

August 23, 2016

**VIA ELECTRONIC FILING**

Ms. Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

**Re: North American Electric Reliability Corporation  
Docket No. RR16-\_\_\_\_-000  
Request for Acceptance of 2017 Business Plans and Budgets of NERC and  
Regional Entities and for Approval of Proposed Assessments to Fund Budgets**

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby submits this filing in accordance with 18 C.F.R. §39.4, requesting acceptance of the 2017 Business Plans and Budgets of NERC, the eight Regional Entities and the Western Interconnection Regional Advisory Body, and approval of the proposed assessments to fund the 2017 budgets.

NERC's filing consists of: (1) this transmittal letter, (2) the narrative text of this filing which follows this transmittal letter, and (3) Attachments 1 through 15, all of which are being transmitted in a single pdf file. Pages ii and iii in the Table of Contents to the narrative text list the 15 attachments.

Please contact the undersigned if you have any questions concerning this filing.

Respectfully submitted,

/s/ Owen E. MacBride  
Owen E. MacBride

Attorney for North American Electric  
Reliability Corporation

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**UNITED STATES OF AMERICA**  
**Before the**  
**FEDERAL ENERGY REGULATORY COMMISSION**

**NORTH AMERICAN ELECTRIC** )  
**RELIABILITY CORPORATION** ) **Docket No. RR16-\_\_-000**  
 )

**REQUEST OF THE**  
**NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION**  
**FOR ACCEPTANCE OF ITS 2017 BUSINESS PLAN AND BUDGET AND**  
**THE 2017 BUSINESS PLANS AND BUDGETS OF REGIONAL ENTITIES**  
**AND FOR APPROVAL OF PROPOSED ASSESSMENTS TO FUND BUDGETS**

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August 23, 2016

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## ATTACHMENTS

**Attachment 1:** Summary tables showing NERC’s proposed 2017 budget; the proposed 2017 budget for statutory activities of each Regional Entity; and the 2017 U.S. ERO statutory assessments of NERC and the Regional Entities.

**Attachment 2:** NERC’s Proposed 2017 Business Plan and Budget

**Attachment 3:** Florida Reliability Coordinating Council Proposed 2017 Business Plan and Budget

**Attachment 4:** Midwest Reliability Organization Proposed 2017 Business Plan and Budget

**Attachment 5:** Northeast Power Coordinating Council, Inc. Proposed 2017 Business Plan and Budget

**Attachment 6:** ReliabilityFirst Corporation Proposed 2017 Business Plan and Budget

**Attachment 7:** SERC Reliability Corporation Proposed 2017 Business Plan and Budget

**Attachment 8:** Southwest Power Pool Regional Entity Proposed 2017 Business Plan and Budget

**Attachment 9:** Texas Reliability Entity Proposed 2017 Business Plan and Budget

**Attachment 10:** Western Electricity Coordinating Council Proposed 2017 Business Plan and Budget

**Attachment 11:** Western Interconnection Regional Advisory Body Proposed 2017 Business Plan and Budget

**Attachment 12:** Discussion of Comments Received During Development of NERC's 2017 Business Plan and Budget.

**Attachment 13:** Calculation of Adjustments to the AESO 2017 NERC Assessment, the IESO 2017 NERC Assessment, the New Brunswick 2017 Assessment and the Québec 2017 NERC Assessment.

**Attachment 14:** Metrics Comparing Regional Entity Operations Based on the 2017 Budgets

**Attachment 15:** Metrics on NERC and Regional Entity Administrative (Indirect) Costs Based on the 2016 and 2017 Budgets

## **I. INTRODUCTION**

In accordance with 18 C.F.R. §39.4, the North American Electric Reliability Corporation (NERC) submits for the Commission's acceptance and approval:

- (1) NERC's proposed Business Plan and Budget as the electric reliability organization (ERO), for the year ending December 31, 2017;
- (2) the proposed Business Plans and Budgets for the year ending December 31, 2017, for the eight Regional Entities: (i) Florida Reliability Coordinating Council (FRCC), (ii) Midwest Reliability Organization (MRO), (iii) Northeast Power Coordinating Council, Inc. (NPCC), (iv) ReliabilityFirst Corporation (ReliabilityFirst), (v) SERC Reliability Corporation (SERC), (vi) Southwest Power Pool Regional Entity (SPP RE), (vii) Texas Reliability Entity (Texas RE), and (viii) Western Electricity Coordinating Council (WECC);
- (3) the proposed budget of the Western Interconnection Regional Advisory Body (WIRAB) for activities under §215(j) of the Federal Power Act (FPA) for the year ending December 31, 2017; and
- (4) NERC's proposed allocation of the proposed ERO statutory assessment of NERC, the Regional Entities, and WIRAB by country and among the Regional footprints, and the proposed assessments to the load-serving entities (LSE) within each Region to collect the allocated statutory funding requirements.

This filing includes the following attachments:

**Attachment 1** is a set of summary tables showing (i) NERC's proposed 2017 budget by program, (ii) the proposed 2017 budget for statutory activities of each Regional Entity, and (iii) the aggregate ERO statutory assessment of NERC and the Regional Entities allocated to the U.S., for which approval is requested.

**Attachment 2** contains NERC's detailed 2017 Business Plan and Budget and the allocation of assessments by Region and LSE to recover the resulting statutory funding requirements for 2017 (as well as the assessments to recover the statutory funding requirements of the Regional Entities and WIRAB).

**Attachments 3 through 11** contain the detailed 2017 Business Plans and Budgets of, respectively, FRCC, MRO, NPCC, ReliabilityFirst, SERC, SPP RE, Texas RE, WECC, and WIRAB.

**Attachment 12** describes how comments submitted by interested entities on posted drafts of NERC's 2017 Business Plan and Budget during the budgeting process were addressed in developing the final 2017 Business Plan and Budget.

**Attachment 13** contains the calculation of the adjustment to the Alberta Electric System Operator (AESO) 2017 NERC assessment, the adjustment to the Ontario Independent Electric System Operator (IESO) 2017 NERC assessment, the adjustment to the New

Brunswick 2017 NERC assessment, and the adjustment to the Québec 2017 NERC assessment, for credits for certain NERC Compliance Program and Event Analysis and Situation Awareness Program costs.

**Attachment 14** provides metrics, based on the 2017 budgets, comparing Regional Entity operations.

**Attachment 15** contains metrics, based on the 2016 and 2017 budgets, on NERC and Regional Entity administrative (indirect) costs.

The Commission's regulations require the ERO to file its proposed entire annual budget for statutory and non-statutory activities with the Commission 130 days before the beginning of the ERO's fiscal year. NERC's 2017 fiscal year will begin January 1, 2017. The filing must also contain the entire annual budget of each Regional Entity for statutory and non-statutory activities and include supporting materials, including the ERO's and each Regional Entity's complete business plan and organization chart, and explanation of the proposed collection of all dues, fees and charges and the proposed expenditure of funds collected. 18 C.F.R. §39.4(b). The information required by 18 C.F.R. §39.4(b) is included in this filing. In accordance with 18 C.F.R. §39.4(c), NERC requests issuance of an order by November 2, 2016, accepting the proposed Business Plans and Budgets and approving the assessments submitted in this filing.<sup>1</sup> Entry of the Commission's order by November 2, 2016 will enable billings to be issued to the

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<sup>1</sup>18 C.F.R. §39.4(c) states: "The Commission, after public notice and opportunity for hearing, shall issue an order either accepting, rejecting, remanding or modifying the proposed Electric Reliability Organization budget and business plan no later than sixty (60) days in advance of the beginning of the Electric Reliability Organization's fiscal year." For reference, NERC notes that the Commission conditionally approved NERC's budget and funding requirement and the budgets and funding requirements of the Regional Entities and WIRAB for 2007 through 2015 in the following orders: (i) 2007: *North American Electric Reliability Corp.*, 117 FERC ¶ 61,091 (2006), *order on reh'g and establishing technical conference*, 118 FERC ¶ 61,111, *order on reh'g*, 119 FERC ¶ 61,059 (2007); (ii) 2008: *North American Electric Reliability Corp.*, 121 FERC ¶ 61,057 (2007); (iii) 2009: *North American Electric Reliability Corp.*, 125 FERC ¶ 61,056 (2008) and *North American Electric Reliability Corp.*, 128 FERC ¶ 61,025 (2009) (*July 16, 2009 Budget Compliance Order*); (iv) 2010: *North American Electric Reliability Corp.*, 129 FERC ¶ 61,040 (2009); (v) 2011: *North American Electric Reliability Corp.*, 133 FERC ¶ 61,062 (2010); (vi) 2012: *North American Electric Reliability Corp.*, 137 FERC ¶ 61,071 (2011); 2013: *North American Electric Reliability Corp.*, 141 FERC ¶ 61,086 (2012); 2014: *North American Electric Reliability Corp.*, 145 FERC ¶ 61,097 (2013); 2015: *North American Electric Reliability Corp.*, 149 FERC ¶ 61,028 (2014); 2016: *North American Electric Reliability Corp.*, 153 FERC ¶ 61,134 (2015).

LSEs or their designees for assessments with initial payment dates commencing on or about January 1, 2017, to support the activities of NERC, the Regional Entities, and WIRAB.

## **II. NOTICES AND COMMUNICATIONS**

Notices and communications concerning this filing may be addressed to:

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## **III. OVERVIEW OF PROPOSED BUDGETS AND FUNDING REQUIREMENTS**

### **A. NERC’s Proposed Business Plan, Budget and Funding Requirement**

#### **1. Organization of NERC’s 2017 Business Plan and Budget**

In this filing NERC seeks acceptance of its 2017 Business Plan and Budget. NERC’s 2017 Business Plan and Budget is organized based on its statutory program areas:

- Reliability Standards
- Compliance Monitoring and Enforcement and Organization Registration and Certification; this program is comprised of three departments:
  - Compliance Assurance
  - Compliance Analysis, Certification and Registration
  - Compliance Enforcement
- Reliability Assessment and System Analysis (RASA)



- Performance Analysis
- Reliability Risk Management (RRM); this program is comprised of two departments:
  - Situation Awareness Department
  - Event Analysis Department
- Electricity Information Sharing and Analysis Center (E-ISAC), including the Cyber Risk Information Sharing Program (CRISP)
- Training, Education, and Operator Certification

Each of these program areas carries out or supports implementation of one or more of the statutory activities of the ERO as specified in §215 of the FPA and the Commission’s regulations and orders.<sup>2</sup> Detailed explanations of the functions and activities performed by each of these programs is provided in the individual subsections of Section A of **Attachment 2** where the detailed plans, objectives and activities for each program or group in 2017, and its 2017 budget, are discussed.

NERC’s statutory, or “direct,” programs are supported by its Administrative Services, or “indirect,” programs: Technical Committees and Member Forums,<sup>3</sup> General and Administrative, Legal and Regulatory, Information Technology (IT), Human Resources (HR), and Finance and Accounting. The functions and activities of each Administrative Services program are described in the individual sections on each indirect program, and in Exhibit B, to **Attachment 2**.

In its 2017 Business Plan and Budget, NERC has continued to provide a high level of granularity in the presentation of its planned activities and budgeted expenditures:

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<sup>2</sup> Exhibit B to the 2017 Business Plan and Budget (**Attachment 2**) describes how the major activities in the 2017 Business Plan and Budget meet the Commission-approved criteria for determining whether a reliability activity is eligible to be funded under FPA §215. The Commission approved the FPA §215 criteria (with modifications to the criteria originally proposed by NERC) in *North American Electric Reliability Corporation, Order on Compliance*, 143 FERC ¶ 61,052 (2013) (*FPA §215 Criteria Order*).

<sup>3</sup> No activities are planned and no budget is requested for Technical Committees and Member Forums.

- Individual budgets and the related supporting information are presented for a total of ten statutory programs or departments.
- As it has done beginning with its 2013 Business Plan and Budget, in Section A of its 2017 Business Plan and Budget (**Attachment 2**), NERC has provided a discussion of each program’s or department’s current activities and its 2017 goals and deliverables, as well as additional detail concerning the staffing and Consultants and Contracts Expenses (if any) budgeted for the program or department.
- Also as it has done beginning with its 2013 Business Plan and Budget, in Exhibit C of the 2017 Business Plan and Budget (**Attachment 2**), NERC has provided information on the activities and projects within each of the statutory programs and groups and Administrative Services departments for which Consultants and Contracts expense is budgeted.
- In Exhibit D of the 2017 Business Plan and Budget (**Attachment 2**), NERC has provided information on its capital financing program through which NERC is financing the development cost of certain software applications and hardware projects and amortizing the recovery of the principal and interest payments through its budgets and assessments over several years, rather than including the entire cost of the projects in the current year assessments.
- In Exhibit E of the 2017 Business Plan and Budget (**Attachment 2**), NERC provides a discussion of its working capital and operating reserves requirements, in accordance with its Working Capital and Operating Reserve Policy that was adopted in 2012 and amended in 2013 and, most recently, in 2015.<sup>4</sup> This discussion includes explanation of the proposed use of the Assessment Stabilization Reserve to reduce the proposed 2017 assessments to LSEs below the levels that would otherwise be required to support 2017 activities (this proposal is also discussed in §IV.C, below).
- In the General and Administrative section of its 2017 Business Plan and Budget (**Attachment 2**), NERC has separately identified the amounts budgeted for Board of Trustee compensation and expenses (costs of quarterly Board and Board committee meetings, Trustee Travel expenses, Trustee fees, and Trustee search fees). *See* page 71 of **Attachment 2**.<sup>5</sup>
- In the IT department budget, NERC has provided detailed cost information on both Operating Expenses (budgeted as Office Costs), such as Telephone, Internet, Computer Supplies, Computer Maintenance and Service Agreements, and Software; and on budgeted capital expenditures for IT projects.

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<sup>4</sup>*See North American Electric Reliability Corporation, Order Conditionally Accepting Revisions to Working Capital and Operating Reserve Policy*, 151 FERC ¶ 61,225 (2015).

<sup>5</sup> This presentation addresses agreed Recommendations 4 (with Board of Trustees meetings defined as a “major activity”) and 30 in the Settlement Agreement for the Commission’s 2011 financial performance audit of NERC.

- In Table B-10 of its 2017 Business Plan and Budget (**Attachment 2**), NERC has provided budgeted 2017 amounts for miscellaneous expenses, employee rewards and recognition expenses, community responsibility and employee engagement expenses, and expenses for a year-end employee recognition event.<sup>6</sup>

The information required by 18 C.F.R. §39.4(b) is contained in NERC's 2017 Business Plan and Budget, **Attachment 2** to this filing. The initial section of **Attachment 2**, About NERC, provides an overview of NERC's organization, membership and governance, scope of oversight responsibilities, delegated authorities to Regional Entities, the ERO Enterprise operating model,<sup>7</sup> statutory and regulatory background, and source of funding.

The Introduction and Executive Summary summarizes NERC's total resource requirements for 2017 including total full-time equivalent employees (FTEs) in statutory programs and administrative functions, statutory expenses, and required ERO funding assessments. It shows the distribution of the total net energy for load (NEL) among the U.S., Canada and Mexico to be used for allocating the ERO funding requirement among the three countries. It also highlights NERC's strategic goals, objectives and performance metrics and its priorities and major activities for 2017 and the 2017 key business planning assumptions. (A detailed statement of the 2016-2019 Shared Business Plan and Budget Assumptions developed and used by NERC and the Regional Entities in developing their 2017 Business Plans and Budgets and 2018 and 2019 budget projections is provided in Exhibit A to **Attachment 2**.) Finally, it provides an overview of NERC's budget and funding requirements for 2017 by major areas of expenditures. Specifically, the Introduction and Executive Summary presents NERC's overall Statement of Activities and Fixed Asset Expenditures, showing information from the

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<sup>6</sup> This presentation addresses agreed Recommendation 22 from the Commission's 2011 financial performance audit of NERC.

<sup>7</sup> NERC uses the term "ERO Enterprise" to refer to NERC and the eight Regional Entities.

approved 2016 Budget, the 2016 Projection, and proposed 2017 Budget, and the variances between the 2016 Projection and 2016 Budget and between the 2017 Budget and 2016 Budget, for the major line item categories of Funding, Expenses and Fixed Assets expenditures and in total for NERC.<sup>8</sup>

NERC's 2017 strategic goals and objectives to carry out its statutory mission are based on the 2016-2019 *ERO Enterprise Strategic Plan*, approved by the NERC Board of Trustees in November, 2015, as described in the Introduction and Executive Summary of the 2017 Business Plan and Budget. The 2017 strategic goals and objectives and priorities and major activities are focused on the areas of (i) maintaining timely and risk-responsive reliability standards; (ii) conducting objective and risk-informed compliance monitoring, enforcement, and organization certification and registration activities, through an ERO Enterprise that is a strong enforcement authority that is independent, without conflicts of interest, objective, fair, and promotes a culture of reliability excellence; (iii) identifying and mitigating significant current risks to reliability; (iv) identifying and assessing emerging risks to reliability; and (v) operating the ERO Enterprise in an effective, efficient, and collaborative manner that improves transparency, consistency, quality, effectiveness, cost-effectiveness, and timeliness of results. The Introduction and Executive Summary of the 2017 Business Plan and Budget identifies the portions of NERC's budgeted 2017 resources that will be allocated to each of the strategic goals and objectives.

The Introduction and Executive Summary of the 2017 Business Plan and Budget describes the ongoing focus of NERC and the Regional Entities on controlling costs and on making improvements to systems and processes to improve the efficiency of operations, including thorough coordination of development of ERO Enterprise IT investments by NERC

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<sup>8</sup> The 2016 Projection is NERC's projection of 2016 year-end financial results.

and the Regional Entities. It then provides an overview of the resource requirements and other factors driving NERC's proposed 2017 Budget. NERC is proposing an overall 2017 budget of \$69,602,175, which is an increase of \$2,415,510 (3.6%) over the 2016 Budget. This comparison includes the 2016 and 2017 budgeted expenditures for the CRISP. As compared to the 2016 budget, the proposed 2017 budget reflects an increase of \$1,357,525 (3.6%) in Personnel Expenses; a decrease of \$247,400 (6.8%) in Meeting Expenses; and a decrease of \$102,825 (0.4%) in Operating Expenses. The table on page 17 of **Attachment 2** shows the change in the 2017 total budget (*i.e.*, including allocated Indirect Expenses<sup>9</sup>) from the 2016 total budget for each of NERC's statutory departments.

The CRISP expenditures included in NERC's 2017 budget, \$8,292,440, will be primarily funded (\$6,990,447 (84.3%)) by participating utilities.<sup>10</sup> The remaining funding for CRISP will come from Assessments (\$1,275,681 (15.4%)), an allocation of Penalty Sanctions funding (\$26,243 (0.3%)), and Interest (\$70). Budgeted CRISP expenditures for 2017 are increased by \$319,977 (4.0%) from the 2016 budget. With CRISP expenditures excluded, NERC's 2017 budget represents an increase of \$2,095,533 (3.5%) from its 2016 budget. NERC's Business Plan and Budget provides detailed comparisons of the 2017 budget to the 2016 budget, both with and without CRISP. *See* pages 19-20 of **Attachment 2**.

As shown on page 18 of **Attachment 2**, the 2017 budget reflects an overall decrease of 2.5 FTEs in staffing from the 2016 budget, although there are increases or decreases in budgeted FTEs for each program area or department, due in whole or in part to the full or partial

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<sup>9</sup> Allocated Indirect Expenses are the amount of Administrative Services expenditures that have been allocated to each of the statutory programs, on the basis of relative numbers of FTEs in each statutory program.

<sup>10</sup> Funding received from third parties for CRISP is placed in a separate account to be utilized solely to fund CRISP expenses.

reallocation of personnel and resources from one program area to another. The changes in budgeted FTEs by program area also reflects a reduction in the assumed vacancy rate (*i.e.*, the adjustment for such factors as personnel attrition and hiring or start date delays) from the vacancy rate used in the 2016 budget. Total budgeted staffing for the statutory programs is decreased by 0.7 FTE, and budgeted staffing for the administrative programs is decreased by 1.9 FTE, from the 2016 budget. Within individual programs and departments, the 2017 budgeted staffing is decreased by 3.9 FTEs in Compliance Assurance, decreased by 2.6 FTEs in Compliance Analysis, Certification and Registration, increased by 2.3 FTEs in RASA, increased by 2.5 FTEs in Performance Analysis, increased by 1.1 FTE in IT, and decreased by 1.6 FTE in Finance and Accounting, from the 2016 budget. The budgeted change in staffing for each of the other programs and departments is less than 1.0 FTE.

The Introduction and Executive Summary also provides an overview of increases and decreases in Consultants & Contracts Expenses, by program area, from the 2016 budget. (Consultants & Contracts Expense is a line item component of the budget for Operating Expenses.) The proposed 2017 budget provides for an overall increase in Consultants & Contracts expense of \$261,835 (2.0%) from the 2016 budget. Of the total 2017 budgeted Consultants & Contracts Expense of \$13,127,749, \$5,888,594 (44.9%) is attributable to CRISP.

The Introduction and Executive Summary identifies the major components of NERC's proposed 2017 capital budget. NERC is budgeting \$4,372,000 of capital expenditures for 2017, an increase of \$461,000 (11.8%) from the 2016 budget.

NERC's 2017 resource and funding requirements reflect a variety of steps that have been taken during the last four years to control costs and increase the efficiency of NERC's operations and those of the overall ERO Enterprise. These steps include development of a coordinated long

term ERO Enterprise information technology program for development and improvement of enterprise software tools for use by NERC and the Regional Entities (with one objective being the use of common IT tools and programs throughout the ERO Enterprise); focused efforts to control travel and meeting expenses and outside contractor, consultant and legal expenses; transitioning financial responsibility for certain reliability tools from NERC to industry; development of the body of reliability standards to a steady state (thereby enabling the ERO and industry to devote fewer resources to standards development and modification); development and implementation of more efficient, streamlined and risk-oriented compliance monitoring and enforcement methods, which have enabled staffing reductions or stabilization; and reallocations of personnel among departments in accordance with current reliability needs and priorities. NERC management evaluates resource needs and allocations on an ongoing basis to ensure proper alignment between resources and priorities set forth in the ERO Enterprise Strategic Plan, by the NERC Board of Trustees, by the Reliability Issues Steering Committee (RISC), from regulatory requirements, and from stakeholders.

NERC's proposed 2017 statutory assessment to LSEs is \$59,856,314, which is \$2,774,868, or 4.9%, higher than the 2016 statutory assessments. This increase takes into account NERC's budgeted non-assessment Funding sources in 2016 and 2017. The non-assessment Funding sources in the 2017 budget consist of \$1,100,000 of Penalty payments to be applied, with Commission approval, from the balance in NERC's Assessment Stabilization Reserve (\$339,000 reduction from the amount applied in the 2016 budget), \$6,990,447 of Third-Party Funding for CRISP (\$159,709 increase from the 2016 budget), \$1,921,900 of Testing Fees (\$53,928 increase from the 2016 budget), \$50,000 of revenues from Services & Software (same amount as budgeted for 2016), \$230,000 in attendance fees for Workshops (same amount as

budgeted for 2016), and \$3,000 in Interest income (same amount as budgeted for 2016). In the aggregate, the non-assessment Funding sources in the 2017 budget are \$125,363 lower than in the 2016 budget.

Finally, the Introduction and Executive Summary presents NERC's budget and assessment projections for 2018 and 2019, including information on the anticipated use of NERC's Assessment Stabilization Reserve to mitigate fluctuations in assessments over the 2016-2019 period. Section III.F of this filing, below, provides further discussion of the 2018-2019 budget projections.

Section A of **Attachment 2** is NERC's detailed 2017 Business Plan and Budget. It is designed to address the requirements of 18 C.F.R. §39.4(b), the Commission's Order certifying NERC as the ERO,<sup>11</sup> and applicable directives in subsequent Commission orders. Section A provides program scope and functional descriptions, descriptions of key efforts under way in the current year, 2016, the 2017 goals and deliverables, and explanations of increases or decreases in Personnel Expenses and Consultants & Contracts expense for 2017 over the 2016 budget, for each of NERC's statutory programs (and groups or departments for those statutory programs that are comprised of more than one group or department) and for the Administrative Services functions. Section A includes a table at the start of the subsection on each statutory program or department showing total FTEs, total direct expenses, total indirect expenses, other non-operating expenses, increase or decrease in Fixed Assets, and total budget for the statutory program (department) for the 2017 budget, with the comparable data from NERC's 2016 budget and the increase or decrease from the 2016 budget. For the Administrative Services functions,

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<sup>11</sup> *Order Certifying North American Electric Reliability Corporation as the Electric Reliability Corporation and Ordering Compliance Filing*, 116 FERC ¶ 61,062 (2006) (*ERO Certification Order*), at P 202.



this table shows, for each of the five Administrative Services functions,<sup>12</sup> the 2016 budget amount, 2017 budget amount, and the change from the 2016 budget to the 2017 budget, as well as budgeted 2016 FTEs, budgeted 2017 FTEs, and the change in FTEs from the 2016 budget to the 2017 budget. A detailed Statement of Activities and Fixed Asset Expenditures is provided for each statutory program or department, and for the Administrative Services functions in the aggregate. The Statements of Activities show funding and expenditure information from the 2016 budget, the 2016 projection and the 2017 budget, as well as the variances from the 2016 budget to the 2016 projection and from the 2016 budget to the 2017 budget.

In the Statements of Activities for each program or department, Funding is shown from the NERC Assessments and, as applicable, from other anticipated sources (Penalty Sanctions, Testing Fees, fees from Services & Software, fees from Workshop attendance, Interest income, Third-Party Funding, and Miscellaneous Funding).<sup>13</sup> Expenses are shown by the major categories (and sub-categories) of Personnel Expenses (Salaries, Payroll Taxes, Benefits, Retirement Costs); Meeting Expenses (Meetings, Travel, Conference Calls); Operating Expenses (Consultants & Contracts, Office Rent, Office Costs, Professional Services, Miscellaneous, Depreciation); and Other Non-Operating Expenses. Finally, the Statements of Activities show Fixed Assets activity, comprised of Depreciation (an equal and offsetting amount to the Depreciation included in Operating Expenses<sup>14</sup>), Computer & Software CapEx, Furniture &

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<sup>12</sup> General and Administrative, Legal and Regulatory, IT, HR, and Finance and Accounting. A sixth Administrative Services function is Technical Committees and Member Forums; NERC does not budget any resources for this function, but some of the Regional Entities do.

<sup>13</sup> Some of these other sources of Funding are anticipated only for certain of the statutory programs. For example, Third-Party Funding is budgeted only for the E-ISAC, which is responsible for managing NERC's participation in CRISP. Income from Testing Fees is budgeted only for the Training, Education, and Operator Certification Program. Additionally, for the 2017 budget (and the 2016 budget), NERC has (had) no funding budgeted from Miscellaneous sources.

<sup>14</sup> As a result of this offset, the Funding requirement does not include funding for Depreciation.

Fixtures CapEx, Equipment CapEx, Leasehold Improvements, and the Allocation of Fixed Assets activity from the Administrative Services programs.

Section B of **Attachment 2** provides Supplemental Financial Information comprised of tables detailing the components of certain Funding and Expense categories and explanations of variances from the 2016 budget, including analysis of the Working Capital and Operating Reserve balance (Table B-1), Penalties (Table B-2), Outside Funding (Table B-3), Personnel Expenses (Table B-4), Meetings Expenses (Table B-5), Office Rent (Table B-7), Office Costs (Table B-8), Professional Services (Table B-9), Miscellaneous Expenses (Table B-10), Other Non-Operating Expenses (Table B-11), and Fixed Assets expenditures (Table B-12). As was the case in NERC's 2013 through 2016 Business Plans and Budgets, Table B-6, Consultants & Contracts Expenses, which was provided in NERC's Business Plans and Budgets for years prior to 2013, has been replaced with a more detailed presentation of Consultants & Contracts Expenses in Exhibit C to **Attachment 2**. Additionally, Table B-13 in the ERO Business Plan and Budget template is reserved for 2018-2019 Projections, but NERC has included its 2018-2019 budget projections in the Introduction and Executive Summary, as described above.

Section C, Non-Statutory Activity, of **Attachment 2** is reserved for presentation of business plan and budget information on non-statutory activities. This section is empty for NERC, because NERC does not engage in non-statutory activities, but in the business plans and budgets of those Regional Entities that have non-statutory activities, Section C includes business plan and budget information on their non-statutory activities.

Section D, Supplemental Financial Statements, of **Attachment 2** provides NERC's actual and projected Statements of Financial Position at December 31, 2015, 2016, and 2017. The data at December 31, 2015 is actual data per the independent financial audit of 2015 results; the data

at December 31, 2016 is based on NERC's Projection for 2016 year-end results; and the data at December 31, 2017 is based on the detailed 2017 budget.<sup>15</sup> In addition, Section D provides NERC's 2017 Consolidated Statement of Activities, showing its 2017 budgeted line-item Funding sources, Expenses, and Fixed Asset activity, in total and by statutory program and the Administrative Services functions, as well as the direct expenses and indirect expenses for each statutory program.

Exhibit A – Common Assumptions to **Attachment 2** contains the 2016-2019 Shared Business Plan and Budget Assumptions developed and used by NERC and the Regional Entities in preparing their 2017 Business Plans and Budgets and their 2018-2019 budget projections.

Exhibit B – Application of NERC Section 215 Criteria to **Attachment 2** describes how the major activities included in the 2017 Business Plan and Budget for NERC's direct function programs and Administrative Services functions meet the NERC written criteria for eligibility for FPA §215 funding as approved by the Commission in the *FPA §215 Criteria Order*.

Exhibit C – Contractor and Consulting Costs to **Attachment 2** contains a detailed list of NERC's budgeted 2017 Consultants & Contracts expenses, by program area and by major activity or project. Exhibit C also shows the 2016 budget amounts and the change in the 2017 budget from the 2016 budget (where applicable).

Exhibit D – Capital Financing to **Attachment 2** describes proposed borrowing and repayment activity under NERC's capital financing program for certain capital expenditures. Exhibit D shows the budgeted 2016 and 2017 and projected 2018 and 2019 borrowings under the capital financing program, the projected year-end outstanding debt balance at the end of each

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<sup>15</sup> The audited financial statements of NERC and each Regional Entity for 2015 were filed with the Commission on May 31, 2016, in NERC's *Report of Comparisons of Budgeted to Actual Costs* for 2015 in Docket No. RR16-4-000 (*2015 Budget True-Up Report*).

year, and the annual payments for debt service (principal and interest) for each year, based on the loan structure terms and projected interest rates. Expenditures, debt service payments, and year-end balances for 2014 and 2015 are also shown. Exhibit D also mentions NERC's interest in renewing the capital financing facility, which expires in 2016. At its August 11, 2016 meeting, the NERC Board approved the plan to renew the capital financing facility and authorized NERC management to finalize a renewal credit facility agreement with similar terms and conditions to those currently in place.

Exhibit E – Working Capital and Operating Reserve Amounts to **Attachment 2** provides the budgeted 2017 amounts for Working Capital and Operating Reserves pursuant to NERC's Working Capital and Operating Reserve Policy (WCOR Policy) adopted in 2012 and amended in 2013 and 2015.<sup>16</sup> The WCOR Policy provides for the separate budgeting and tracking of working capital and operating reserves.<sup>17</sup> Section IV.B below provides further discussion of the 2017 budgeted amounts for working capital and each category of operating reserves.

Exhibit F – E-ISAC Portal Improvements to **Attachment 2** provides information on the proposed capital project to improve and enhance the functionality of the E-ISAC portal.

Appendix 1 to **Attachment 2** contains NERC's organization chart, as required by 18 C.F.R. §39.4(b).

Appendix 2 to **Attachment 2** contains the calculation of the NEL-based allocation factors

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<sup>16</sup> The most recently amended version of the WCOR Policy was filed with the Commission on March 6, 2015, in Docket No. RR15-8-000, and was conditionally approved by the Commission in an order issued June 18, 2015. *North American Electric Reliability Corporation, Order Conditionally Accepting Revisions to Working Capital and Operating Reserve Policy*, 151 FERC ¶ 61,225 (2015). NERC submitted the compliance filing required by this order on August 14, 2015, in Docket No. RR15-8-001 (*Compliance Filing of the North American Electric Reliability Corporation in Response to Paragraph 18 of June 18, 2015 Order Concerning Amendments to NERC's Working Capital and Operating Reserve Policy*), and it was accepted by the Commission in a letter order dated September 18, 2015.

<sup>17</sup> The WCOR Policy also sets forth guidelines and authorities regarding access to Working Capital and Operating Reserve funds.

for each LSE and designee and the allocation of the NERC, Regional Entity and WIRAB statutory assessments, by allocation method, to each LSE and designee, for 2017.<sup>18</sup> Development of the assessments presented in the Appendices is discussed in more detail in §III.A.3 and III.D below.

The detailed information in the Introduction and Executive Summary and in Sections A and B and Exhibits A, B, C, D, E, and F of **Attachment 2** demonstrates that the programs included in NERC's 2017 Business Plan and Budget are necessary and appropriate to carry out NERC's responsibilities as the ERO and that the specific resource requirements budgeted meet the Commission's objectives for affordability, sustainability and efficiency and effectiveness of the ERO's expenditures.<sup>19</sup> The discussion in the text and exhibits of **Attachment 2**, as well as in this narrative, demonstrates how the activities and expenditures included in NERC's 2017 Business Plan and Budget lend themselves to accomplishment of NERC's statutory responsibilities and objectives as the ERO.<sup>20</sup>

## **2. Development of the 2017 Business Plans and Budgets**

NERC prepared its 2017 Business Plan and Budget (and worked with the Regional Entities in the development of their business plans and budgets) through a rigorous process that provided ample opportunity for review and input by the Finance and Audit Committee (FAC) of the NERC Board, as well as by stakeholders. During the development process, successive versions of the 2017 NERC and Regional Entity business plans and budgets were discussed in

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<sup>18</sup> The NEL-based allocation factors are calculated using NEL data for 2015, which is the most current actual NEL data available as of August 2016. As has been the case in allocating the NERC and Regional Entity statutory assessments by country and by Regional footprint and calculating the assessments to LSEs or their designees for prior years' budgets, the allocation and calculation of assessments for the 2017 Budget is based on actual NEL data for the second preceding calendar year, 2015.

<sup>19</sup> *ERO Certification Order*, P 202 (budget principle (5)).

<sup>20</sup> *ERO Certification Order*, P 202 (budget principle (2)).

meetings and conference calls of the FAC and of the full NERC Board, in each case with opportunities for stakeholders to make comments. Throughout the development of its 2017 Business Plan and Budget, NERC management also held a number of conference calls with a Business Plan and Budget Input Group formed by the NERC Member Representatives Committee (MRC). The following list highlights important steps in the preparation of the NERC and Regional Entity 2017 Business Plans and Budgets

- On July 16, 2015, the NERC Board of Trustees requested policy input on the proposed 2016-2019 *ERO Enterprise Strategic Plan* and metrics.
- The November 4, 2015 MRC meeting included a review of the draft 2016-2019 *ERO Enterprise Strategic Plan* and metrics.
- On November 5, 2015, the NERC Board approved the 2016-2019 *ERO Enterprise Strategic Plan* and metrics.
- During the fourth quarter of 2015 and early first quarter of 2016, the ERO Executive Management Group (ERO EMG), comprised of NERC and Regional Entity chief executives or equivalents, and the ERO Finance Group (EROFG), comprised of senior Finance and Accounting management personnel of NERC and the Regional Entities, met to review strategic goals and objectives for 2017.
- During October, November and December, 2015, the EROFG worked to develop and finalize the common business plan and budget assumptions to be used in developing the 2017 business plans and budgets and the 2018-2019 budget projections.
- On January 12, 2016, an MRC Informational Session Webinar was conducted that included a discussion of the 2017 Business Plan and Budget development process and ERO Enterprise Strategic Plan redesign. A request to stakeholders for policy input on the 2017 Business Plan and Budget was also issued.
- During the first four months of 2016, NERC and the Regional Entities worked collaboratively in the development of their business plans and budgets.
- During February and March 2016, the NERC program areas provided input to the NERC Finance and Accounting department on their business plans and budget requirements for 2017.
- On April 6, 2016, another MRC Informational Session Webinar concerning the 2017 Business Plan and Budget was held.

- On April 14, 2016, a conference call was held with the MRC Business Plan and Budget Input Group to discuss the 2017 Business Plan and Budget.
- On April 19, 2016, a meeting was held with interested trade associations and the MRC Business Plan and Budget Input Group to discuss the NERC 2017 Business Plan and Budget.
- On April 19, 2016, the FAC and the Corporate Governance and Human Resources Committee (CGHRC) of the NERC Board met in closed session to review the personnel, benefits, contracts and other assumptions for the NERC 2017 Business Plan and Budget.
- The May 4, 2016 MRC meeting included review of policy input for the ERO Enterprise Strategic Planning Framework and an update on the 2017 Business Plan and Budget.
- The May 4, 2016 FAC meeting included a review of the preliminary NERC 2017 Business Plan and Budget.
- The May 5, 2016 NERC Board meeting included a review of policy input for the ERO Enterprise Strategic Planning Framework and for the NERC 2017 Business Plan and Budget
- On May 19, 2016, Draft #1 of the NERC 2017 Business Plan and Budget and a consolidated ERO Enterprise Business Plan and Budget overview were posted on the NERC Website for stakeholder review and comment. Notification of the posting (and of all subsequent postings) was sent by e-mail to a broad distribution list of interested persons and entities. Three sets of written stakeholder comments were received during the comment period that ended June 30, 2016.<sup>21</sup> These comments were posted on NERC's website.<sup>22</sup>
- Also on May 19, 2016, drafts of the Regional Entities' 2017 Business Plans and Budgets, along with an overview document for each Regional Entity Business Plan and Budget, were posted on the NERC website. The Regional Entity budget drafts were prepared using a common template that was similar to the common template used for the 2011 through 2016 NERC and Regional Entity Business Plans and Budgets. NERC program managers reviewed the sections of the draft Regional Entity business plans and budgets relevant to the program manager's program area and, where necessary, provided feedback to their Regional Entity counterparts. Feedback from NERC's review of the initial drafts was used by the Regional Entities

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<sup>21</sup> Comments were submitted by (1) the Canadian Electricity Association, (2) the Ontario Independent Electricity System Operator, and (3) the Member Executive Committee of the Electricity Subsector Coordinating Council. On July 15, 2016, NERC posted on its website the aforementioned comments and a management response. The response is provided in **Attachment 12** to this filing.

<sup>22</sup> <http://www.nerc.com/gov/bot/FINANCE/Pages/2017-NERC-Business-Plan-and-Budget.aspx>.

in developing revised drafts.

- WIRAB's draft 2017 Business Plan and Budget was also posted for comment on the NERC website on May 19, 2016.
- During May, 2016, the Regional Entities posted drafts of their 2017 Business Plans and Budgets on their respective websites for review and comment by their stakeholders, in accordance with each Regional Entity's public review process. (*See* §III.B below for further discussion of the stakeholder review opportunities provided by each Regional Entity for its 2017 Business Plan and Budget.)
- On May 25, 2016, representatives of NERC and of each of the Regional Entities met with Commission budget staff to provide an overview of the drafts of their respective 2017 Business Plans and Budgets.
- On May 26, 2016, a conference call with the FAC and NERC management was held, and a webinar was conducted, to review the Draft #1 NERC 2017 Business Plan and Budget and Regional Entity 2017 Business Plans and Budgets. In this session, the Regional Entities made presentations concerning their 2017 Business Plans and Budgets to the FAC.
- On June 17, 2016, NERC management met again with the MRC Business Plan and Budget Input Group to review the draft NERC 2017 Business Plan and Budget and to obtain informal input from the MRC Business Plan and Budget Input Group.
- At various dates from late May to late June 2016, the Boards or other governing bodies of the Regional Entities met to review and approve their respective proposed 2017 Business Plans and Budgets. The approved Regional Entity Business Plans and Budgets were submitted to NERC in early July.
- On July 6, 2016, a closed call was held with the FAC to review personnel, contracts, and other assumptions in the 2017 Business Plan and Budget.
- On July 12, 2016 (following the receipt of the written comments on the posted Draft #1 of the NERC 2017 Business Plan and Budget), NERC management again met with the MRC Business Plan and Budget Input Group and trade associations to discuss the comments received and to receive additional input. This meeting was conducted in a conference call format that allowed other MRC members and stakeholders to participate. Additionally, details of the proposed E-ISAC portal project were presented and related stakeholder comments were discussed.
- On July 15, 2016, a revised Draft #2 of the NERC 2017 Business Plan and Budget was posted on the NERC website. Any additional stakeholder comments were requested, with a due date of July 29, 2016. No comments were submitted on this Draft #2.



- Also on July 15, 2016, the final, approved versions of the Regional Entity 2017 Business Plans and Budgets were posted on the NERC website. (Several of the Regional Entity Business Plans and Budgets were subsequently revised and reposted to reflect minor corrections or updates.)
- On July 21, 2016, a conference call with the FAC and NERC management was held, and a webinar was conducted, to review the final draft of NERC's 2017 Business Plan and Budget, the final Regional Entity 2017 Business Plans and Budgets, and the consolidated ERO Enterprise 2017 Business Plan and Budget.
- On August 3, 2016, the final version of the NERC 2017 Business Plan and Budget and the proposed NERC and Regional Entity 2017 assessments, were posted on the NERC website for the upcoming MRC, FAC and NERC Board meetings.
- At the August 10, 2016 open meeting of the FAC, NERC management presented the final draft of the 2017 Business Plan and Budget and solicited final comments and questions from the NERC Board and stakeholders. The FAC then recommended NERC Board approval of the 2017 Business Plans and Budgets and associated statutory assessments for NERC, the Regional Entities and WIRAB.
- During the August 10, 2016 meeting of the MRC, an additional opportunity was provided to stakeholders for input and questions regarding the final 2017 Business Plans and Budgets of NERC and the Regional Entities.
- At its August 11, 2016 meeting, the NERC Board approved the 2017 Business Plans and Budgets and the proposed 2017 statutory assessments for NERC, the Regional Entities and WIRAB.

In summary, the processes followed by NERC and the Regional Entities to develop the proposed 2017 Business Plans and Budgets were thorough, comprehensive, open and inclusive, involved significant input from NERC and Regional Entity management and financial and program area staffs, as well as iterative review and comment by the FAC, and provided numerous opportunities for stakeholder input and comment.

### **3. Summary of NERC's Proposed 2017 Budget and Funding Requirement**

NERC's proposed 2017 total statutory Funding requirement is \$70,151,660. This total encompasses U.S., Canadian and Mexican activities. The proposed 2017 total statutory Funding requirement represents an increase of \$2,649,505 (3.9%) as compared to the 2016 total Funding

requirement of \$67,502,155. The 2017 budget is comprised of \$66,921,632 of Expenses (including Depreciation) and a \$2,680,543 increase in Fixed Assets (Capital Expenditures of \$4,372,000 less Depreciation of \$1,691,457<sup>23</sup>). The 2017 total statutory Funding requirement reflects a provision for Working Capital and Operating Reserve funding of \$530,402, as well as (due to NERC's capital financing plan) proceeds from financing activities of \$966,667 and debt service of \$985,750,<sup>24</sup> whereas the total Funding requirement in the 2016 Business Plan and Budget included a provision for Working Capital and Operating Reserve Funding of \$380,490.

As in past years, a portion of NERC's 2017 budget will be funded in part through Testing Fees charged to participants in certain NERC programs, including the System Operator Certification Program and the Continuing Education Program (budgeted at \$1,921,900, a \$53,928 (2.8%) increase from the 2016 budget); by attendance fees for Workshops (budgeted at \$230,000, the same amount as in the 2016 budget<sup>25</sup>); by revenues from Services & Software (budgeted at \$50,000, the same amount budgeted in the 2015 and 2016 budgets); and by Interest earned on bank balances and short-term investments (budgeted at \$3,000, the same amount budgeted in the 2015 and 2016 budgets). The Funding sources in the 2017 budget also include \$1,100,000 of Penalty Sanctions payments to be released, with Commission approval, from the Assessment Stabilization Reserve, which is \$339,000 less than the amount of Penalty payments included in Funding in the 2016 budget.<sup>26</sup> Finally, funding for the 2017 budget includes

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<sup>23</sup> As noted earlier, an end result of this budget presentation is that Funding is not being requested for Depreciation expense.

<sup>24</sup> See §IV.B below and Table B-1 and Exhibit E in **Attachment 2**.

<sup>25</sup> NERC strives to set Workshop fees to cover the costs of presenting the workshops, such as costs to rent meeting space (if necessary) and prepare printed materials. The number of Workshops planned also impacts the projected total Workshop fee revenues.

<sup>26</sup> The NERC policy, *Accounting, Financial Statement and Budgetary Treatment of Penalties Imposed and Received for Violations of Reliability Standards*, and §1107.2 of the NERC Rules of Procedure (ROP), specify that Penalty payments received by NERC or a Regional Entity during the period from July

\$6,990,447 of Third-Party Funding, representing funding provided by participating utilities and other entities to support NERC's participation in CRISP. This is an increase in the Third-Party Funding for CRISP of \$159,709 from the CRISP funding provided in the 2016 budget.

The budgeted non-assessment sources of Funding are projected to be \$10,295,347 in total. Additionally, the 2017 budget includes a net requirement of \$19,083 for debt repayment from the capital financing program. Application of these funding sources results in a 2016 net Funding requirement of \$59,856,314 to be funded by assessments to LSEs. Of this amount, \$54,326,337 (90.76%) is allocated to the U.S., \$5,353,026 (8.94%) is allocated to Canadian provinces (in the aggregate), and \$176,951 (0.30%) is allocated to Mexico. Based on the aggregate NEL of the United States for 2015 on which the allocation of assessments is based,<sup>27</sup> the proposed U.S. net funding requirement for NERC represents approximately \$0.0000136 (*i.e.*, 0.00136 cents) per end-user kilowatt-hour.

NERC's 2017 Business Plan and Budget was developed and is organized based on its statutory programs and, where applicable, departments within each program (2016 budgeted amounts by program are shown for comparison):

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1 of the second year preceding the budget year through June 30 of the year preceding the budget year are used to offset assessments to LSEs in the U.S. for the budget year, unless an alternative treatment is approved by the Commission (as allowed by ROP §1107.4). NERC received \$500,000 of Penalty payments in the period July 1, 2015 – June 30, 2016. NERC proposes to place this \$500,000 of Penalty payments into its Assessment Stabilization Reserve, and to then use \$1,100,000 of Penalty payments accumulated in the Assessment Stabilization Reserve to reduce the 2017 assessments. *See* Table B-2 of **Attachment 2** and §IV.B and IV.C below.

<sup>27</sup> The NEL data for the U.S., Canada and Mexico, by Region and by LSE or designee, is provided in Appendix 2-A of **Attachment 2**.

<u>Program</u>	<u>2016 Budget</u>	<u>2017 Budget</u>
Reliability Standards	\$ 8,193,116	\$ 8,100,282
<u>Compliance Monitoring and Enforcement</u>		
Compliance Assurance	\$ 9,420,903	\$ 7,858,599
Compliance Analysis, Certification and Registration	\$ 4,632,871	\$ 3,646,289
Compliance Enforcement	\$ 5,293,298	\$ 5,800,647
Reliability Assessment and System Analysis	\$ 6,342,917	\$ 7,535,594
Performance Analysis <sup>28</sup>	\$ 3,575,811	\$ 4,908,855
<u>Reliability Risk Management</u>		
Situation Awareness	\$ 3,692,197	\$ 4,032,862
Event Analysis	\$ 5,355,795	\$ 5,446,206
E-ISAC (including CRISP)	\$16,767,525	\$18,515,341
Training, Education and Operator Certification	<u>\$ 3,912,231</u>	<u>\$ 3,757,501</u>
	<u>\$67,186,665</u>	<u>\$69,602,175</u>

The budgeted amounts for each program incorporate a total budget for Administrative Services of \$31,414,834 (an increase of \$972,399 (3.2%) from the 2016 budget). The Administrative Services budgeted expenses and Fixed Assets additions have been allocated to the budgets for the direct function programs in proportion to the numbers of FTEs budgeted for each direct function program.

The discussion in §IV below, as well as the detailed discussion of the individual programs (or of individual departments or groups where the presentation is disaggregated to the department or group level within a program) in **Attachment 2**, demonstrates that each of NERC's programs is necessary and appropriate to the execution of NERC's responsibilities as the ERO. Section A of **Attachment 2** describes the activities encompassed in each program or department (Background and Scope), key activities under way in 2016, the 2017 Goals and

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<sup>28</sup> In NERC's 2016 Business Plan and Budget, the budgets for RASA and Performance Analysis were reported together under Reliability Assessment and Performance Analysis, with a budget of \$9,918,728.

Deliverables for the program or department, and the 2017 Resource Requirements for Personnel and Contractors and Consultants for the program or department. A Statement of Activities and Fixed Assets Expenditures showing the line item components of the 2017 budget (as well as, for comparison, the 2016 budget and the 2016 projection), is provided for each direct function program or department and for Administrative Services.

NERC proposes an allocation of its 2017 net funding requirement (statutory assessment) of \$59,856,314 to the Regional footprints as follows<sup>29</sup>:

•	FRCC	\$ 3,199,370
•	MRO	\$ 3,874,215 <sup>30</sup>
•	NPCC	\$ 7,229,254 <sup>31</sup>
•	ReliabilityFirst	\$12,166,655
•	SERC	\$13,985,766
•	SPP RE	\$ 3,077,330
•	Texas RE	\$ 4,749,493
•	WECC	\$11,574,231 <sup>32</sup>

Appendix 2 to **Attachment 2** contains tables showing (i) the development of the NEL-based allocation factors used to allocate the NERC and Regional Entity statutory assessments by country and among the Regional footprints (Appendix 2-A), and (ii) the allocation of the NERC and Regional Entity statutory assessments by country and by Region (Appendices 2-B, 2-C and

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<sup>29</sup> As described in §III.D below, the aggregate NERC statutory assessment has been allocated to the Regional footprints on the basis of (i) 8-Region NEL and (ii) 8-Region NEL to allocate adjustments (credits) to certain Canadian entities for Compliance Monitoring and Enforcement Program (CMEP), Event Analysis and Situation Awareness costs to the remaining LSEs. The detailed allocations of the NERC statutory assessment by allocation methodology are shown in Appendix 2 to **Attachment 2**.

<sup>30</sup> The total allocation to MRO consists of \$3,217,546 allocated to the U.S. and \$656,669 allocated to Canadian provinces.

<sup>31</sup> The total allocation to NPCC consists of \$3,934,700 allocated to the U.S. and \$3,294,554 allocated to Canadian provinces.

<sup>32</sup> The total allocation to WECC consists of \$9,995,477 allocated to the U.S., \$1,401,802 allocated to Canadian provinces and \$176,951 allocated to Mexico.

2-D). Appendix 2 shows the allocation of the NERC and Regional Entity assessments to the individual LSEs or designees within the footprint of each Regional Entity. These allocations are discussed in greater detail in §III.D below.<sup>33</sup> NERC's only sources of funding for its planned programs and operations will be the assessments to users, owners, and operators of the bulk power system (BPS) provided for in 18 C.F.R. §39.4(e) and comparable collections from entities in Canada and Mexico, the other sources listed as "Funding" on its Statements of Activities and described above, including but not limited to Third-Party Funding for CRISP, and proceeds from the 2017 capital financing.<sup>34</sup>

### **B. Regional Entity Proposed 2017 Business Plans and Budgets**

Section 39.4(b) of the Commission's regulations requires that the ERO's annual budget submission include "the entire annual budget for statutory and non-statutory activities for each Regional Entity, with supporting materials, including . . . each Regional Entity's complete business plan and organization chart, explaining . . . the proposed expenditure of funds collected

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<sup>33</sup> NERC will calculate and bill the assessments to certain entities, referred to as "designees," based on NEL values that include the NEL for other LSEs served by the designee, or for which the designee is otherwise responsible for assessments. The calculation and billing of assessments to designees is not a departure from the principle that the ERO funding requirement should be recovered through assessments to LSEs based on NEL, but rather is a matter of administrative convenience and efficiency (*e.g.*, a generation and transmission (G&T) cooperative and its member distribution cooperatives may find it more efficient for the assessment to be calculated and billed to the G&T cooperative rather than to the individual distribution cooperatives). The lists of LSEs and designees for which assessments will be calculated and billed have been provided to NERC by the Regional Entities. NERC has had no involvement in developing the lists of LSEs or in arrangements between LSEs and designees pursuant to which a designee agrees to accept responsibility for an assessment that would otherwise be calculated for and billed to the LSE and the LSE agrees to be financially responsible to reimburse the designee for the assessment. The assessments for the NPCC Region will be billed to ISO New England and the New York ISO (and to similar entities in Ontario, Québec, New Brunswick and Nova Scotia), each of which will be responsible for billing and collecting assessments from the LSEs within their respective footprints. The assessments for the Texas RE region will be billed to the Electric Reliability Council of Texas (ERCOT), which will bill and collect assessments from the LSEs in ERCOT.

<sup>34</sup> NERC's 2017 Business Plan and Budget includes no non-statutory activities; therefore, NERC has not developed or presented specific accounting processes to separate the funding of its statutory and non-statutory activities and to assure that funding derived from §215 of the FPA will exclusively support statutory activities.

in sufficient detail to justify the requested funding collection and budget expenditures . . . .” Section 39.4(b) further states that the ERO’s annual budget submission “shall include the line item budgets for the activities of each Regional Entity that are delegated or assigned to each Regional Entity pursuant to §39.8.” This information for 2017 is provided in the individual Regional Entity Business Plans and Budgets in **Attachments 3 through 10**.

The Regional Entity budgets for statutory activities that are to be funded through NERC are the budgets for the functions and activities relating to development of reliability standards; compliance monitoring and enforcement and organization registration and certification; training, education and operator certification; reliability assessment and performance analysis (including necessary data gathering activities); and situation awareness and infrastructure security, encompassed by the Commission-approved delegation agreements, as well as each Regional Entity’s budgeted costs for administrative services supporting these functions and activities. Funding the Regional Entities in accordance with their proposed Business Plans and Budgets will enable them to carry out the activities necessary in 2017 to meet their responsibilities under the Commission-approved delegation agreements.

In *Order No. 672*, the Commission stated that “The ERO must determine, at a minimum, whether each Regional Entity’s proposed budget is adequate to carry out the functions delegated to it.”<sup>35</sup> As described above in §III.A.2, NERC staff worked collaboratively with the Regional Entities to develop a set of shared business planning and budget assumptions for the Regional Entities’ 2017 Business Plans and Budgets, and provided input to the Regional Entities on the development of their business plan and budget submissions. Further, the Regional Entities

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<sup>35</sup>*Rules Concerning Certification of the Electric Reliability Organization; Procedures for the Establishment, Approval and Enforcement of Electric Reliability Standards*, Order No. 672, FERC Stats. & Regs. ¶ 31,204 (2006) (*Order No. 672*), at P 229.

prepared their 2017 Business Plans and Budgets using a common format. The use of the common format facilitates comparisons among the Regional Entities' budgets. The Shared Business Plan and Budget Assumptions for 2016-2019 developed collaboratively by NERC and the Regional Entities, are provided in Exhibit A of **Attachment 2**. Additionally, in developing their 2017 Business Plans and Budgets, NERC and the Regional Entities continued to use the set of consistent accounting principles for presentation of the budgets, and the common definition of administrative (indirect) costs, that were originally developed in connection with preparation of the 2010 Business Plans and Budgets.

As described in §III.A.2 above, NERC management and staff worked iteratively with the Regional Entities on the development of the Regional Entity 2017 Business Plans and Budgets. Drafts of each Regional Entity's 2017 Business Plan and Budget were submitted to NERC for posting on the NERC website on May 19, 2016 for stakeholder comment. NERC also reviewed and provided feedback on these drafts. The draft Regional Entity Business Plans and Budgets were also the subject of presentations and discussion at meetings of the NERC FAC.

Additionally, each Regional Entity posted one or more drafts of its 2017 Business Plan and Budget on its own website for comment by its stakeholders, and/or provided other opportunities for stakeholder input, as follows:

**FRCC:** FRCC posts its proposed budget to the FRCC website and sends a copy (along with all presentation materials that will be presented to the FRCC Board) to each Board Member, Corporate Compliance Finance and Audit Committee, Alternate Board Member, all Standing Committee Chairs, and all Voting Members from the Supplier, Non-Investor-Owned Utility Wholesale, Load Serving Entity, Generating Load Serving Entity, Investor Owned Utility, and General Sectors of the membership, approximately 45 days prior to the expected FRCC Board vote date. The recipients are encouraged to contact FRCC with any comments or questions, so they can be resolved prior to the Board meeting date. Ten days prior to the Board meeting at which the vote on the budget will take place, another distribution is made to the same recipients, and posted to the FRCC website with any changes from the first version. After approval is finalized, the



process is repeated with a copy marked as Final with the Approval Date. The FRCC Board approved FRCC's 2017 Business Plan and Budget on June 30, 2016.

**MRO:** MRO posted its draft 2017 Business Plan and Budget for comments on May 19, 2016. MRO's 2017 Business Plan and Budget was presented in several meetings of the MRO Board and its stakeholders. On June 30, 2016, MRO's Board of Directors approved a resolution that approved the 2017 budget, approved MRO's reserves policy, and affirmed that the budget is sufficient to complete MRO's delegated responsibilities.

**NPCC:** On April 18, 2016, a preliminary 2017 total NPCC Expense Budget, along with the Business Plans and Budgets for both the Regional Entity and Criteria Services divisions, were presented to NPCC's Finance and Audit Committee (NPCC FAC) for review and discussion. On April 28, 2016, NPCC posted Draft #1 of its 2017 Business Plan and Budget on its website for stakeholder review and comment. Draft #1 was presented to the NPCC Reliability Coordinating Committee for comment following this posting. NPCC did not receive any formal comments from either the posting or various presentations to the stakeholders on any of its draft 2017 Business Plans and Budgets during the posting period. There were a few comments received after the May 25 comment period close, but the comments were received in time to share them with the NPCC Board at its June 30 meeting. The New Brunswick Energy and Utilities Board (NBEUB) provided comments related to the description of the NBEUB as an independent, quasi-judicial board that regulates New Brunswick's electricity sector. The comments were incorporated into the 2017 NPCC Business Plan and Budget. The NPCC FAC unanimously endorsed the "Draft for Approval" as presented and on June 30, 2016, the "Draft for Approval" of the 2017 Business Plan and Budget was presented to the NPCC Board, and was unanimously approved. Subsequently on July 12, 2016, NERC provided a letter to NPCC requesting that an allocation of \$50,000 related to a potential future special assessment of the reliability impacts associated with the Clean Power Plan allocated to U.S.-only Balancing Authorities be removed as premature. Accordingly, NPCC changed the allocation of the \$50,000 expense to U.S.-only Balancing Authorities to \$0 and "To Be Determined" in the cost allocation table on page 61 of the final 2017 Business Plan and Budget. There was no change made to the aggregate budget. This assessment allocation change was reported to the NPCC Board at its August 3, 2016 meeting.

**ReliabilityFirst:** On April 25, 2016, the ReliabilityFirst Board of Directors approved the first draft of its 2017 Business Plan and Budget, after which it was posted to the ReliabilityFirst website for a 30-day industry review and comment period. ReliabilityFirst did not receive any comments. The final 2017 Business Plan and Budget was approved by the ReliabilityFirst Board on June 2, 2016.

**SERC:** The SERC Board approved the draft 2017 Business Plan and Budget at its April 2016 meeting, after which it was posted on the SERC Website for a 30-day comment period (*i.e.*, during the month of May). SERC received one comment from a registered entity on the draft 2017 Business Plan and Budget. The comment was reviewed by the SERC President and the Director of Finance. SERC reviewed the response with the

Finance and Audit Committee and Board Executive Committee at their June 2016 meetings. The final version of the Business Plan and Budget was approved by the Board Executive Committee on June 23, 2016 and posted on July 5, 2016.

**SPP RE:** SPP RE presented a summary of the preliminary budget at the SPP RE Trustees public meeting on April 25, 2016. Prior to the meeting, the preliminary budget was posted on SPP RE's website on April 18, 2016 and the SPP RE April 2016 newsletter indicated that the budget would be posted for comments through May 30, 2016. The final SPP RE 2017 Business Plan and Budget was presented to the Trustees for approval at the June 13, 2016 public meeting. SPP RE posts all Board of Trustee materials on its public website prior to the meetings. SPP RE received no formal comments from stakeholders regarding the 2017 budget.

**Texas RE:** Texas RE's 2017 Business Plan and Budget was presented in multiple meetings of the Texas RE Board and member representatives committee. There were no written or oral challenges to the 2017 Business Plan and Budget. Texas RE posted the draft 2017 Business Plan and Budget on April 20, 2016. The Board of Directors approved Texas RE's 2017 Business Plan and Budget on May 24, 2016.

**WECC:** WECC's draft 2017 Business Plan and Budget was posted on its website on May 2, 2016 for a two-week comment period. The WECC Board of Directors and WECC Members were notified of the posting. Five sets of comments were received from stakeholders on the draft 2017 Business Plan and Budget. WECC posted a response to the comments on its website on June 1, 2016. WECC's Board approved WECC's 2017 Business Plan and Budget on June 16, 2016.

Throughout the process of NERC's review of the draft Regional Entity business plans and budgets, where appropriate, additional information was requested and other suggested changes were made. As needed, NERC and Regional Entity management and finance staffs convened meetings and conference calls to provide feedback and refine their respective business plans and budgets. NERC's review focused on:

1. Adequacy of the resources and activities to perform delegated functions;
2. Alignment of the Regional Entity's goals, objectives and major activities to the ERO Strategic Plan;
3. Description of efforts to improve efficiency and control costs;
4. Quality and completeness of the financial information presented, including:

- a. Conformance with Commission budget reporting requirements and with the common presentation format,
- b. Separation of statutory and non-statutory activities,
- c. Supporting detail for projections, including explanations for significant changes from the entity's 2016 budget, and
- d. Working capital and operating reserve budgets, policies and controls.

Through the processes described above and in §III.A.2, NERC has been able to satisfy itself that each Regional Entity's 2017 Business Plan and Budget provides necessary and adequate resources to carry out the Regional Entity's delegated functions in 2017.<sup>36</sup>

The Regional Entities submitted their final 2017 Business Plans and Budgets, approved by their respective governing bodies, to NERC in July 2016. These Business Plans and Budgets were submitted to the NERC FAC and Board and were reviewed at the FAC's meetings held on July 21 and August 10, 2016, and at the Board's August 11, 2016 meeting. The Regional Entities' 2017 Business Plans and Budgets were approved by the NERC Board at the August 11 meeting, for submission to the Commission.

The table below shows the budgets for statutory and (where applicable) non-statutory functions for each Regional Entity as presented in their respective 2017 Business Plans and Budgets (**Attachments 3-10**).<sup>37</sup> For all Regional Entities, the total budget amount for statutory functions includes total Expenses and Fixed Asset activity. Because each Regional Entity has one or more other sources of income (*e.g.*, attendance fees for workshops and Penalty payments received from Registered Entities) that will be used to offset the costs of performing delegated

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<sup>36</sup> In reviewing the Regional Entity Business Plans and Budgets, and in accordance with the Commission's directive in the *ERO Certification Order*, NERC afforded the proposed Regional Entity Business Plans and Budgets no presumption of reasonableness due to having been approved by the Regional Entities' governing bodies. *See ERO Certification Order* at P 203.

<sup>37</sup> MRO, ReliabilityFirst and SERC do not plan to perform any non-statutory activities in 2017.

functions, the requested ERO funding (assessments) for the Regional Entities is less than their budgets for statutory activities. The fourth column shows the total (*i.e.*, for all jurisdictions) net statutory assessment required for each Regional Entity, after taking into account other sources of income including application of Penalty payments. The net statutory assessment amounts include amounts (which for some Regional Entities are negative adjustments to the Funding requirement) to achieve the level of target Working Capital Reserve at December 31, 2017, determined to be appropriate by each Regional Entity.

<b>Regional Entity</b>	<b>Total Budget for Statutory Functions</b>	<b>Budget for Non-Statutory Functions</b>	<b>Total Net Statutory Assessment</b>
<b>FRCC</b>	\$ 7,177,854	\$10,198,585	\$ 6,163,896
<b>MRO</b>	\$11,226,668	-----	\$10,494,345 <sup>38</sup>
<b>NPCC</b>	\$15,147,054	\$ 1,026,896	\$14,255,060 <sup>39</sup>
<b>ReliabilityFirst</b>	\$19,908,939	-----	\$19,560,881
<b>SERC</b>	\$17,482,403	-----	\$15,706,023
<b>SPP RE</b>	\$10,865,511	\$206,226,489 <sup>40</sup>	\$ 9,092,553
<b>Texas RE</b>	\$12,167,256	\$ 1,059,945	\$ 9,595,256
<b>WECC</b>	\$26,796,928	\$ 1,744,309	\$25,282,000 <sup>41</sup>

### **C. Western Interconnection Regional Advisory Board Funding Request**

In its Order issued July 20, 2006, in Docket No. RR06-02-000 (*WIRAB Order*), the Commission concluded that reasonable costs incurred by WIRAB for activities under §215(j) of the FPA can be funded through the ERO funding process.<sup>42</sup> As specified in P 35 of the *WIRAB*

<sup>38</sup> The statutory assessment for MRO of \$10,494,345 consists of \$8,717,286 allocated to the U.S. and \$1,777,059 allocated to Canadian provinces.

<sup>39</sup> The statutory assessment for NPCC of \$14,255,060 consists of \$8,894,696 allocated to the U.S. and \$5,360,364 allocated to Canadian provinces.

<sup>40</sup> The figure of \$206,226,489 is the total 2016 budget of Southwest Power Pool, Inc. (\$217,092,000) less the 2017 Budget of SPP RE for statutory activities of \$10,865,511. The overall annual budget of Southwest Power Pool, Inc. is prepared on a schedule that will not result in approval of its 2017 budget until October 2016. See §V.B.6 below and Section C of **Attachment 8**.

<sup>41</sup> The statutory assessment for WECC of \$25,282,000 consists of \$22,015,983 allocated to the U.S., \$2,865,616 allocated to Canadian provinces and \$400,401 allocated to Mexico.

<sup>42</sup> *Order on Petition to Establish a Regional Advisory Body for the Western Interconnection*, Docket No. RR06-2-000, 116 FERC ¶61,061 (2006) (*WIRAB Order*), PP 33-37.

*Order*, WIRAB submitted to NERC a proposed 2017 Business Plan and Budget for §215(j) activities, which is **Attachment 11** to this filing. NERC has reviewed WIRAB's submission and believes it complies with the requirements of P 35 of the *WIRAB Order*.

WIRAB's proposed 2017 budget for expenses is \$1,229,080, which is a \$141,194 (10.3%) decrease from its 2016 budget. As it did in preparing its 2015 and 2016 budgets, WIRAB anticipates monitoring the activities of, and potentially offering advice to, both WECC and Peak Reliability (Peak), as well as NERC. WIRAB also anticipates the need to continue to devote increased attention to physical and cyber security issues and protection of Critical Electricity Infrastructure Information; to implementation of recommendations resulting from the Commission and NERC's investigations of the September 2011 Southwest outage event (and, more generally, to the promotion of best operational practices by registered entities in the region); and to assessing the availability of Essential Reliability Services in the Western Interconnection. Other topics on which WIRAB plans to focus during 2017 in its engagement with WECC and Peak include the reliability impacts of market reforms in the Western Interconnection; the reliability impacts of increased use of natural gas generation and the need for natural gas and electric industry coordination; the feasibility of adopting a new dynamic path transfer capability methodology; the impacts of large amounts of distributed generation resources; and the reliability implications of implementation of the U.S. Environmental Protection Agency's (EPA) Clean Power Plan and related U.S. EPA regulation of electric generating units.

WIRAB's budgeted staffing for 2017 is 5.50 FTEs, the same as in its 2016 budget. WIRAB's budgeted 2017 Personnel (Salaries) Expense is lower, by \$73,847 (13.7%), than in its 2016 budget, due in part to moving certain personnel-related costs from Salaries Expense to

Indirect Expenses (overhead). WIRAB's 2017 budget includes \$150,000 for Consultants & Contracts Expense (the same amount as provided in its 2015 and 2016 budgets) to provide technical expertise to WIRAB on issues related to improved grid operating practices, Reliability Standards and compliance, to support WIRAB in providing technically sound advice to WECC and Peak under §215(j) of the FPA. WIRAB's 2017 budget for Meetings Expense (including Meetings, Travel and Conference Calls) is only slightly increased, by \$3,546 (2.2%), over its 2016 budget. These expenses enable WIRAB staff and representatives of the states and provinces to attend meetings of WECC and Peak. Additionally, WIRAB will hold two major in-person meetings during 2017 that include participation of state and provincial agencies with electric power responsibilities in the Western interconnection.

WIRAB's proposed statutory assessment for 2017 is \$901,452, which is a decrease of \$338,546 (27.3%) from its 2016 assessment. The assessment decrease reflects a \$326,978 decremental adjustment for Working Capital Reserve, as compared to a \$129,726 decremental adjustment for Working Capital Reserve in the 2016 budget (*i.e.*, the adjustment for Working Capital Reserve reduces the WIRAB assessment by \$197,252 more than in the 2016 budget). The decremental adjustment to the assessment is based on a target Working Capital Reserve amount of \$100,000 at December 31, 2017, as approved by WIRAB's members, and a projected Working Capital Reserve at December 31, 2016 of \$426,978.

WIRAB's overall statutory funding (assessment) request of \$901,452 for 2017 consists of \$759,556 allocated to the U.S., \$128,716 allocated to Canadian provinces, and \$13,180 allocated to Mexico, all based on 2015 NEL.

**D. Allocation of Statutory Assessments by Country, Regional Entity Footprint and LSE**

The total ERO statutory funding requirement for 2017, net of other NERC and Regional

Entity income sources, to be funded by assessments is \$170,907,780 consisting of \$59,856,314 for funding of NERC's programs and \$111,051,466 for funding of Regional Entity statutory activities and the WIRAB. NERC has allocated its statutory assessment of \$59,856,314 to the LSEs within each Regional footprint primarily on the basis of NEL, as described below.<sup>43</sup>

First, a total of \$1,693,333 of adjustments (credits) to the allocations to the AESO, the IESO, New Brunswick and Québec for certain CMEP, Event Analysis and Situation Awareness (SAFNR<sup>44</sup>) costs and the true-up of 2015 costs was allocated using 8-Region NEL. In accordance with NERC's *Expanded Policy on Allocation of Certain Compliance and Enforcement Costs*, adjustments were made in the calculations of the assessments to the AESO, the IESO, New Brunswick and Québec, to provide credits for certain activity costs. These adjustments recognize that entities in certain of these provinces (Ontario, Alberta and New Brunswick) expend resources to perform compliance and enforcement activities in those provinces that otherwise would be performed by NERC or a Regional Entity, and that the compliance and enforcement resources NERC needs for Alberta and Québec are reduced due to the very small number of entities subject to compliance and enforcement activities in those provinces.<sup>45</sup> These adjustments also recognize that (1) certain compliance costs related to maintenance of the CMEP database are budgeted in the Information Technology program; and (2) certain NERC activities, including the SAFNR program, either overlap with Canadian

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<sup>43</sup>See Appendix 2-A of **Attachment 2** for the 2015 NEL data by Regional Entity and calculation of the country allocation factors for each Region. MRO, NPCC and WECC are the only Regional Entities whose footprints encompass Canadian provinces (and for WECC, Mexico). As noted earlier, the year 2015 is the most recent calendar year for which NEL data is available.

<sup>44</sup> SAFNR = Situation Awareness – FERC, NERC and the Regions.

<sup>45</sup> The Commission accepted NERC's *Expanded Policy on Allocation of Certain Compliance and Enforcement Costs* in the *July 16, 2009 Budget Compliance Order*, at P 42, finding that the Expanded Policy "provides reasonable guidelines for cost allocation in specific circumstances described in the document."

regulatory programs or, as in the case of SAFNR, are not used by these Canadian provinces, and therefore these provinces were not allocated a share of these costs. In addition, these adjustments included a true-up of credits provided in 2015, based upon actual costs incurred in 2015. The credit amounts were allocated to all other LSEs (Balancing Authorities) on the basis of NEL.

**Attachment 13** shows the calculations of these adjustments to the allocations to the AESO, the IESO, New Brunswick and Québec. The allocation of the \$1,693,333 of adjustments (credits) to the allocations to the AESO, the IESO, New Brunswick and Québec is reflected in Appendix 2-C of **Attachment 2**.

Second, an allocation of \$1,100,000 of Penalty payments from the Assessment Stabilization Reserve was made to all U.S. LSEs. Because the Penalty payments are collected solely from U.S. Registered Entities, the Penalty payments are allocated solely to offset statutory assessments to U.S. LSEs.

Third, an allocation based on the 8-Region NEL was used to allocate \$60,956,314 of the NERC statutory assessment. The NEL-based allocations to the eight Regional footprints are shown in Appendix 2-C of **Attachment 2**.

NEL has also been used to allocate the Regional Entity assessments, with these exceptions: First, 23.28% of NPCC's Compliance Monitoring and Enforcement and Organization Registration and Certification (CORC) Program costs, representing CORC program fundamentals, has been allocated among the six Balancing Authority Areas in NPCC on the basis of NEL; 51.98% of the CORC costs has been allocated between the U.S. and Canadian Balancing Authority Areas in NPCC using a compliance audit-based methodology; and the remaining 24.74% of the CORC costs has been allocated between the U.S. and Canadian



Balancing Authority Areas using an enforcement activity-based methodology. As directed in the *July 16, 2009 Budget Compliance Order*, PP 38-41, the portion of NPCC CORC costs allocated to the U.S. using the compliance audit-based methodology and the portion of NPCC CORC costs allocated to the U.S. using the enforcement activity-based methodology has then been re-allocated between the New England and New York Balancing Authority Areas based on NEL.<sup>46</sup>

Second, WECC's allocation of its assessment to the AESO for the Province of Alberta has been reduced by \$969,620, representing WECC CMEP costs that are duplicative of programs of the AESO. The AESO credit amount was allocated to the remainder of the LSEs (Balancing Authorities) in the WECC Region on the basis of NEL.<sup>47</sup>

After allocating the appropriate portions of the NERC, Regional Entity and WIRAB funding requirements to Canadian provinces and Mexico (taking into account the NEL-based allocations, the adjustments to the NERC allocations to the AESO, the IESO, New Brunswick and Québec, the adjustments to the NPCC allocations to Canadian provinces, and the adjustment to the WECC assessment to the AESO), the total ERO statutory assessment for 2017 allocable to U.S. LSEs for which Commission approval is sought is \$154,832,467, comprised of:

NERC Assessment:	\$ 54,326,337
Regional Entity Assessments:	\$100,506,130 (includes the WIRAB assessment)

The funding requirement of each Regional Entity for statutory activities is allocated 100% to that Region. The funding requirement for the WIRAB is allocated 100% to the WECC Region. The following table shows the allocation to each Region of the total 2016 ERO

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<sup>46</sup> The allocation of NPCC CORC Program costs is described in greater detail at pages 59-61 of the NPCC 2017 Business Plan and Budget, **Attachment 5**.

<sup>47</sup> See Appendix C of the WECC 2017 Business Plan and Budget, **Attachment 10** to this filing, which shows the calculation of the \$969,620 adjustment to the WECC assessment to the AESO. The adjustment to the WECC assessment to the AESO is provided for in a memorandum of understanding entered into effective July 15, 2010 among NERC, WECC and the AESO.

statutory assessment of \$154,832,467 for the U.S. statutory activities of NERC and the Regional Entities (including WIRAB). The table also shows the statutory assessments per kWh based on the 2015 U.S. NEL of each Region.

<b>Regional Entity</b>	<b>NERC Assessment</b>	<b>Regional Entity Assessment</b>	<b>Total U.S. Assessment</b>	<b>Assessment per kWh (2015 NEL)</b>
<b>FRCC</b>	\$ 3,199,370	\$ 6,163,896	\$ 9,363,266	\$0.0000399
<b>MRO</b>	\$ 3,217,546	\$ 8,717,286	\$ 11,934,833	\$0.0000506
<b>NPCC</b>	\$ 3,934,700	\$ 8,894,696	\$ 12,829,396	\$0.0000445
<b>ReliabilityFirst</b>	\$ 12,166,655	\$ 19,560,881	\$ 31,727,536	\$0.0000356
<b>SERC</b>	\$ 13,985,766	\$ 15,706,023	\$ 29,691,789	\$0.0000290
<b>SPP RE</b>	\$ 3,077,330	\$ 9,092,553	\$ 12,169,883	\$0.0000539
<b>Texas RE</b>	\$ 4,749,493	\$ 9,595,256	\$ 14,344,749	\$0.0000412
<b>WECC</b>	\$ 9,995,477	\$ 22,775,539 <sup>48</sup>	\$ 32,771,016	\$0.0000447
<b>Total</b>	\$ 54,326,337	\$ 100,506,130	\$ 154,832,467	\$0.0000389

NERC obtained from each Regional Entity a listing of the LSEs or their designees in the Region and a breakdown of the Region's 2015 NEL by LSE or designee.<sup>49</sup> NERC used this information to allocate the total ERO statutory assessment allocated to each Region among the LSEs, their designees or the other entities to be billed the assessments within that Region.<sup>50</sup> The amount of the NERC and Regional Entity statutory assessments allocated to each LSE or designee or other entity to be billed in each Region is shown in Appendix 2-B of **Attachment 2**. NERC requests that the Commission approve the statutory assessment amounts for NERC and

<sup>48</sup> The number for WECC includes the portion of the WIRAB assessment allocated to the U.S.

<sup>49</sup> For the NPCC Region, assessments are allocated on the basis of NEL in each Balancing Authority Area (New York, New England, Ontario, Québec, Nova Scotia and New Brunswick). For Texas RE, assessments are allocated on the basis of the NEL for ERCOT, which acts as the billing agent for the Texas RE Region.

<sup>50</sup> Certain LSEs in MRO and WECC serve end users only in Canada or Mexico and not in the U.S. These LSEs were not allocated any portion of the ERO funding requirement allocated to U.S. end users, but were allocated appropriate portions, based on NEL (except as noted above), of the ERO funding requirement allocated to Canadian provinces or Mexico, as applicable.

the Regional Entities allocated to each LSE or designee, as shown in Appendix 2-B of **Attachment 2**, so that the LSEs and their designees or other entities may be billed for these assessments in accordance with 18 C.F.R. §39.4(e).<sup>51</sup>

As provided for in Exhibit E to the delegation agreement with each Regional Entity, NERC will directly invoice the approved assessments to LSEs or designees, or to the other entities to be billed, in all Regions except WECC.<sup>52</sup> WECC will invoice LSEs or Balancing Authorities or their designees within the WECC footprint, collect the assessments and remit the funds collected for the NERC, WECC and WIRAB assessments to NERC.

#### **E. Provision for Working Capital Reserve**

In the development of their 2017 Business Plans and Budgets and proposed assessment amounts to LSEs, NERC and the Regional Entities have taken into account the need to maintain appropriate amounts of working capital and operating reserves. NERC's WCOR Policy, originally developed in 2012 and revised in 2013 and again in 2015,<sup>53</sup> provides for budgeting and accounting for separate working capital and several categories of operating reserves with specified purposes, including an Assessment Stabilization Reserve. It also sets forth guidelines and authorities for accessing Working Capital and Operating Reserves and for use of funds for activities in excess of budgeted amounts. The amounts that NERC has budgeted for 2017 in the various reserves categories under its WCOR Policy, and the impacts on NERC's 2017 proposed statutory assessments, are discussed in §IV.B below and in Exhibit E to **Attachment 2**. The

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<sup>51</sup> As approved by the Commission in the *ERO Certification Order* at P 218, for reasons of administrative convenience, billing and payment by LSEs of annual assessments less than \$100 will not be required.

<sup>52</sup> As indicated above, the assessments in the NPCC Region will be billed to a single entity for each of the six Balancing Authority Areas within NPCC; and the assessments in the Texas RE region will be billed to ERCOT. (NERC also directly bills La Régie de l'énergie du Québec, which is not a LSE, for the CMEP costs allocated to Québec, and directly bills the total assessment in New Brunswick to the New Brunswick Energy and Utilities Board as the LSE in New Brunswick.)

<sup>53</sup> See footnote 16 above.

remainder of the discussion in this §III.E describes the development of the Regional Entities' Working Capital Reserve amounts and associated adjustments to assessments for 2017.

The process takes into account each Regional Entity's actual and projected Working Capital Reserves at December 31, 2015 and December 31, 2016, respectively, resulting from its accumulated prior years' surpluses and deficits, and results in an incremental or decremental adjustment to each Regional Entity's proposed 2017 statutory assessment amount, in order to arrive at its target Working Capital Reserve at December 31, 2017. Table B-1, Reserve Balance (Working Capital Reserve Balance), in Section B of each Regional Entity's 2017 Business Plan and Budget, shows the calculation of the increment or decrement to the Regional Entity's requested 2017 assessment to achieve the Regional Entity's desired Working Capital Reserve at December 31, 2017. The calculations shown on Table B-1 take into account: (1) the Regional Entity's actual Working Capital Reserve at December 31, 2015, (2) assessment Funding, projected other Funding, and projected Expenses and Capital Expenditures for 2016, resulting in (3) a projected Working Capital Reserve at December 31, 2016, (4) the desired (target) Working Capital Reserve at December 31, 2017, (5) the budgeted Expenses and Capital Expenditures, and projected other funding sources (including Penalties collected from Registered Entities during the 12 months ended June 30, 2016), for 2016, resulting in (6) the increment or decrement to the Regional Entity's requested 2017 assessments to achieve the target Working Capital Reserve at December 31, 2017.

As shown on Table B-1 in each Regional Entity's 2017 Business Plan and Budget, each Regional Entity (except SPP RE; *see* §V.B.6 below) has established a target Working Capital Reserve for 2017. The basis for each entity's Working Capital Reserve for 2017 is stated on its Table B-1 or explained elsewhere in the text of its 2017 Business Plan and Budget. Further

discussion of the target Working Capital Reserve amount, and of the calculation of the adjustment (increase or decrease) to each Regional Entity's proposed 2017 statutory assessment to achieve its target Working Capital Reserve, is provided in the discussions of the individual Regional Entity 2017 Business Plans and Budgets in §V.B below.

As of the end of the second quarter of 2016, NERC and the Regional Entities are projecting year-end 2016 balances in Working Capital and Operating Reserves that are collectively \$33.2 million, which is \$10 million (42.7%) over the aggregate ending balances that were projected in their 2016 Business Plans and Budgets. This difference is primarily due to higher beginning balances (\$8 million).

The projected year-end 2016 balances of Working Capital and Operating Reserves for NERC and the Regional Entities included in their 2017 Business Plans and Budgets total \$31.4 million, which is \$2.2 million (6.7%) less than the aggregate projected year-end 2016 balances projected at the end of the second quarter of 2016. The difference between the two sets of projected year-end balances is related to the timing difference in the preparation of the projections. The projections included in the 2017 Business Plans and Budgets were prepared earlier than the second quarter variance reports, based upon information available at the time, and were approved by the respective Boards prior to preparation of second quarter 2016 variance reports. NERC and the Regional Entities have planned to decrease reserves by \$7.2 million in the aggregate in their 2017 Business Plans and Budgets. Funds in excess of projected 2017 beginning Working Capital and Operating Reserve Balances will be subject to applicable Regional Entity controls over the expenditure of such funds and will be taken into account in developing 2018 funding requirements.

#### **F. Budget Projections for 2018 and 2019**

As it did its Business Plans and Budgets for each of the years 2008 through 2016, NERC

is providing preliminary budget projections for the two years following the budget year (*i.e.*, 2018 and 2019).<sup>54</sup> This information is provided on pages 20-23 of **Attachment 2**.<sup>55</sup> These budget projections show that NERC's 2018 total budget is projected to be approximately \$1.719 million, or 2.5%, above the 2017 total budget. For 2019, NERC's total budget is projected to be approximately \$1.791 million, or 2.5%, higher than the amount projected for 2018. The significant assumptions underlying these projections include: (i) no increases in total FTEs over budgeted 2017 FTEs; (ii) Personnel and Benefits costs per FTE are consistent with the 2017 budget assumptions; (iii) Operating Expenses (including Consultant & Contract Expense) are slightly higher in the projection years due to increases for maintenance costs associated with software applications supporting ERO Enterprise operations, and ongoing implementation of improved budgeting and financial reporting tools; (iv) debt service repayment obligations in connection with NERC's capital financing program consistent with the projected capital forecast for Enterprise IT applications; and (v) no increase in expenditures related to CRISP except for Personnel and Benefits expense increases consistent with the general assumption (item (ii) above) for these costs.

#### **IV. DISCUSSION OF NERC BUSINESS PLAN AND BUDGET**

##### **A. 2017 Business Plan and Budget by Program**

This section summarizes NERC's proposed 2017 Business Plan and Budget by statutory program and Administrative Services department. The proposed 2017 staffing and expenditure budgets for the individual NERC departments and programs are described in the subsections

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<sup>54</sup> The 2017 Business Plan and Budget of each Regional Entity also includes budget projections for 2018 and 2019.

<sup>55</sup> The NERC Board has not approved the 2018-2019 projections as official budgets, and NERC is not seeking approval of these budget projections by the Commission or other applicable governmental authorities.

below. However, several factors impact the budgets for all programs and departments.

First, in the 2017 budget, the budgeted number of FTEs is slightly reduced from the 2016 budget. Budgeted FTE staffing for 2017 is 2.5 FTEs lower than in the 2016 budget, including a reduction of 0.7 FTE in the staffing for the statutory direct programs and 1.9 FTE in the administrative departments. Additionally, some staff have been (in 2016) or will be redeployed internally from one program or department to one or more other programs or departments which now have higher priority resource needs.

Second, in developing their budgeted staffing (FTEs) and related Personnel Expenses for 2017, all NERC programs and departments have applied a 6.0% vacancy rate reduction to FTEs to account for attrition and hiring delays. The vacancy rate adjustment reflects that actual staffing is typically less than budgeted staffing due to factors such as employees leaving NERC for other jobs and new positions being filled at a later date than was assumed in the preparation of the budget. The vacancy rate adjustment used for budgeting purposes is reviewed each year, based on historical attrition and the time it takes to recruit and onboard new staff, and is adjusted if appropriate. In the 2016 NERC budget, a 7.8% vacancy rate adjustment was used; in the 2015 budget, a vacancy rate adjustment of 6% was used. The decrease in the vacancy rate adjustment factor used in the 2017 budget as compared to the 2016 budget causes slight increases (offset in some cases by a reduction in the number of budgeted positions (headcount)) in the budgeted 2017 FTE and Personnel Expenses for each program and department (which may be fully or partially offset by other factors for the individual programs and departments).

Third, in the development of Personnel Expense in the 2017 budget, market-based compensation and salary adjustments were assumed, based on guidelines established by the NERC CGHRC, market information provided by a nationally recognized compensation and

benefits consulting firm, and other available data. An updated market compensation study was completed in late 2015 under the oversight of the CGHRC and was utilized in developing the budgeted compensation and salary adjustments for purposes of the 2017 budget.

Fourth, budgeted Benefits Expense is increased for all programs (all other things equal) due to anticipated market increases in medical and dental plan cost from the 2016 budget, based on information provided by NERC's benefits consultants.

Fifth, budgeted Meetings Expense and Travel Expense are relatively flat in the 2017 budget from the 2016 budget (decrease of \$25,000 (0.8%)), reflecting the significant actions NERC has taken over the past several years to reduce these expenses, including by working with Regional Entities to share meeting space where possible, to help reduce Meetings costs.

Sixth, budgeted Conference Calls Expense is reduced by \$222,400 (69.5%) from the 2016 Budget based on the execution of a contract for this service with a new provider in 2016. The reduction in costs under the new contract offsets an increase in maintenance costs associated with a new lease for audio-visual equipment and associated service and maintenance agreements (budgeted in Office Costs).

Although the overall budgeted staffing for NERC's statutory direct programs is virtually the same (0.7 FTE decrease) as in the 2016 budget, there have been (as noted above) some reallocations of positions among the NERC programs to better align resources with needs, so that some statutory direct programs or departments are budgeted for increased staffing, and others for reduced staffing, as compared to the 2016 budget. The budgeted expenses and Fixed Assets expenditures for the Administrative Services programs (Indirect Expenses) are allocated to the statutory direct programs on the basis of the ratio of the budgeted FTEs in each statutory program to the total budgeted statutory program FTEs. The changes in the numbers of FTEs



budgeted for each statutory direct program for 2017 as compared to the 2016 budget therefore impact the allocation of the Administrative Services costs among the statutory direct programs.

### **1. Reliability Standards Program**

The Reliability Standards Program carries out the ERO's responsibility to develop, adopt, obtain approval of, and modify as and when appropriate, mandatory Reliability Standards for the reliable planning, operation and critical infrastructure protection of the North American Bulk Electric System (BES). The major activities of the Reliability Standards Program include (1) providing project management and leadership to the Reliability Standard development process to deliver high-quality, continent-wide Reliability Standards, including standard development outreach activities, assistance to and facilitation of Standard Drafting Teams' activities, drafting support, and ensuring that the quality of documents produced are appropriate for approval by industry and the NERC Board; (2) facilitating continent-wide industry engagement in the standard development processes; and (3) conducting balloting, disseminating information, and supporting regulatory filings on proposed standards. The Reliability Standards Program staff also supports Regional Entities' regional reliability standards development processes by providing technical advice, final quality review of Regional standards, presentation to the NERC Board, and submission to applicable regulatory authorities in the U.S. and Canada for adoption.

The key activities of the Reliability Standards Program underway in 2016 are described at pages 25-26 of **Attachment 2**, and include focusing on the selection of standard projects undertaken; addressing Commission directives and responding to Commission orders on Reliability Standards; performing enhanced periodic reviews of the existing Reliability Standards; and facilitating smooth transitions to new Reliability Standards, through working in conjunction with the Compliance Monitoring and Enforcement and Organization Certification and Registration, RASA, and Performance Analysis programs to develop guidelines, webinars,

and other activities to support auditor and industry training for the new standards. The Reliability Standards program works in conjunction with the NERC Standards Committee, the RISC, and the Reliability Risk Management Process (RRMP) to develop annually the rolling three-year Reliability Standards Development Plan.

The 2017 goals and deliverables for the Reliability Standards Program are described at page 26 of **Attachment 2**, and reflect that the transformation of the NERC Reliability Standards to steady state<sup>56</sup> is nearing completion, including addressing the majority of the Commission directives and the recommendations of the Paragraph 81 initiative<sup>57</sup> and the Independent Expert Review Panel for retiring specified requirements of Reliability Standards. The Reliability Standards program will continue to address any new standards directives issued by the Commission, as well as any reliability risks identified by the RISC or the RRMP for which a Reliability Standard is part of the solution.

NERC has budgeted 17.16 FTEs for the Reliability Standards Program for 2017, which is a decrease of 0.82 FTE from the 2016 budget and reflects the expectation that workload in the standards area will remain stable from 2016 to 2017. The 2017 budgeted direct expenses for this program are \$3,861,666, which is a decrease of \$27,102 (0.7%) from the 2016 budget. Budgeted 2017 Personnel Expenses are increased from the 2016 budget by \$56,958 (1.9%), although budgeted Payroll Taxes and Benefits Expense are both decreased from the 2016 budget. Meetings Expense and Travel Expense are budgeted at the same amounts as in the 2016 budget,

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<sup>56</sup> NERC defines “steady state” in this context to mean a stable set of clear, concise, high-quality and technically sound Reliability Standards that are results based, including retirement of requirements that do little to promote reliability.

<sup>57</sup> The Paragraph 81 initiative was the result of the Commission’s invitation, in a March 2012 order, to identify specific Reliability Standards or requirements that need to be revised or retired based on lack of meaningful benefit to BPS reliability. *North American Electric Reliability Corporation, Order Accepting with Conditions the Electric Reliability Organization’s Petition Requesting Approval of New Enforcement Mechanisms and Requiring Compliance Filing*, 138 FERC ¶ 61,193 (2012), at P81.

while the budget for Conference Calls Expense is decreased by 92,435 (69.5%). The reduction in budgeted Conference Calls Expense is consistent with the overall reduction in this expense item due to the execution of a contract with a new service provider in 2016. As was the case in the 2014, 2015 and 2016 budgets, no Consultant & Contracts expense is budgeted for this program for 2017. The allocation of Administrative Services expenses to this program is \$4,180,279 (a decrease of \$53,741 from the 2016 budget), the Allocation of Fixed Assets from the Administrative Services programs is \$290,058, and no Fixed Asset additions are included in the 2017 budget for the Reliability Standards Program.

## **2. Compliance Monitoring and Enforcement and Organization Registration and Certification Program**

The Compliance Monitoring and Enforcement and Organization Registration and Certification Program carries out NERC's responsibility to monitor, enforce and ensure registered entity compliance with mandatory Reliability Standards. This program is comprised of three operational groups: Compliance Assurance (addressing compliance monitoring), Compliance Analysis, Certification and Registration (addressing Assurance, Organization Certification and Organization Registration), and Compliance Enforcement.

### **a. Compliance Assurance**

Compliance Assurance addresses the Regional Entities' implementation of the compliance monitoring section of the CMEP. Compliance Assurance works collaboratively with the Regional Entities to ensure effective implementation of risk-based compliance monitoring under the CMEP across the ERO Enterprise, including the development by Regional Entities of customized compliance oversight plans (COPs) for each registered entity. Compliance Assurance's responsibilities include but are not limited to the following major activities and functions: (i) oversight of the quality implementation of the risk-based compliance monitoring

program; (ii) development of the annual CMEP Implementation Plan; (iii) oversight of the use of necessary compliance-related processes, procedures, IT platforms, tools, and templates; (iv) development and delivery of education and training for ERO Enterprise staff; (v) Version 5 Critical Infrastructure Protection (CIP) standards activities related to education programs that support industry compliance and integration of risk assessment and internal controls; (vi) training and outreach activities related to effective implementation of the Physical Security Reliability Standard (CIP-014-1); (vii) coordination with the Reliability Standards program for standard development to assist in the smooth transition for standards from development to enforceability; (viii) support for Regional Entity and industry committees, working groups and task forces; and (ix) industry training for every Reliability Standard approved by the Commission.

The specific goals and deliverables of Compliance Assurance for 2017 are described at page 30 of **Attachment 2** and include: (i) continuing to implement and mature the risk-based compliance monitoring program, fully developing customized COPs for registered entities; (ii) working closely with Compliance Enforcement, IT, and the Regional Entities, to improve the existing Compliance, Reporting, Analysis Tracking System (CRATS) and other compliance tools to support risk-based activities; (iii) supporting continued successful implementation of the Version 5 CIP standards and subsequent enhancements; (iv) continuing to monitor and support implementation of the Physical Security Standard; (v) initiating a training program to support implementation of common audit procedures for each Reliability Standard; and (vi) continuing to integrate the standards and compliance functions for stakeholder implementation, including through common sets of Reliability Standards Audit Worksheets, measures, or successors, for all Reliability Standards.

The budgeted staffing for Compliance Assurance for 2017 is 15.51 FTEs, which is a

decrease of 3.85 FTEs from the 2016 budget and reflects the reallocation of personnel to other program areas during 2016 to support initiatives for successful implementation and oversight of the risk-based CMEP. As a result, budgeted 2017 Personnel Expenses are decreased by \$674,828 (17.1%) from the 2016 budget. Budgeted Consultants & Contracts Expense is reduced by \$150,000 (75.0%) from the 2016 budget, to \$50,000. Budgeted 2017 Office Costs are increased by \$96,419 (215%) from the 2016 budget, primarily for costs for a new software audit tool.

The budgeted total direct expenses for Compliance Assurance for 2017 are \$3,816,924, which is a decrease of \$742,309 (16.3 %) from the 2016 budget, with the primary drivers of the decrease being the reduced staffing and related Personnel Expenses and the reduced Consultants & Contracts Expense. The allocation of Administrative Services expenses to Compliance Assurance is \$3,779,431 (a reduction of \$780,283, reflecting the reduced staffing in Compliance Assurance), Fixed Assets additions allocated to Compliance Assurance are \$262,244, and no Fixed Asset additions or Depreciation are budgeted for Compliance Assurance for 2017.

**b. Compliance Analysis, Certification and Registration**

The Compliance Analysis, Certification and Registration group is responsible for a range of requirements and activities embodied in Section 500 and Appendices 5A and 5B of the NERC Rules of Procedure. Specific activities include: (1) identification and registration of BES users, owners and operators who are responsible for compliance with Reliability Standards; (2) certification of the competency of Reliability Coordinators, Balancing Authorities, and Transmission Operators to perform their reliability functions; (3) reliability assurance activities, including conducting activities to assure that certain actions have been taken as reported in response to NERC Alerts or guidance to industry, oversight of Regional Entity implementation of registration, compliance, certification, investigation, and complaint programs and processes, conducting compliance investigations and participating in Regional Entity-led investigations,

working with Regional Entities to confirm that events and disturbances are evaluated against relevant Reliability Standards, and addressing formal complaints alleging violations of Reliability Standards.

The 2017 goals and deliverables for the Compliance Analysis, Certification and Registration group are described at page 33 of **Attachment 2** and include continuing to mature the NERC-led Panel to review entities for deregistration or applicability to a reduced number of standards; implementing registration program improvements identified during 2016, and conducting training as necessary; and implementing certification program improvements identified during 2016, and conducting training as necessary.

The budgeted staffing for Compliance Analysis, Certification and Registration for 2017 is 7.52 FTEs, which is a decrease of 2.62 FTE from the 2016 budget, reflecting a reduced workload for this group. Budgeted 2016 Personnel Expenses for this group is decreased by \$347,598 (18.8%) from the 2016 budget, reflecting the reduced staffing. No Consultants & Contracts Expense is budgeted for 2017, a reduction from \$50,000 budgeted in 2016.

The budgeted total direct expenses for Compliance Analysis, Certification and Registration for 2017 are \$1,686,689, which is a decrease of \$400,094 (19.2%) from the 2016 budget, with the primary drivers of the decrease being the reduced Personnel Expenses and the reduced (to zero) Consultants & Contracts Expense. The allocation of Administrative Services expenses to Compliance Analysis, Certification and Registration is \$1,832,451 (a reduction of \$555,499 from the 2016 budget, reflecting the reduced FTE staffing); Fixed Assets allocated to Compliance Analysis, Certification and Registration are \$127,149; and no Fixed Asset additions or Depreciation are budgeted for Compliance Analysis, Certification and Registration for 2017.

### c. Compliance Enforcement

Compliance Enforcement is responsible for overseeing enforcement processes, the application of penalties or sanctions, and activities to mitigate and prevent recurrence of noncompliance with Reliability Standards. Compliance Enforcement works collaboratively with the Regional Entities to ensure consistent and effective implementation of the risk-based CMEP, and focuses on ensuring that the ERO Enterprise dedicates resources to matters that pose the greatest risk to reliability. Ensuring successful implementation of the risk-based CMEP is the priority of Compliance Enforcement's oversight plan. Compliance Enforcement (i) monitors and provides oversight over the Regional Entities' enforcement processes and the outcomes of those processes to ensure due process, identify best practices, and promote consistency; (ii) collects and analyzes compliance enforcement data and trends to identify emerging risks and inform the development of enforcement policy and processes; (iii) files notices of penalties and other submittals associated with violations discovered through Regional Entity compliance monitoring and enforcement activities or through NERC-led investigations and audits; (iv) collaborates with other NERC departments including Reliability Standards, Compliance Assurance, Event Analysis, and Regional Entity Coordination (a function within the General and Administrative Department); and (v) delivers training of ERO Enterprise staff and registered entities and supports other outreach efforts. During 2016, Compliance Enforcement is continuing to conduct outreach activities that focus on self-logging, compliance exceptions, risk elements, Version 5 CIP standards, Inherent Risk Assessments, internal controls, and Reliability Standards approved by the Commission in 2016; and to provide training to Regional Entity staffs on the most important elements of risk-based enforcement. Compliance Enforcement's activities are further described at pages 35-41 of **Attachment 2**.

The 2017 goals and deliverables for Compliance Enforcement are described on page 41 of **Attachment 2**, and are focused on refining and improving the risk-based CMEP processes; implementing in a transparent manner the ERO Enterprise enforcement philosophy that is risk-focused and drives desired behaviors by registered entities; expanding the information feedback loop from Compliance Enforcement to Reliability Standards and other program areas; and working with Compliance Assurance, IT, and Regional Entity staff regarding improvements in the existing CRATS and other compliance tools to support risk-based CMEP activities.

The budgeted staffing for Compliance Enforcement for 2017 is 13.16 FTEs, which is an increase of 0.94 FTE from the 2016 Budget and reflects implementation of an internship program. Budgeted 2017 Personnel Expenses are \$147,851 (6.9%) higher than in the 2016 budget. As in the budgets for each of the years 2012 through 2016, no Consultants & Contracts Expense is budgeted for Compliance Enforcement for 2017. Compliance Enforcement is also supported by funding in the IT Department budget for the maintenance of existing software tools and development of plans for future tools for compliance assessment, registration, certification, and enforcement activities.

The budgeted total direct expenses for Compliance Enforcement for 2017 are \$2,371,347, an increase of \$145,409 (6.5%) from the 2016 budget. The allocation of Administrative Services expenses to Compliance Enforcement is \$3,206,790, the allocation of Fixed Asset additions to Compliance Enforcement is \$222,510, and no Fixed Asset additions are budgeted for Compliance Enforcement for 2017.

### **3. Reliability Assessment and System Analysis Program**

The RASA Program (formerly referred to as Reliability Assessment and Performance Analysis, or RAPA) carries out the ERO's statutory responsibility to conduct assessments of the reliability and adequacy of the BES in North America to provide insight and guidance about



reliability risks. RASA's activities provide a foundation for the development of new, or modification of existing, Reliability Standards, or other initiatives that enhance overall reliability. The majority of RASA's activities directly address risk priorities established by the RISC. RASA focuses on developing a technical framework and understanding of the emerging reliability risks facing the industry and providing guidance and insights to enhance reliability.

The RASA Program is responsible for preparing independent assessments of the overall reliability and adequacy of the BES and associated reliability risks that could impact the short-term, mid-term and long-term (ten-year) planning horizons, and other reliability issues requiring an in-depth analysis; supporting development and improvement of long-term sustainable interconnection-based power flow, dynamic, and load models that exhibit the accuracy and fidelity reflecting actual BES reliability performance and dynamic conditions; conducting interconnection-wide analysis of steady-state and dynamic conditions, including frequency, Essential Reliability Services, stability, and oscillatory behavior aspects; advancing the industry's and the ERO's understanding of power system characteristics and behaviors by gathering larger Phasor Measurement Unit (PMU) datasets for advanced data analytics and modeling improvements; providing assurance oversight that the BES elements necessary for reliable operation are identified, thereby requiring the BES elements to follow applicable Reliability Standards; and establishing reliability leadership and consistent, technically sound guidance and recommendations to position the industry and policymakers to enhance reliability through effective outreach and communications.

RASA works closely with other industry organizations, including the Electric Power Research Institute (EPRI), the U.S. Department of Energy (DOE), the Institute of Electrical and Electronic Engineers (IEEE), the Institute of Nuclear Power Operations (INPO), the North

American Transmission Forum (NATF), the North American Generation Forum (NAGF), the Canadian Electricity Organization (CEA), the Interstate Natural Gas Association of America (INGAA), and the Natural Gas Supply Association (NGSA). Areas of collaboration with these organizations include geomagnetic disturbances, vegetation management, integration of variable generation, and interdependency of gas and electric systems.

The major activities of the RASA Program underway in 2016 are described at pages 44-46 of **Attachment 2**. These activities are focused on reliability assessment and system analysis. Reliability assessment activities include performing the NERC Long-Term Reliability Assessment and the Summer and Winter Reliability Assessments, as well as Short-Term and Special Reliability Assessments on emerging or high priority/high risk issues that warrant an independent assessment from the ERO, such as development of effective Essential Reliability Services. System analysis activities include PMU measurement, use and analysis improvements; Frequency Response Analysis, Interconnection Frequency Response Obligation (IFRO) analysis, and forward-looking reliability assessments; Interconnection-wide model building designation and criteria administration; analysis of TPL Footnote 12; load and distributed energy resource modeling; simulation and forensic analysis of major events; supporting Reliability Standards; and processing BES Exception requests and Self-Determined Notifications.

The 2017 goals and deliverables for the RASA Program are summarized at pages 46-47 of **Attachment 2**. They include: (1) implementing advanced reliability assessment and system analysis methods to address the changing nature of the grid, and issue reliability assessment reports, guidelines and recommendations to address high priority evolving performance trends and emerging risks to reliability; (2) conducting special assessments on high-priority risks identified by the RISC, including changing resource mix, maintaining Essential Reliability

Services, increased penetration of distributed energy resources, increasing dependency on natural gas generation, and inter-area and local system oscillations and their potential impact on interconnection reliability; (3) providing the basis to industry to meet requirements of standard BAL-003-1, including the BAL-003 filing with the Commission, determination of IFRO and Balancing Authority Frequency Reporting Obligation values, as well as interconnection-wide studies of frequency response; (4) supporting standards development by providing subject matter expertise; (5) supporting the NERC Planning Committee and the subcommittees, working groups and task forces serving NERC standing committees, including supporting development of technical reference documents and Reliability Guidelines per the Planning Committee annual work plan; (6) supporting major event investigations, analyses, and reporting of findings, recommendations and lessons learned; (7) providing feedback to interconnection-wide model building groups on improvements to system model quality and fidelity; and (8) assisting in development of approaches to registration, providing input to the development of CMEP risk elements, and leading and supporting the BES Definition Exception process.

The budgeted staffing for the RASA Program for 2017 is 14.10 FTEs, which is an increase of 2.35 FTEs from the 2016 budget.<sup>58</sup> Staffing is being increased in order to address resource demands associated with ongoing reliability assessment performance analysis and system analysis activities. Budgeted 2017 Personnel Expense is increased by \$534,398 (22.6%) over the 2016 budget. Budgeted 2017 Meetings Expense is decreased by \$47,010 (14.0%) from the 2016 budget. The RASA Program is budgeting \$525,000 for Consultants & Contracts

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<sup>58</sup> In NERC's 2016 Business Plan and Budget, the RAPA budget included costs for resources and activities now separately conducted and budgeted in the RASA and Performance Analysis programs. Comparisons to the 2016 RASA budget are based on the 2016 RAPA budget excluding activities, resources and costs now conducted and budgeted in the Performance Analysis Program (discussed in the next subsection of this filing).

Expense for 2017, which is a decrease of \$50,000 (8.7%) from the 2016 budget. The budgeted consultant and contractor resources will support research concerning reliability effects of geomagnetic disturbances and provide other reliability consulting support related to the U.S. EPA Clean Power Plan, essential reliability services and other probabilistic analysis.

The total budgeted direct expense for the RASA Program for 2017 is \$3,986,965, which represents an increase of \$208,370 (5.5%) from the 2016 budget. The RASA Program is budgeting \$50,000 of revenue from Services & Software and \$15,000 of revenue from Workshop attendance fees in 2017, the same amounts as budgeted for 2016. The allocation of Administrative Services expenses to this program is \$3,435,846, the allocation of Fixed Asset additions to this program is \$238,403, and there are no Fixed Asset additions budgeted for RASA in 2017.

#### **4. Performance Analysis<sup>59</sup>**

The Performance Analysis group provides analysis and guidance about reliability risks and areas of concern based on analysis of historic system performance, including with respect to system, equipment, entity and organizational performance, that may indicate a need to develop remediation strategies, action plans, or data used to revise or retire Reliability Standards or consider new Reliability Standards. Performance Analysis focuses on developing a technical framework and understanding the reliability risks facing the industry.

Performance Analysis collects transmission outage, generator performance, demand response, and protection and control systems misoperations data in a common format using various industry databases. This data is used to develop and report grid metrics that analyze

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<sup>59</sup>Activities of the Performance Analysis group were formerly conducted within the RAPA program; however, Performance Analysis is internally managed under the Reliability Risk Management department.

outage frequency, duration, causes, and other factors related to transmission and generator performance and automatic power system protection and control effectiveness. Trends, findings and recommendations from Performance Analysis serve as technical input to Reliability Standards development and to standards project prioritization, compliance process improvements, event analyses, reliability assessments, and critical infrastructure protection efforts. In 2017, Performance Analysis will add wind generator data to the data that is collected. The analyses and results collected and produced by Performance Analysis are reported in the annual State of Reliability Report, which provides guidance and recommendations for enhanced BPS reliability. In 2017, the State of Reliability Report will begin to reflect post-seasonal reliability review, insights from analysis of the Transmission Availability Data System (TADS), Generator Availability Data System (GADS), and Demand Response Availability Data System (DADS), as well as integration of event analysis and misoperations information. Performance Analysis works closely with other organizations, including EPRI, DOE, IEEE, INPO, NATF, NAGF, and CEA, on a number of fronts, including the TADS, GADS and DADS.

The 2017 goals and deliverables of the Performance Analysis group are described at pages 50-51 of **Attachment 2**, and include the following: (1) issuing the annual State of Reliability Report, as well as guidelines, recommendations, and alerts as needed, including verification and validation of data and information through the Regional Entities and technical committees; (2) overseeing and evaluating reliability trends that identify reliability risks, by analyzing data contained in TADS, GADS and DADS as well as reliability metrics and protection and control systems misoperations data; (3) supporting Reliability Standards development by providing subject matter expertise; (4) providing support and leadership to subcommittees, working groups, and task forces serving the NERC standing committees; (5)

assisting in the development of approaches to registration and providing input to NERC staff in support of development of CMEP risk elements; (6) conducting major event investigations and analyses and reporting major findings, recommendations, and lessons learned that will improve reliability; and (7) providing insights on emerging system protection issues, and handing-off any issues with future implications to RASA.

The budgeted staffing for the Performance Analysis program for 2017 is 9.40 FTEs, which is an increase of 2.49 FTEs from the 2016 budget, and reflects the allocation of additional personnel to Performance Analysis during 2016 to address increased resource needs associated with ongoing reliability assessment, performance analysis, and system analysis activities.<sup>60</sup> Budgeted 2017 Personnel Expenses are increased by \$557,212 (47.4%) over the 2016 budget, reflecting the increased staffing. Budgeted 2017 Consultants & Contracts Expense for Performance Analysis is \$528,082, which is a \$19,043 (3.7%) increase from the 2016 budget. Consulting and contractor support for Performance Analysis is for the TADS, GADS and DADS and the Spare Equipment Database. Budgeted 2017 Office Costs are increased from \$23,732 in the 2016 budget to \$74,843, primarily for new software analytics tools.

The total budgeted direct expense for the Performance Analysis group for 2017 is \$2,459,356, an increase of \$621,111 (33.8%) from the 2016 budget. The allocation of Administrative Services expenses to Performance Analysis is \$2,290,564, the allocation of Fixed Assets additions to this program is \$158,936, and there are no Fixed Asset additions budgeted for Performance Analysis for 2017.

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<sup>60</sup> As noted earlier, in NERC's 2016 Business Plan and Budget, the RAPA budget included costs for resources and activities now separately conducted and budgeted in the RASA and Performance Analysis programs. Comparisons to the 2016 Performance Analysis budget are based on the 2016 RAPA budget excluding activities, resources and costs now conducted and budgeted in the RASA Program (discussed in the immediately preceding subsection of this filing).

## **5. Reliability Risk Management**

The Reliability Risk Management (RRM) group carries out NERC's responsibility to perform assessments (including real-time or near-real-time continual awareness, analysis of significant events, and longer-term broad performance assessments) of the reliability and adequacy of the BES, as well as identifying potential issues relating to system, equipment, entity and human performance that may indicate a possible need to develop or implement targeted interventions such as new or modified standards. The RRM group covers six primary functions: (i) BES awareness, (ii) event analysis and determination of root and contributing causes, (iii) assessment of human performance challenges affecting BES reliability and identification of improvement opportunities, (iv) continent-wide analysis and reporting of BES performance; (v) support of the NERC Operating Committee; and (vi) support of the NERC Critical Infrastructure Protection Committee. RRM has two departments, Situation Awareness and Event Analysis. The 2017 budgets for Situation Awareness and Event Analysis are discussed separately below.

### **a. Situation Awareness**

The Situation Awareness Department works with the Regional Entities to monitor BES conditions, significant occurrences and emerging risks, and threats across the Reliability Coordinator regions. Situation Awareness also supports development and publication of Alerts and awareness products and facilitates information sharing among industry, Regional Entities and government during crisis situations and major system disturbances.

During 2017, Situation Awareness is involved with enhancement, replacement, streamlining, or modification, as applicable, of a number of reliability tools: (1) operation and maintenance of the SAFNR Version 2 software application; (2) operation and maintenance of the current secure NERC Alerts tool while planning for a streamlined NERC Alert process and

platform integrated with related ongoing NERC, E-ISAC and ERO Enterprise IT initiatives; (3) refresh of the Reliability Coordinator Information System (RCIS) application for operability and maintainability; and (4) continuing to set conditions to bring limited Synchrophasor data into NERC for wide-area situational awareness and event triage applications.

The 2017 goals and deliverables for Situation Awareness are described on page 54 of **Attachment 2** and include ensuring that the ERO is aware of all BES events above a threshold of impact; enabling the sharing of data and information to facilitate wide-area situation awareness; during crisis situations, facilitating the exchange of information among industry, Regional Entities, and U.S. and Canadian governments; keeping the industry informed of emerging reliability threats and risks to the BES, including any expected actions; conducting the annual NERC Monitoring and Situation Awareness Conference and Human Performance Conference; and administering the NERC Alerts process as specified in NERC ROP §810.

The 2017 budgeted staffing for Situation Awareness is 5.64 FTEs, which is virtually the same as (0.11 FTE increase) the 2016 budget and reflects the reduction in the vacancy rate adjustment. Budgeted 2017 Personnel Expenses are increased by \$175,488 (17.4%) from the 2016 budget. The budgeted Personnel Expenses are increased for Situation Awareness, and decreased for Event Analysis (as described in the next subsection), despite small changes in staffing in those department, due to changes in the mix of managers and non-managers between the two departments.

The 2017 Consultants & Contracts budget for Situation Awareness of \$1,295,850 is an increase of \$84,375 (7.0%) from the 2016 budget. The budgeted 2017 Consultants & Contracts Expense includes increased costs for reliability tools (\$619,150, an increase of \$42,850); continued use of the Secure Alerting System (\$96,000, a \$45,000 decrease), which as noted



above is being phased out; increased costs for SAFNR – Version 2 (\$505,700, an increase of \$67,500); and costs for the communications network that replaces NERCnet (\$75,000, an increase of \$19,025).

The total budgeted direct expense for Situation Awareness for 2017 is \$2,570,828, which is an increase of \$259,953 (11.2%) from the 2016 budget. The allocation of Administrative Services expenses to this program is \$1,374,338, the allocation of Fixed Asset additions to this program is \$95,361, and no Fixed Asset additions are budgeted for this program for 2017.

**b. Event Analysis**

The Event Analysis Department performs assessments of the reliability and adequacy of the BES, including identifying potential issues related to system, equipment, entity and human performance that may indicate a need to develop remediation strategies, action plans, or data used to revise Reliability Standards or consider new Reliability Standards. Event Analysis analyzes and determines the cause of system events, assures tracking of corrective actions to prevent recurrence, and provides lessons learned to the industry. Event Analysis analyzes all reportable events for sequence of events, root cause, risk to reliability, and mitigation, and provides lessons learned, emerging trends, risk analysis and expected actions to the industry. Additionally, Event Analysis focuses on identifying human-error risks and precursor factors that allow human error to impact system reliability; educates industry regarding risks, precursors, and mitigation methods; supports compliance and standards training initiatives; and supports trending and analysis to identify emerging reliability risks to the BES.

The 2017 goals and deliverables for Event Analysis are described at page 58 of **Attachment 2**, and include: (1) working with Regional Entities to obtain and review information on qualifying events and disturbances in order to advance awareness of these events, facilitating

analysis of root and contributing causes, risks to reliability, wide-area assessments, and remediation efforts, and disseminating information about events in a timely manner; (2) ensuring that all reportable events are analyzed for sequence of events, root cause, risk to reliability and mitigation; (3) continuing to refine risk-based methodologies to support better identification of reliability risks, including the use of more sophisticated cause codes; (4) conducting training to inform industry and the ERO of lessons learned, root cause analysis, trends, human performance, and extreme weather preparedness and recommendations; (5) developing reliability recommendations and alerts as needed and tracking industry accountability for critical reliability recommendations; (6) ensuring that industry is well informed of system events, emerging trends, risk analysis, lessons learned and expected actions; and (7) conducting major event analysis and reporting of major findings and recommendations that will improve reliability. Additionally, Event Analysis will support several of the top priority reliability risk projects described in the Performance Analysis section, above.

The 2017 budgeted staffing for Event Analysis is 11.28 FTEs, which is an increase of 0.22 FTE from the 2016 budget, and reflects the lower vacancy rate adjustment used in the 2017 budget. Budgeted 2017 Personnel Expenses are decreased by \$5,614 (0.3%) from the 2016. No Consultants & Contracts Expense is budgeted for Event Analysis for 2017 (versus \$56,000 in the 2016 budget), as 2016 projects requiring consultant and contractor support will have been completed.

The total budgeted direct expense for Event Analysis for 2017 is \$2,592,388, which is a decrease of \$57,677 (2.2%), reflecting decreased Personnel, Meetings, and Consultants & Contracts Expenses from the 2016 budget. The allocation of Administrative Services expenses to Event Analysis is \$2,748,677, the allocation of Fixed Asset additions to Event Analysis is

\$190,723, and no Fixed Asset additions are budgeted for Event Analysis for 2017.

## **6. Electricity Information Sharing and Analysis Center (E-ISAC)**

The E-ISAC reduces cyber and physical risk to the Electricity Subsector across North America by providing insights, leadership and coordination as a trusted, timely, actionable resource of grid risk information and analysis to enhance reliability. The E-ISAC facilitates Electricity Subsector and cross-sector coordination regarding physical security and cyber security events affecting the BES. Additionally, E-ISAC performs the management role for the CRISP, a public-private partnership whose purpose is to facilitate the sharing of cyber threat information and develop situation awareness tools that enhance the Electricity Subsector's ability to identify, prioritize, and coordinate the protection of its critical infrastructure. CRISP provides critical infrastructure owners and operators the capability to voluntarily share cyber threat data, analyze this data, and receive machine-to-machine mitigation measures.

The E-ISAC supports an annual grid security conference and a biennial Grid Security Exercise. A biennial Grid Security Exercise was conducted in 2015 and not in 2016, and therefore a Grid Security Exercise is planned, and the associated costs budgeted, for 2017.

The budgeted 2017 staffing for the E-ISAC is 19.74 FTEs, which is an increase of 0.84 FTE from the 2016 budget and is the result of the reallocation of personnel resources from several other departments to E-ISAC during 2016. Budgeted 2017 Personnel Expenses are increased by \$88,711 (2.1%) over the 2016 budget, with the main component of the increase being an increase in Benefits Expense. Budgeted 2017 total Meeting Expense is decreased by \$15,290 (3.0%) from the 2016 budget, with the entire decrease occurring in Conference Calls Expense. The budgeted 2017 expense for Consultants & Contracts for E-ISAC is \$6,788,429, which is an increase of \$236,500 (3.6%) from the 2016 budget. Consultants & Contracts

Expense is increased by \$383,000 is for the 2017 Grid Security Exercise (as noted above, the biennial Grid Security Exercise was not conducted in 2016, therefore no Consultant & Contracts Expense for this activity was included in the 2016 budget). There is no increase in budgeted Consultants & Contracts Expense for CRISP (budgeted Consultants & Contracts Expense for CRISP is \$5,888,594), and budgeted Consultants and Contracts Expense for other initiatives and activities in the E-ISAC is reduced by \$146,500, resulting in the net increase of \$236,500. During 2017, NERC will continue to subcontract to Pacific Northwest National Laboratory the majority of the resource requirements and associated costs to operate and maintain CRISP.

Budgeted 2017 Office Costs for E-ISAC are increased by \$39,610 (10.1%) over the 2016 Budget, primarily due to higher software maintenance costs. Finally, \$175,000 is included in the E-ISAC budget for Professional Services (same amount as in the 2016 budget) for professional services support and insurance for CRISP.

The budgeted direct expense for 2017 for the E-ISAC is \$12,276,689, which is an increase of \$311,340 (2.6%) from the 2016 budget. The allocation of Administrative Services expenses to the E-ISAC is \$4,810,185, the allocation of Fixed Assets to the E-ISAC is \$333,765, and \$1,100,000 of Fixed Asset additions are budgeted for the E-ISAC for 2017, for Computer & Software Capital Expenditures, an increase of \$1,000,000 over the 2016 budget. The \$1,000,000 of additional Fixed Asset expenditures is budgeted for enhancements to the E-ISAC portal, with \$250,000 of this expenditure allocated to CRISP.

The E-ISAC budget for 2017 includes \$6,990,447 of Third-Party Funding (an increase of \$159,709 from the 2016 budget), which represents the funding being provided by participating utilities and other entities, pursuant to the master services agreement for CRISP, to support NERC's participation and activities as program manager for CRISP. The Third-Party Funding is

equal to approximately 84% of the CRISP budget. Third-Party Funding for CRISP is deposited in a separate account. Any underrun in the CRISP budget which is allocated to and funded by CRISP participants will be applied as a credit against future CRISP participant funding requirements, pursuant to the terms of the CRISP agreements.

## **7. Training, Education, and Operator Certification Program**

The Training, Education, and Operator Certification Program provides oversight and coordination of the delivery of training programs that support the ERO's statutory responsibilities, by providing training and education to NERC and Regional Entity staff, including compliance auditors, relating to their job responsibilities, and to industry participants on the requirements of Reliability Standards, the standards development process, and the compliance monitoring and enforcement process. The Training, Education, and Operator Certification Program also supports NERC's System Operator Certification and Continuing Education Programs, which ensure that personnel operating the BES have the skills, training and qualifications needed to operate the system reliably. NERC maintains the credentials required to work in system control centers across North America for over 6,000 system operators. The System Operator Certification Program is governed by the Personnel Certification Governance Committee (PCGC), an industry group of operations experts, trainers, and supervisors. Certification exams are created by the Exam Working Group (EWG), an industry group of operations subject matter experts. Once an operator achieves certification by passing the examination, the operator's certification is maintained by completing NERC-approved continuing education courses and activities. The NERC Personnel Subcommittee, comprised of industry training experts, provides oversight of the Continuing Education Program.

The major activities of the Training, Education, and Operator Certification Program for

2016 are described at pages 65-66 of **Attachment 2** and include providing education for industry and ERO personnel in the following areas: risk-based compliance monitoring and enforcement; standards and compliance; registration and certification; event analysis, cause analysis, and lessons learned; reliability assessment and system analysis; continuing education for system operators; and new system operator certification exams for the credentials of Reliability Coordinator, Transmission Operator, Balancing and Interchange Operator, and Balancing, Interchange and Transmission Operator.

The 2017 goals and deliverables of the Training, Education, and Operator Certification Program are described at pages 66-67 of **Attachment 2**. A primary objective, in response to stakeholder and Regional Entity feedback, is to further expand and focus training and education opportunities for NERC, Regional Entity and registered entity personnel, including on topics for registered entities such as objectives of Reliability Standards, standards compliance, emerging cyber-related issues that could affect BES reliability; and topics for ERO personnel such as consistent audit and investigation techniques and standards compliance reviews, including risk-based compliance monitoring and enforcement and other improvements in compliance and enforcement practices. Training will continue to be offered in auditor skills to promote continued development of auditing expertise. Other training will focus on knowledge and skills development in a number of areas, including development and implementation of clear and technically sound Reliability Standards; lessons learned and trends from events; identified themes from trending and common cause analysis; effective compliance cultures with practices, procedures and controls to address reliability risks; effective root, apparent, and common cause analysis methods; quality improvement of registered entity self-reporting and self-certification; entity registration processes, issues, and alternatives; human performance fundamentals; and

developing and incorporating a systematic approach to ongoing training. Training and education opportunities will be provided through workshops hosted by NERC and the Regional Entities, webinars, training courses, and vendor-provided training modules and other offerings. The Training, Education, and Operator Certification Program will provide coordination and synchronization for shared NERC and ERO training responsibilities.

Additionally, as part of the System Operator Certification exam development cycle, the results of the Job Task Analysis conducted in 2015 will be the baseline for the next set of certification exams. Deliverables for the System Operator Certification Program in 2017 will be completing analysis of the exam Item Bank and implementation of Linear On The Fly testing for all exams. The System Operator Certification Program will continue to work with industry stakeholders and the certification examination development vendor to create certification exams that will promote the reliability of the North American BPS.

Finally, in 2017, the Continuing Education program will evaluate and revise the current program criteria in the Continuing Education Program Manual. This evaluation will consider the growth and maturity of industry training programs as well as ongoing research on adult learning, to ensure that the Continuing Education program continues to foster improvement in training and promote quality in training programs.

The budgeted staffing for the Training, Education, and Operator Certification Program for 2017 is 7.05 FTEs, which is a decrease of 0.33 FTE from the 2016 budget, and is due to a slight reduction in the FTEs supporting the System Operator Certification Program. Budgeted 2017 Personnel Expense is virtually the same (\$1,227 increase) as the 2016 budget. Budgeted total Meeting Expense for 2017 is decreased by \$50,368 (36.6%) from the 2016 budget, with decreases of \$25,000 for Meetings and \$25,368 for Conference Calls Expense. The budgeted

Consultants & Contracts Expense for 2017 of \$580,600 is a decrease of \$95,200 (14.1%) from the 2016 budget, with the principal areas of reduction being in consultant and contractor support for database development (\$24,000 decrease) and the SOCCED Database Improvement Project (\$100,000 decrease) in the System Operator Certification Program. Of the total 2017 budgeted Consultants & Contracts Expense of \$580,600, \$360,800 is for training and education (including continuing education) activities and \$219,800 is for System Operator Certification activities.

The direct expense budgeted for the Training, Education, and Operator Certification Program for 2017 is \$1,992,295, which is a decrease of \$139,791 (6.8%) from the 2016 budget. The allocation of Administrative Services expenses to this Program is \$1,717,923 (a slight decrease (\$19,111) from the 2016 budget, reflecting the reduction in budgeted staffing), the allocation of Fixed Assets to this program is \$119,202, and no Fixed Asset additions are budgeted for this program in 2017.

The System Operator Certification Program generates revenues from fees charged for system operator certification examinations, which are intended to recover the costs (including an allocation of indirect expenses) of the Program. In addition, fees charged to continuing education providers offset costs associated with the review of courses taken by certified operators to maintain their certification. The 2017 budget includes projected revenues from Testing Fees totaling \$1,921,900, which is an increase of \$53,928 (2.9%) from the 2016 budget.

Under NERC's Working Capital and Operating Reserve Policy, a separate Operating Reserve account is established for any revenues realized by the System Operator Certification Program in excess of expenses incurred for the Program, to be used solely for operator certification needs as determined by NERC management and the PCGC. NERC has established a target Operating Reserve for this program of \$714,118 at December 31, 2017, and has



projected a \$683,716 Operating Reserve balance for the System Operator Certification Program at December 31, 2016. Therefore, for 2017, revenues of the System Operator Certification Program will provide \$30,402 for the Operator Certification Operating Reserve.

## **8. Administrative Services**

The Administrative Services departments support the NERC statutory programs. Administrative Services comprises the following functions: (i) Technical Committees and Members' Forums (which has no budgeted resources for 2017); (ii) General and Administrative (which includes senior executive and administration and Board functions); (iii) Legal and Regulatory; (iv) Information Technology; (v) Human Resources; and (vi) Finance and Accounting. Descriptions of the responsibilities of each of the functions included in Administrative Services are provided in the text at pages 70-81 of **Attachment 2**.

The total amount budgeted for expenses and Fixed Assets in Administrative Services for 2017 (before provision for Working Capital and Operating Reserves) is \$31,414,834, which is an increase of \$972,399 (3.2%) over the 2016 budget. The total budgeted staffing for the Administrative Services departments for 2017 is 69.33 FTEs, which is a decrease of 1.91 FTEs from the 2016 budget. Budgeted Personnel Expenses for 2017 for Administrative Services are increased by \$823,720 (5.8%) from the 2016 budget. Budgeted total Meetings Expense (Meetings, Travel, and Conference Calls) is reduced by \$8,994 (0.9%) from the 2016 budget, with a decrease in Conference Calls Expense of \$43,994, due primarily to the contract with a new provider as described earlier, more than offsetting a \$35,000 increase in budgeted Meetings Expense from the 2016 budget.

Consultants & Contracts Expense budgeted in Administrative Services for 2017 is \$3,359,787, which is an increase of \$323,116 (10.6%) over the 2016 budget. The principal areas

of increase are increases for IT, totaling \$218,116, for ERO Application Development and Support (increase of \$273,116) and ERO Data Analysis (increase of \$100,000), partially offset by a decrease of \$155,000 in Consultants & Contracts support for Applications Enhancements, Consulting and Help Desk Support (total budgeted Consultants & Contracts Expense for IT is \$2,312,787); an increase for HR of \$25,000 for Training and Development (total budgeted Consultants & Contracts Expense for HR is \$575,000); and an increase of \$160,000 for Finance and Accounting for Internal Controls and Outside Auditor Consulting Support and other finance and accounting consulting support (total budgeted Consultants & Contracts Expense for Finance and Accounting is \$457,000). These increases are partially offset by a decrease of \$80,000 in budgeted Consultants & Contracts Expense in General & Administrative, reflecting that an ERO Effectiveness Survey conducted with outside assistance in 2016 will not be repeated in 2017.

Budgeted Office Rent for 2017 (budgeted entirely in General & Administrative for all NERC programs and functions) is \$3,117,009, which is an increase of \$62,722 (2.1%) from the 2016 budget. Budgeted rent expense is decreasing by \$116,143 from the 2016 budget due to the termination of the lease for NERC's former Washington, D.C., office; however, budgeted maintenance costs at NERC's offices (budgeted in the Office Rent line item) are increasing by \$178,866 from the 2016 budget, due to increases per the terms of the leases as well as increases in property taxes and other costs not covered under the terms of the leases. Budgeted Office Costs for Administrative Services 2017 are increased by \$355,274 (12.2%) over the 2016 budget, primarily due to increased costs for Computer Maintenance & Service Agreements in IT.

Budgeted 2017 Professional Services Expense for Administrative Services is \$2,293,135, which is a decrease of \$41,165 (1.8%) from the 2016 budget, primarily due to a reduction of \$175,000 in budgeted Outside Legal Expense. The budgeted amount for Independent Trustee

fees is increased by \$99,646 (8.8%) from the 2016 budget. The increased Independent Trustee compensation is supported by a compensation study performed by an independent compensation consultant, and was approved by the NERC Board at its August 13, 2015 meeting based on the recommendation of the CGHRC of the Board.<sup>61</sup> Based on its review of the compensation study and other industry information, as well as the increasing workload for NERC Trustees and overall budgetary constraints, the Board, at the August 13, 2015 meeting, determined to: (1) maintain an annual retainer structure (rather than per-event or time-based payments), as consistent with industry best practices; (2) phase in a new annual retainer amount for Trustees of \$112,500 in installments over a three-year period (2016-2018); (3) make no change to the current annual retainer amount for Board committee chairs and for the Board member serving on the Electricity Subsector Coordinating Council; (4) phase in a new target annual retainer for the Board Chair of \$160,000 in installments over a three-year period (2016-2018); and (5) make no change to the current annual retainer amount for the Board Vice Chair. The increase in Independent Trustee fees in the 2017 budget represents the second step of the three-year phase-in of the increased annual retainer amounts for Trustees and for the Board Chair (items (2) and (4) listed above). In accordance with Paragraph 12(a) of the Settlement Agreement for the Commission's 2011 financial performance audit of NERC, which requires the NERC Board to review Trustee compensation on an annual basis,<sup>62</sup> the CGHRC, at its April 27, 2016 meeting, reviewed the Trustee compensation plan, including the three-year phase-in schedule, that had been approved by the Board in August 2015 based on the comprehensive compensation study

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<sup>61</sup> A copy of the compensation study, performed by the Towers Watson consulting firm (*Board of Trustee Remuneration Review*, July 2015) was provided as Attachment 16 to NERC's 2016 Business Plan and Budget Filing in Docket RR15-16-000 (2016 Business Plan and Budget Filing).

<sup>62</sup> Annual review of Trustee compensation is also required by the CGHRC's mandate and by NERC's Governance Guidelines.

conducted by Towers Watson. The CGHRC concluded that for purposes of the 2017 Business Plan and Budget, there is no need to depart from the approved Trustee compensation plan and phase-in schedule.<sup>63</sup> At its August 11, 2016 meeting, the NERC Board adopted this recommendation.

The other components of budgeted Board of Trustees expenses for 2017 (Trustee meetings and travel expenses and Trustee search fees) are the same as in the 2016 budget. The table on page 71 of **Attachment 2** details budgeted Board expenses for 2016 and 2017.

Additionally, the budgeted amount for Outside Services, included in Professional Services, is increased by \$14,554 (8.9%) over the 2016 Budget, due to increases in the costs for various employee benefits management systems (budgeted in HR).

The 2017 Administrative Services budget includes \$37,000 of Miscellaneous Expense (detailed in Table B-10 of **Attachment 2**) and \$106,725 of Other Non-Operating Expenses (detailed in Table B-11). The Other Non-Operating Expenses cover NERC's property tax obligations on the value of property and equipment in NERC's Atlanta office and data center (\$50,000), and Interest expense for 2017 under NERC's capital financing plan (\$56,725), which is discussed in §IV.D below. The 2017 budgeted amount for interest expense is a decrease of \$3,275 from the 2016 budget, and is calculated based on the expected draws on NERC's capital financing loan (*see* Exhibit D – Capital Financing in **Attachment 2**).

The 2017 Administrative Services budget includes \$1,472,000 of Computer & Software Capital Expenditures (a decrease of \$875,000 from the 2016 budget) and \$1,800,000 of Equipment Capital Expenditures (an increase of \$336,000 from the 2016 budget). The Computer & Software Capital Expenditures are described further under IT, below. The increase in

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<sup>63</sup> <http://www.nerc.com/gov/bot/GOV/Board%20of%20Trustees%20Governance%202013/CGHRC%20-%20April%2027%202016%20Conference%20Call%20Minutes.pdf>.

Equipment Capital Expenditures is primarily for security devices.

All Administrative Services expenses and Fixed Asset additions are allocated to the statutory programs on the basis of proportional numbers of budgeted FTEs in the statutory programs.

The following paragraphs provide further information on the 2017 activities and budgeted expenditures and staffing for the individual Administrative Services functions.

**Technical Committees and Members' Forums** – While NERC management and staff will continue to interact with and support numerous reliability-related industry forums during 2017, including the NATF and the NAGF, the 2017 budget does not include any specific projected expense or funding for any forum activities.

**General and Administrative** – The General and Administrative function is responsible for administration and general management of NERC. Expenses budgeted in this area include Office Rent; Personnel Expense and related costs of the Chief Executive Officer (CEO), the Chief Reliability Officer, and the CEO's executive assistant; communications, external affairs and governmental relations; and costs related to the Board. Budgeted staffing for this function for 2017 is 16.92 FTEs, which is a decrease of 0.60 FTE from the 2016 budget and reflects reallocations of personnel occurring during 2016, with no additional personnel budgeted for 2017 beyond current staffing. Budgeted Consultants & Contracts Expense is reduced by \$80,000 due to elimination of costs for a one-time ERO effectiveness survey conducted in 2016. The total 2017 budgeted Expenses plus Fixed Assets for General and Administrative is \$10,205,977, which is an increase of \$324,666 (3.3%) over the 2016 budget.

**Legal and Regulatory** – The Legal and Regulatory function provides legal and regulatory support to the organization, including to Compliance Analysis, Certification and

Registration, Reliability Risk Management, RASA, Performance Analysis, and Reliability Standards. In addition, Legal and Regulatory is responsible for providing a wide range of legal support to the organization in corporate, commercial, contractual, employment, insurance, real estate, intellectual property, tax and other legal matters. Budgeted staffing for 2017 for Legal and Regulatory is 11.28 FTEs, a decrease of 0.94 FTE from the 2016 budget. The total 2017 budgeted Expenses plus Fixed Assets for Legal and Regulatory is \$3,292,379, which is a decrease of \$173,587 (5.0%) from the 2016 budget.

**Information Technology** – NERC’s IT department is responsible for supporting the development and maintenance of ERO Enterprise applications, data analysis and ongoing internal operations. IT’s budgeted activities fall into four categories: (1) development of new functionality and enhancements to applications used by the ERO Enterprise; (2) maintenance of infrastructure and support for applications used by the ERO Enterprise and by registered entities; (3) development of new functionality that enhances or improves the internal NERC infrastructure (*e.g.*, document management, telephony, and audio-visual); and (4) maintenance and support of the NERC internal office infrastructure, such as servers, software, network equipment, data and telecommunications circuits, data storage, office administrative applications, and user hardware. Ongoing operations include continued implementation of an improved entity registration application; maintenance and enhancements for the compliance data base (CRATS/webCDMS); maintenance and enhancements for various existing applications and databases, such as BESnet, RCIS, the Standards Balloting System, and Reliability Assessment Data System; quarterly penetration and vulnerability testing for all NERC networks and systems; the NERC security program, which is the subject of ongoing enhancements based on internal audit recommendations; implementation of the document management program and intranet and

extranet development and enhancements; and continuing enhancements to the NERC public website. During 2017, as in 2016, major areas of focus will be development and implementation of a common entity registration system to be used across the ERO Enterprise, development of the ERO Enterprise document management program, ongoing maintenance of and enhancements to CRATS, and replacement of audio-visual equipment in NERC's conference rooms.<sup>64</sup>

The 2017 budgeted Expenses plus Fixed Assets for the IT Department is \$12,480,846, which is an increase of \$324,171 (2.7%) over the 2016 budget. The 2017 budgeted staffing for IT is 23.27 FTEs, an increase of 1.14 FTEs over the 2016 budget, reflecting the reallocation of personnel from other departments to provide increased project management oversight over NERC and ERO Enterprise software application development and implementation.

Budgeted 2017 Consultants & Contracts Expense for IT is \$2,312,787, an increase of \$218,116 (10.4%) over the 2016 budget. The major areas of increase and decrease in the 2017 budget were described earlier in this §IV.A.8 and are shown on Exhibit C – Contractor and Consulting Costs in **Attachment 2**.

Office Costs budgeted in IT for 2017 total \$2,595,408, which is an increase of \$356,213 (15.9%) over the 2016 budget. Costs budgeted in this expense item include telephone expenses, Internet, computer supplies and maintenance (including computers, computer supplies, maintenance and service agreements, and software), subscriptions and publications, dues, and express shipping costs for shipping of computers and computer supplies. The principal increase in Office Costs in the 2017 budget is \$340,793 for computer Maintenance and Service Agreements, due primarily to increased maintenance costs for new data center hardware installed

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<sup>64</sup> The planned development of an ERO Enterprise document management program was described in NERC's *Request for Approval of an Expenditure Greater than \$500,000 from Operating Reserves*, filed May 14, 2015 in Docket No. RR14-6-002.

in 2015 and 2016, new network storage devices, and maintenance costs for new audio-visual equipment. All other components of Office Costs are unchanged or have only minor changes from the 2016 budget. Additional description of the costs budgeted in these expense categories is provided at page 78 of **Attachment 2**.

The 2017 IT budget includes total Capital Expenditures of \$3,272,000, versus \$3,911,000 in the 2016 budget. The IT Capital Expenditures budget includes expenditures for development of ERO Enterprise applications (\$700,000, a decrease of \$800,000 from the 2016 budget) and the document management program (\$335,000, a decrease of \$130,000 from the 2016 budget). The Capital Expenditures budget also includes expenditures for other IT hardware such as storage, servers and laptops (\$991,000, versus \$955,000 in the 2016 budget); other equipment (\$885,000, versus \$535,000 in the 2016 budget, primarily for security devices, as mentioned earlier); disaster recovery hardware (\$150,000, versus \$200,000 in the 2016 budget); and software licenses (\$211,000, versus \$256,000 in the 2016 budget).

**Human Resources** – HR manages all of NERC’s human resources functions, including staffing, benefits administration, employee relations, performance and compensation management, and training and development. HR’s activities include management and staff training and development, use of compensation consultants to provide employment market data, stakeholder surveys including surveys of Board and committee effectiveness, succession planning, and automation of HR products and services. The total budgeted Expenses and Fixed Assets for HR for 2017 is \$1,608,583, which is an increase of \$98,406 (6.5%) from the 2016 budget. The increased budget amount includes an increase of \$25,000 (to \$350,000) in Consultants & Contracts expense over the 2016 budget for additional staff training and development, as well as \$100,000 for compensation consulting services, \$50,000 for employee,



industry and Board surveys, and \$75,000 for HR consulting services (no change from the 2016 budget for these items). The 2017 budgeted staffing for HR, 2.82 FTEs, is virtually unchanged (0.05 FTE increase) from the 2016 budget, and reflects the lower vacancy rate adjustment.

**Finance and Accounting** – Finance and Accounting manages all of NERC’s finance and accounting functions, including employee payroll, retirement plans, travel and expense reporting, monthly financial reporting, sales and use taxes, meeting and events planning and services, insurance, internal audit, and facilities management. Finance and Accounting has primary responsibility for development of the annual business plan and budget, and for NERC’s internal controls and ERO risk management function. The total budgeted Expenses and Fixed Assets for 2017 for Finance and Accounting is \$3,827,050, which is an increase of \$398,743 (11.6%) from the 2016 budget. Consultant & Contracts Expense of \$457,000 is budgeted for Finance and Accounting, an increase of \$160,000 over the 2016 budget, with \$300,000 budgeted for internal controls and outside auditor consulting support and \$157,000 budgeted for finance and accounting consulting support. The increase of \$160,000 over the 2016 budget is primarily due to an increase in outside professional support for auditors to support various risk management and internal control and audit initiatives. The 2017 budget for Finance and Accounting also incorporates increases in Professional Services Expense for accounting and auditing fees and commercial insurance. The 2017 budgeted staffing for Finance and Accounting is 15.04 FTEs, which is a decrease of 1.56 FTE from the 2016 budget and is due to reallocation of resources to other departments during 2016.

#### **B. Working Capital and Operating Reserves**

NERC’s Working Capital and Operating Reserve Policy, adopted by the NERC Board in 2012 and amended in 2013 and in 2015, provides for separation of Working Capital from Operating Reserves, establishes criteria and authorities for funding and access to Working

Capital and Operating Reserves and transfers of funds between the reserve accounts, establishes controls and authorities regarding the reallocation of budgeted funds to other uses, and establishes transparent reporting requirements. The 2015 amendments to the WCOR Policy, which the Commission approved in Docket RR15-8-000,<sup>65</sup> established the categories of Operating Reserves maintained by NERC: Future Obligations Reserve, Operating Contingency Reserve, System Operator Certification Program Reserve, CRISP Reserve, and Assessment Stabilization Reserve. Table B-1 and Exhibit E in **Attachment 2** show and explain the amounts of Working Capital and Operating Reserves proposed to be budgeted, and reflected in the setting of NERC's assessments, for 2017.

The amounts budgeted for 2017 for each Working Capital and Operating Reserve category (target balances at December 31, 2017) are as follows:

Working Capital:     \$0.

NERC maintains a \$4,000,000 line of credit with a major financial institution, and based on its cash flow projections and the timing by which the NERC assessments are billed and paid, does not anticipate a need to access working capital in 2016 to meet monthly cash flow needs.

Operating Reserves:   \$7,759,102.

Future Obligations Reserve:   \$2,646,709

The target level for the Future Obligations Reserve at December 31, 2016, as presented in NERC's 2016 Business Plan and Budget, was \$3,158,074; therefore, the target level for this reserve is being reduced by \$511,365.

Operating Contingency Reserve:   \$2,227,275

The WCOR Policy specifies that except as otherwise approved by the NERC Board, the budgeted Operating Contingency Reserve level is to be between 3.5% - 7.0% of NERC's total expenses and Fixed Assets budget excluding the budgets for the System Operator Certification Program and CRISP, which have their own reserves. Based on the budgeted 2017 expenses and Fixed Assets, the target amount for the Operating Contingency Reserve at December 31, 2017 is slightly below the low end of this range, but has been approved by the Board.

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<sup>65</sup> See footnote 16 above.

System Operator Certification Program Reserve: \$714,118.

The projected December 31, 2016 reserve balance of the System Operator Certification Program is \$683,716; therefore, in 2017, \$30,402 of program revenues will be used to increase the reserve.

CRISP: \$500,000

The CRISP Operating Reserve is used solely for certain contingencies in connection with CRISP. The target level is equal to the original CRISP reserve, established in 2015, which was funded by the participating utilities in CRISP.

Assessment Stabilization Reserve: \$1,671,000

NERC proposes, with Commission approval, to (1) deposit the \$500,000 of Penalty revenues received during the period July 1, 2015 – June 30, 2016, into the Assessment Stabilization Reserve, and (2) utilize \$1,100,000 of funds in the Assessment Stabilization Reserve to reduce 2017 assessments. These actions will leave a balance of \$1,671,000 in the Assessment Stabilization Reserve at December 31, 2017 for use to offset and stabilize assessments in future years' budgets.<sup>66</sup>

Total Desired Working Capital and Operating Reserve at 12/31/2017: \$7,759,102.

Based on the beginning Working Capital and Operating Reserve balances at December 31, 2015, the projected funding and expenditures for 2016, the budgeted funding and expenditures for 2017, and the desired Working Capital and Operating Reserve balances at December 31, 2017, Table B-1 on page 83 of **Attachment 2** shows the calculation of the resulting adjustment (increase) to NERC's 2017 statutory assessment of \$530,402. As shown on Table B-1, there are additional adjustments to the 2017 assessment calculation for (1) proceeds (non-current) from financing activities (\$966,667), and (2) debt service (\$985,750), as discussed in §IV.D below. To the extent NERC's actual year-end 2016 Working Capital and Operating Reserves balances are higher than the projected amounts shown on Table B-1, the excess funds will be included in the Operating Contingency Reserve account, System Operator Certification Program Reserve account, or CRISP Reserve account, as applicable, and subject to the

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<sup>66</sup> The projected balance of \$1,671,000 in the Assessment Stabilization Reserve at December 31, 2017, does not include a Penalty payment of \$500,000 that NERC is scheduled to receive in May 2017 under the terms of an existing settlement agreement. (The \$500,000 Penalty payment received in the July 1, 2015-June 30, 2016 period was also pursuant to the settlement agreement.) NERC anticipates requesting Commission approval to deposit the May 2017 Penalty payment in the Assessment Stabilization Reserve.

limitations and authorities regarding their use as set forth in the WCOR Policy.

**C. Proposed Assessment Stabilization Reserve Transactions**

The NERC policy, *Accounting, Financial Statement and Budgetary Treatment of Penalties Imposed and Received for Violations of Reliability Standards*, and §1107.2 of the NERC ROP, specify that Penalty payments received by NERC or a Regional Entity during the period from July 1 of the second year preceding the budget year through June 30 of the year preceding the budget year are used to offset assessments to LSEs in the U.S. for the budget year, unless an alternative treatment is approved by the Commission. For the period July 1, 2015 through June 30, 2016, NERC received \$500,000 of Penalty collections. As described in §IV.B above, NERC proposes to deposit the \$500,000 of Penalty collections into the Assessment Stabilization Reserve created by the amended WCOR Policy that the Commission approved in Docket No. RR15-8-000. NERC also proposes to use \$1,100,000 of accumulated Penalty sanctions revenues in the Assessment Stabilization Reserve to reduce 2017 assessments, as shown on Table B-1 of **Attachment 2**. Therefore, in accordance with ¶19 of the Commission's June 18, 2015 Order in Docket No. RR15-8-000, and pursuant to §1107.4 of the NERC ROP, NERC requests an exception to §1107.2 of the ROP to permit it to place \$500,000 of Penalty collections received during the 12 months ended June 30, 2016 into the Assessment Stabilization Reserve. NERC also requests the Commission's approval to use \$1,100,000 of accumulated Penalty collections in the Assessment Stabilization Reserve to reduce 2017 assessments.

**D. Capital Expenditures Financing**

As described in Exhibit D to NERC's 2014 Business Plan and Budget, NERC is financing the development costs of certain software applications and IT hardware and amortizing these investments over a multi-year period. As described in Exhibit D to **Attachment 2** of this 2017 Business Plan and Budget filing, NERC successfully closed its capital financing program

on January 10, 2014, establishing a \$7,500,000 non-revolving credit facility. NERC made draws on the revolving line of credit in 2014, 2015 and 2016. The outstanding debt balance at December 31, 2016 is projected to be \$2,769,686. NERC is in discussions with the lender to renew the credit facility for 2017, at terms and conditions similar to the current facility. At its August 11, 2016 meeting, the NERC Board approved renewing the credit facility and authorized management to finalize the renewal by year-end 2016, based on terms and conditions similar to those currently in effect.

For 2017, NERC's proposed capital expenditures budget is \$4,372,000, of which NERC is proposing to finance \$1,450,000. The capital expenditures in the 2017 budget are listed on page 126 of **Attachment 2**, in Exhibit D, and include \$700,000 for ERO Application Development; \$1,000,000 for enhancements to the E-ISAC portal; \$335,000 for development of the ERO Enterprise Document Management Program; \$991,000 for Hardware such as data storage, servers and laptops; \$885,000 for other equipment such as security devices and audio-visual equipment; \$150,000 for disaster recovery hardware; and \$311,000 for Software licenses.

The table included in Exhibit D (page 127) of **Attachment 2** shows the actual or projected year-end outstanding debt balances and the annual payments for debt service for 2014, 2015, 2016, 2017, 2018 and 2019 under the capital financing program. These projections assume an average interest rate of 3.5% over the life of the financing, which is consistent with the interest rate assumptions under the program in the prior years' budgets. NERC is continuing to use a 3.5% interest rate assumption given the potential for interest rate increases in 2017. The actual interest rate and interest expense will be reflected in the quarterly budget-to-actual variance reports that NERC posts on its website, reviews in open session with the NERC FAC and files with the Commission. Any savings in interest expense compared to the budgeted

expense will be captured and reported as a contribution to NERC's Operating Reserves, the expenditures from which are subject to the terms of the WCOR Policy.

## **V. REGIONAL ENTITY BUSINESS PLANS AND BUDGETS**

### **A. Consistency Among Regional Entity Budgets**

In developing the 2017 Regional Entity Business Plans and Budgets, NERC and the Regional Entities continued the substantial efforts they devoted to achieving consistency of format and presentation of information in the Business Plans and Budgets for the years 2008 through 2016. NERC and the Regional Entities: (i) used a common and consistent format for the 2017 Business Plan and Budget documents, (ii) continued to use the consistent accounting methodologies that were developed in connection with the 2010 Business Plans and Budgets, (iii) continued to use the common definition of administrative (indirect) costs that was originally developed in connection with the 2010 Business Plans and Budgets, and (iv) again developed and used extensive Shared Business Plan and Budget Assumptions for their 2017 Business Plans and Budgets. The Shared Business Plan and Budget Assumptions are provided in Exhibit A to the NERC 2017 Business Plan and Budget (**Attachment 2**) and are cross-referenced in the individual Regional Entity Business Plans and Budgets.<sup>67</sup> Additionally, each Regional Entity has highlighted entity-specific assumptions in its Business Plan and Budget.

In preparing their 2014 Business Plans and Budgets, the Regional Entities developed and applied adjustments to Personnel Expenses for labor "float" or "attrition." Use of this factor was intended to reflect the fact that, historically, the Regional Entities (and NERC) have often been unable to achieve or maintain budgeted staffing levels throughout the year due to (i)

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<sup>67</sup> The Shared Business Plan and Budget Assumptions have been developed for the 2016-2019 period, and therefore are applicable to the NERC and Regional Entity 2018 and 2019 budget projections as well as to their 2017 Business Plans and Budgets.

unanticipated departures of individual employees (*e.g.*, employees leave to take positions with other employers), and (ii) inability to fill budgeted positions within the time periods anticipated in preparing the budget (*e.g.*, it is assumed that a new position can be filled by the start of the second quarter but in fact it is not filled until the start of the third quarter). As a result, actual Personnel Expenses have often been less than budgeted. To recognize this experience, in their 2014 Budgets, the Regional Entities applied labor float factors to either or both their budgeted staffing numbers (FTEs) or their budgeted Personnel Expenses. Each Regional Entity developed its own labor float or labor attrition factor based on its experience. In the preparation of the 2015, 2016 and 2017 Business Plans and Budgets, however, some Regional Entities elected not to use a labor float factor adjustment, while other Regional Entities have continued to apply this adjustment (now referred to as a “vacancy rate” adjustment). The 2017 Business Plans and Budgets of the Regional Entities that have continued to use a vacancy rate adjustment discuss the specific adjustment that each Regional Entity used. The Regional Entities that use a vacancy rate adjustment have continued to refine and revise the specific values used over time, based on experience, including in the development of their 2017 Business Plans and Budgets.

As discussed in previous years’ Regional Entity Business Plans and Budgets, the Regional Entities have jointly retained a coordinator, employed by SERC, to manage joint Regional Entity projects, including development of common IT applications that are being conducted under the auspices of the Regional Entity Management Group. The development and implementation of common IT applications and other processes on a joint basis among the Regional Entities results in (i) lower costs for each Regional Entity and (ii) adoption of systems and processes that are consistent across the Regions, to the benefit of stakeholders, particularly those operating in multiple Regions. Each Regional Entity’s 2017 budget includes an expense

for the Regional Entity's share of the costs for the coordinator position, which are paid to SERC.

Achieving and maintaining consistency among the Regional Entity business plans and budgets is an ongoing process, and NERC intends to continue to work collaboratively with the Regional Entities to maintain and enhance consistency in the presentation of the NERC and Regional Entity business plans and budgets in the future.

The Regional Entity Business Plans and Budgets follow a similar format to that used for the NERC Business Plan and Budget. Each Regional Entity Business Plan and Budget begins with an Introduction section that presents a table showing the Regional Entity's budgeted Total Resources for 2017, including statutory and (where applicable) non-statutory FTEs and expenses; the proposed increases or decreases in statutory and non-statutory Fixed Assets and Working Capital Requirement; the total statutory and non-statutory Funding Requirement; and the proposed Assessments to recover the Regional Entity's statutory Funding Requirement, allocated (where applicable) among the U.S., Canadian provinces and Mexico.<sup>68</sup> The Introduction also provides general information on the Regional Entity, including information on its organization, membership and governance; provides the Regional Entity's key assumptions and its goals and key deliverables for 2017; and provides an overview of the primary cost impacts to the Regional Entity's 2017 budget. The Introduction section includes a table showing the Regional Entity's 2016 budget, 2016 projection, 2017 budget, and variance between the 2016 budget and 2017 budget, for each of the statutory programs. It also contains a chart comparing the Regional Entity's 2016 to 2017 budgeted expenditures by statutory program; and a table showing the Regional Entity's FTEs, by statutory program and administrative department, for its

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<sup>68</sup> Information on non-statutory FTEs, expenses, and funding is, of course, only provided in the business plans and budgets of the Regional Entities that have non-statutory activities – FRCC, NPCC, SPP RE, Texas RE and WECC.



2016 budget, 2016 projection, and 2017 budget. Finally, the Introduction section includes the Regional Entity's overall statutory Statement of Activities, with information presented for its 2016 budget, 2016 projection, variance between its 2016 budget and 2016 projection, 2017 budget, and variance between its 2017 budget and 2016 budget.

The Regional Entity Business Plans and Budgets next contain, in Section A – Statutory Programs, separate subsections on each statutory program and on the administrative services functions of the Regional Entity. These sections are presented in similar format to the NERC Business Plan (Section A of **Attachment 2**), including: (i) a table for each statutory program showing total FTEs, total Direct Expenses, total Indirect Expenses, increase or decrease in Fixed Assets, and total Funding Requirement, for the 2016 budget and 2017 budget and the Increase or Decrease; (ii) a table for Administrative Services showing the 2016 and 2017 budgeted Expenses and Fixed Assets and budgeted FTEs and the changes in budgeted expenditures and FTEs, for each Administrative Services function; and (iii) a Statement of Activities for the statutory program or for Administrative Services showing Funding, Expenses and Fixed Asset activity by major line item categories, Total Budget and Total Change in Working Capital.<sup>69</sup> Information is presented in each of the Statements of Activities for the 2016 budget, the 2016 projection and the 2017 budget, and the variances between the 2016 budget and 2016 projection and between the 2017 budget and 2016 budget. The text of these sections for each statutory program includes discussion of the program scope and functional description, 2017 key assumptions, and goals and key deliverables for 2017. Reasons for increases or decreases in funding sources and costs in the 2016 budget for the program are provided in the narrative discussion and/or in the notes to the applicable table in Section B of the Regional Entity's Business Plan and Budget.

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<sup>69</sup> All Expenses and Fixed Asset activity for the Administrative Services functions are allocated to, and included in the Funding Requirements for, the statutory programs.

Section B of the Regional Entity Business Plans and Budgets presents additional financial information supporting the 2017 statutory budget. Section B contains tables detailing the development of the adjustment to the Regional Entity's 2017 assessment to achieve its target Working Capital Reserve at December 31, 2017 (Table B-1); Penalty payments received in the 12 months ended June 30, 2016, to be used as an offset to the Regional Entity's funding requirement (Table B-2); budgeted Supplemental Funding (*e.g.*, Workshop fees and Interest income) (Table B-3); budgeted Personnel Expenses (Table B-4); budgeted Meeting Expense (Table B-5); budgeted Consultants & Contracts expense (Table B-6); budgeted Office Rent (Table B-7); budgeted Office Costs (Table B-8); budgeted Professional Services expense (Table B-9); budgeted Miscellaneous Expense (Table B-10); budgeted Other Non-Operating Expenses (Table B-11); and budgeted Fixed Assets additions (Table B-12). Tables B-3 through B-12 are followed, where applicable, by explanations of significant variances between the Regional Entity's 2016 and 2017 budgets for the funding or cost category. Finally, Table B-13 provides the Regional Entity's statutory budget projections for 2018 and 2019.<sup>70</sup>

Section C – Non-Statutory Activities of each Regional Entity Business Plan and Budget provides (where applicable) information on the Regional Entity's non-statutory activities for 2017, including program descriptions and objectives, budget information, and FTEs.<sup>71</sup>

Following Section C, each Regional Entity Business Plan and Budget also provides, in Section D – Additional Consolidated Financial Statements, or in separate appendices: (1) a 2017

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<sup>70</sup> WECC has included its budget projections for 2018 and 2019 in Appendix A to its 2017 Business Plan and Budget, rather than in Table B-13 of Section B.

<sup>71</sup> MRO, ReliabilityFirst and SERC do not plan to have, and have not budgeted for, any non-statutory activities in 2017. SPP RE is unable to provide a non-statutory budget for 2017 because its planning and budgeting cycle does not result in finalization and SPP Board approval of the overall SPP, Inc. budget until October. SPP RE has included the overall SPP, Inc. 2016 budget and 2015 actual income statement, for information.

Consolidated Statement of Activities, Fixed Asset Expenditures and Changes in Working Capital showing the Regional Entity's 2017 budgeted line-item funding sources, expenses, and Fixed Asset activity, in total, by statutory and (if applicable) non-statutory, and by statutory program and Administrative Services department, as well as the Direct Expenses and Indirect Expenses for each statutory program; (2) a combined (statutory and, where applicable, non-statutory) Statement of Financial Position at (i) December 31, 2015, based on 2015 actual audited results;<sup>72</sup> (ii) December 31, 2016, based on the Regional Entity's 2016 projection; and (iii) December 31, 2017, based on the Regional Entity's 2017 budget; and (3) the Regional Entity's organization chart(s) for 2016 and 2017 (presented either as two separate charts or a combined chart displaying staffing numbers for each year), showing staffing comparisons for 2016 and 2017.

## **B. Discussion of Individual Regional Entity Business Plans and Budgets**

This section summarizes highlights of the individual Regional Entity 2017 Business Plans and Budgets.

### **1. FRCC**

FRCC's total statutory budget for 2017 is \$7,177,854, a decrease of \$83,673 (1.2%) from its 2016 budget. FRCC's proposed 2017 assessment amount of \$6,163,896 is \$464,562 (7.0%) lower than its 2016 assessment, reflecting the net effect of (i) the decreased budget; (ii) a \$95,000 offset from Penalty payments received from Registered Entities (as compared to \$81,000 of Penalty payments in the 2016 budget, *i.e.*, an increase of \$14,000 in this Funding source); (iii) a decrease of \$24,000 in revenues from Services & Software (FRCC is budgeting no revenue from this source for 2017, as compared to \$24,000 in funding from Services & Software from its RAPA program in FRCC's 2016 budget); and (iv) a decremental adjustment of

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<sup>72</sup> The audited financial statements of each Regional Entity for 2015, were filed with the Commission on May 31, 2016, in NERC's *2015 Budget True-up Report* (Docket No. RR16-04-000).

\$826,959 to its 2017 assessment, based on the difference between its projected Working Capital Reserve at December 31, 2016 and its target Working Capital Reserve at December 31, 2017 (as compared to a decremental adjustment to its 2016 assessment of \$436,070 relating to Working Capital Reserve, *i.e.*, the adjustment for Working Capital Reserve provides a larger offset to ERO Assessments, by \$390,889, in FRCC's 2017 budget that was the case in its 2016 budget).

FRCC is budgeting for slightly decreased staffing of 0.32 FTEs in its five operational (statutory) programs for 2017 and a slight decrease in staffing of 0.28 FTE in its Administrative programs, resulting in a budgeted overall staffing decrease of 0.60 FTEs. The increases and decreases in staffing in the individual programs are in each case less than 1.00 FTE, with the exception of the RAPA program, for which a staffing decrease of 1.11 FTEs (from 4.71 FTEs to 3.60 FTEs) is budgeted. FRCC's budgeted Personnel Expenses are decreased by \$41,255 (0.7%) from its 2016 budget, reflecting the slightly decreased staffing, although budgeted Benefits Expense is increased by \$79,218 (13.0%) over the 2016 budget, due primarily to increased costs for employee medical and disability insurance and increased employee education costs.

FRCC's budgeted 2017 staffing for its CMEP is 19.58 FTEs, an increase of 0.75 FTE from its 2016 budget. CMEP staffing represents approximately 65% of FRCC's total budgeted 2017 staffing. FRCC anticipates increased effort in the CMEP to support the transition to the Version 5 CIP standards. Budgeted Consultants & Contracts Expense for the CMEP is decreased by \$17,310 (4.0%) from the 2016 budget, due primarily to a reduction from 2016 in anticipated payments to SERC to perform the Compliance Enforcement Authority (CEA) responsibilities for FRCC's registered functions, 2016 having been a year in which a compliance audit was conducted.

FRCC is budgeting the following changes in the total budgets (including allocated

indirect costs) over its 2016 budget for each of its statutory programs: (i) Reliability Standards Development, increase of \$44,536 (12.6%); (ii) CMEP, increase of \$148,556 (2.9%); (iii) RAPA, decrease of \$288,102 (22.0%); Training, Education and Operator Certification, increase of \$23,754 (6.1%); and Situation Awareness and Infrastructure Security, decrease of \$12,416 (56.2%). In addition to budgeting a staffing reduction of 1.11 FTEs in its RAPA program (resulting in a decrease in budgeted Personnel Expenses for this program of \$158,333 (18.2%)), FRCC is budgeting a reduction in Consultants & Contracts expense for RAPA of \$75,731 (50.4%), due primarily to shifting certain expenses for Eastern Interconnection model development to FRCC Member Services (non-statutory). Further, with reduced budgeted FTE staffing for RAPA relative to the other statutory programs, FRCC's RAPA program is allocated a lower amount of Indirect Expenses (a \$36,649 (23.3%) reduction from the 2016 budget).

FRCC's budgeted General and Administrative Expenses for 2017 are \$866,118, which is a \$7,078 (0.8%) decrease from the 2016 budget. Budgeted 2017 staffing for the General and Administrative Programs is slightly reduced, by 0.28 FTE, from the 2016 budget.

FRCC's desired Working Capital Reserve at December 31, 2017 is \$598,155, based on one month of the total annual budget, as approved by the FRCC Board of Directors. (FRCC also maintains a \$1.5 million line of credit.) Table B-1 in FRCC's Business Plan and Budget shows a projected Working Capital Reserve at December 31, 2016, of \$1,425,113; therefore, FRCC's requested 2017 assessment amount is reduced by \$826,959 to reach its desired Working Capital Reserve at December 31, 2017.

FRCC's 2017 budget for its non-statutory (Member Services Division) activities is \$10,198,585.

## **2. MRO**

MRO's total statutory budget for 2017 is \$11,226,668, a decrease of \$127,973 (1.1%)

from its 2016 budget. MRO's proposed statutory assessment for 2017 of \$10,494,345 is \$397,217 (3.6%) lower than its 2016 assessments, reflecting (i) the decreased budget; (ii) \$166,250 of Penalty payment offsets, an increase of \$30,000 in Penalty payment offsets from its 2016 budget; and (iii) a decremental adjustment (reduction) to its assessments of \$566,073 for Working Capital Reserve, as compared to a decremental adjustment of \$326,829 for this purpose in its 2016 budget, *i.e.*, the adjustment for Working Capital Reserve reduces the statutory assessment by \$239,244 more in the 2017 budget than in MRO's 2016 budget.

MRO's budgeted 2017 staffing for statutory and administrative programs is 43.00 FTEs, the same as in its 2016 budget. Budgeted staffing is being decreased by 1.18 FTEs in the statutory programs and increased by 1.18 FTEs in the Administrative functions. MRO's budgeted staffing for its CMEP for 2017 is 21.11 FTEs (comprised of 9.77 FTEs for Compliance, 8.39 FTEs for Compliance Risk Assessment and Mitigation, and 2.95 FTEs for Compliance Enforcement), a net decrease of 0.15 FTE from its 2016 budget. MRO is budgeting increased staffing of 1.42 FTEs in Compliance Risk Assessment and Mitigation (responsible for developing Inherent Risk Assessments and Customized Oversight Plans and for performing an independent review of the facts and circumstances surrounding each noncompliance) and decreased staffing of 1.45 FTEs in Compliance (responsible for conducting compliance monitoring activities), with minimal change (0.12 FTE reduction) in budgeted staffing for Compliance Enforcement. MRO is budgeting decreased staffing of 1.10 FTEs in RAPA and increased staffing of 0.66 FTE in IT; budgeted FTE changes in all other statutory programs and administrative functions are 0.30 FTE or fewer. The reduction in budgeted staffing in RAPA reflects a shift of headcount to Compliance Risk Assessment and Mitigation. MRO's total budgeted Personnel Expenses for 2017 are \$323,961 (4.2%) higher than in its 2016 budget, due

in part to a 9.2% increase in budgeted Retirement expense reflecting cost of living adjustments in retirement plans and actuarial adjustments to post-retirement medical plan expenses.

MRO's 2017 budget for its CMEP (encompassing all three compliance-related programs) is \$7,313,627 which is a \$16,317 (0.2%) increase over its 2016 budget. Budgeted Personnel Expenses for the CMEP are virtually unchanged from the 2016 budget (\$527 increase). The principal expense increase is in budgeted Consultants & Contracts expense, which is budgeted for an increase of \$55,000 (48.2%), reflecting the addition of a part-time CIP consultant to support the transition to the Version 5 CIP standards and other CIP-related activities. However, budgeted Travel expense is reduced by \$35,500 (15.1%) from the 2016 budget, reflecting the need for fewer onsite audits in 2017; and budgeted Professional Services expense for the CMEP is reduced from \$25,000 in the 2016 budget to zero in the 2017 budget.

MRO is budgeting increases in the budgets for Training, Education and Operator Certification (\$100,741 (20.6%)) and Situation Awareness and Infrastructure Security (\$65,470 (52.2%)); and is budgeting decreases in the budgets for Reliability Standards and Organization Registration<sup>73</sup> (\$50,343 (7.4%)) and RAPA (\$260,160 (9.4%)). The increased budget for Training, Education and Operator Certification is due primarily to an increase in budgeted Personnel Expenses over the 2016 budget, reflecting continuing higher management involvement in stakeholder outreach efforts. The increased budget for Situation Awareness and Infrastructure Security is due primarily to increased staffing for this program, which increases both Personnel Expenses and the allocation of Indirect Expenses to this program. The decreased budget for RAPA is due primarily to the reduced staffing for this program, which reduces both budgeted Personnel Expenses and the allocation of budgeted Indirect Expenses and Fixed Assets to RAPA.

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<sup>73</sup> MRO budgets for and performs the organization registration and organization certification functions within its Reliability Standards program.

The 2017 budgeted amount for Administrative Services, which is allocated to the statutory programs on the basis of numbers of FTEs, is a decrease of \$89,359 (2.0%) from the 2016 budget. The principal drivers of this decrease are decreases in (i) budgeted Fixed Asset expenditures of \$143,830 in Computer & Software CapEx and (ii) Leasehold Improvements of \$323,889, reflecting reduced expenditures from the 2016 budget on MRO's expanded office space. These decreases are partially offset by budgeted increases of \$332,959 (18.1%) in Personnel Expenses, reflecting increased staffing and higher budgeted Retirement Expense (as described above); \$52,954 (8.2%) for increased Office Rent; and \$25,050 (25.1%) for increased Independent Trustee fees.

MRO's desired Working Capital Reserve at December 31, 2017, is \$922,740, representing 30 days of cash requirements for the 2017 budget. MRO's Table B-1 shows a projected Working Capital Reserve of \$1,488,815 at December 31, 2016, resulting in a decremental adjustment (decrease) of \$566,075 to MRO's 2017 assessments to reach its target Working Capital Reserve amount at December 31, 2017.

MRO plans no non-statutory activities in 2017 and therefore has no 2017 budget for non-statutory activities.

### **3. NPCC**

NPCC's statutory budget for 2017 is \$15,147,054, an increase of \$74,057 (0.5%) over its 2016 budget. However, NPCC's 2017 assessments are decreased by \$94,136 (0.7%) from its 2016 budget. The decrease in assessments is the net result of (i) the increased budget, (ii) a reduction in Penalty collections from \$67,000 to zero, and (iii) a decremental adjustment for Working Capital and Operating Reserve of \$827,994 versus a decremental adjustment of \$592,801 in the 2016 budget (*i.e.*, the adjustment to assessments for Working Capital and Operating Reserve reduces the 2017 assessment by \$235,192 more than in the 2016 budget). As



discussed below, the decremental adjustment for Working Capital and Operating Reserve reflects that NPCC's Working Capital and Operating Reserve balance at December 31, 2016 is projected to be well above its target reserve amount. Budgeted decreases in total Meetings Expense (Meetings, Travel, and Conference Calls) of \$78,768 (5.8%) and in Consultants & Contracts Expense of \$214,500 (9.6%) are principal factors in enabling NPCC to limit its total statutory budget to a 0.5% increase.

NPCC's 2017 budget does not reflect any change in total staffing in its statutory and administrative programs from its 2016 budget (nor from its 2015 and 2014 budgets). Budgeted total staffing is 36.86 FTEs, comprised of 28.86 FTEs for the statutory programs (an increase of 1.0 FTE from the 2016 budget) and 8.00 FTEs for the administrative programs (a decrease of 1.00 FTE from the 2016 budget). NPCC is budgeting increased staffing of 1.00 FTE in its CMEP and 1.00 FTE in its Situation Awareness and Infrastructure Security program, offset by decreased staffing of 1.00 FTE in its Reliability Standards program and 1.00 in IT. The staffing changes in these four programs reflect reallocations of staff occurring during 2016 to meet changing workloads in these programs. NPCC does not anticipate hiring any additional staff for any statutory program or administrative department in 2017.

NPCC's budgeted 2017 staffing for its CMEP is 17.0 FTE, and its 2017 budget for its CMEP is increased by \$75,853 (0.9%) from its 2016 budget. NPCC's budgeted Consultants & Contracts expense for its CMEP is decreasing by \$286,000 (18.3%) from its 2016 budget, reflecting continued implementation of the risk-based approach to compliance monitoring.

NPCC is budgeting changes in expenditures (including allocated Indirect Expenses) for its other statutory programs in 2017 from its 2016 budget as follows: increases in RAPA (\$35,392 (1.1%)), Training, Education and Operator Certification (\$28,702 (13.0%)), and

Situation Awareness and Infrastructure Security (\$399,201 (25.9%)); and a decrease in Reliability Standards (\$465,091 (31.3%)). The increased budget for Training, Education and Operator Certification is due to increased Meetings expense. The increased budget for Situation Awareness and Infrastructure Security is due primarily to the increased staffing for this program, which results in both increased Personnel Expense and increased allocation of Indirect Expenses. Correspondingly, the decreased budget for Reliability Standards is due primarily to the decreased staffing for this program, which results in both lower Personnel Expense and decreased allocation of Indirect Expenses, along with a decrease in Travel Expense.

NPCC's budgeted 2017 Administrative Services expenditures are \$5,859,868, a decrease of \$126,775 (2.1%) from its 2016 budget.<sup>74</sup> Budgeted Personnel Expenses are decreased by \$104,244 (3.7%) from the 2016 budget, reflecting the reduced staffing in Administrative Services. Budgeted Consultants & Contracts Expense is increased by \$30,000 (24.6%), reflecting a number of consultant and contractor engagements including a total remuneration study to be performed in 2017. Budgeted Office Costs are increased by \$39,600 (6.2%), due primarily to increased expenses for Computer Supplies and Maintenance. Professional Services expense is increased by \$30,000 (3.0%), due primarily to budgeting for search fees for an anticipated search for an independent director during 2017, due to expiration of a director's term.

NPCC's target Working Capital and Operating Reserve at December 31, 2017 is \$3,069,085, comprised of \$1,806,881 for Operating Reserve and \$1,262,204 for Working Capital. As approved by the NPCC Board of Directors, the Operating Reserve target is within the range of 30 days (8.33%) and 90 days (25.00%) of budgeted expenditures, while the Working

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<sup>74</sup> NPCC budgets Office Rent, Office Costs, Professional Services, Miscellaneous Operating Expense, and Depreciation as Indirect Expenses, rather than budgeting these costs individually in the statutory program budgets, and allocates them to the statutory programs on the basis of the proportion of direct statutory FTEs in each program.

Capital target is 30 days (8.33%) of budgeted expenditures. NPCC's Table B-1 shows a projected Working Capital and Operating Reserve of \$3,897,079 (Operating Reserve - \$2,634,875; Working Capital - \$1,262,204) at December 31, 2016; thus, NPCC's 2017 assessment amount is reduced by \$827,994 to reach its desired Working Capital and Operating Reserve at December 31, 2017.

For purposes of determining the assessments to recover NPCC's statutory funding requirement, the statutory funding requirement is allocated among the Balancing Authority Areas within NPCC in the U.S. (New York and New England), Ontario, Québec, New Brunswick and Nova Scotia. A portion (23.28%) of NPCC's statutory costs for the Compliance and Organization Registration Program (CORC) is allocated between the U.S. and Canadian Balancing Authority Areas on the basis of NEL, a portion (51.98%) of the CORC costs is allocated between the U.S. and the Canadian provinces using a compliance audit-based methodology, and the remaining portion (24.74%) of the CORC costs, representing mitigation and enforcement-related costs, is allocated between the U.S. and Canadian Balancing Authority Areas using an enforcement activity-based methodology.<sup>75</sup> The portion of the costs allocated to the U.S using the audit-based methodology and the enforcement activity-based methodology is then re-allocated between the New York and New England Balancing Authority Areas on the basis of NEL, as required by PP 40-41 of the *July 16, 2009 Budget Compliance Order*. In addition, any NPCC sub-regional reliability assessment costs that will be incurred in response to U.S.-only regulatory initiatives will be considered for allocation to U.S.-only Balancing Authority Areas, consistent with §1102 of the NERC ROP. The narrative discussion on pages

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<sup>75</sup> These allocation percentages reflect the respective scopes of work to be performed by NPCC and the relevant provincial governmental and/or regulatory authorities in the Compliance area, as negotiated between NPCC and the relevant authorities in each of the provinces and reflected in the Memorandum of Understanding between NPCC and the relevant authorities for each province.

59-60, and the table on page 61, of NPCC's Business Plan and Budget (**Attachment 5**), explain and show the development of the 2017 assessments by Balancing Authority Area within NPCC to recover NPCC's statutory funding requirement. Appropriate adjustments to the costs to be allocated are made for Penalty payments received by NPCC from U.S. registered entities (used solely to offset CORC costs to be charged to U.S. Balancing Authority Areas).

NPCC's total non-statutory (Criteria Services Division) Funding Requirement for 2017 is \$1,105,867.

#### **4. ReliabilityFirst**

ReliabilityFirst has a total statutory budget for 2017 of \$19,908,939, an increase of \$541,730 (2.8%) over its 2016 budget. ReliabilityFirst's proposed statutory assessment for 2017 is \$19,560,881, an increase of \$193,672 (1.0%) over 2016. The increase in ReliabilityFirst's 2017 statutory assessment is due to the net effect of (i) the increased budget; (ii) a reduction of \$89,250 in Penalty Sanctions offsets from the 2016 budget; and (iii) an incremental adjustment for Working Capital Reserve of \$310,942, as compared to an incremental adjustment for Working Capital Reserve of \$748,251 in the 2016 budget (*i.e.*, a reduced impact on assessments of \$437,308 compared to the 2016 budget).

ReliabilityFirst is budgeting an overall increase in staffing for 2017 of only 0.10 FTE. Total budgeted staffing is 72.30 FTEs, comprised of 57.60 FTEs for the statutory programs and 14.70 FTEs for the administrative functions. Budgeted staffing for ReliabilityFirst's Reliability Assurance and Compliance Monitoring Program is decreased by 1.00 FTE, from 37.50 FTEs to 36.50 FTEs, while budgeted staffing for Enforcement remains at 8.25 FTEs. Budgeted staffing for Situation Awareness and Infrastructure Security is increased by 1.00 FTE, from 0.50 FTE to 1.50 FTE. The only other change in staffing budgeted for 2017 is an increase of 0.10 FTE in

budgeted staffing in Finance and Accounting, to properly reflect the actual hours being expended to perform the activities in that department.

ReliabilityFirst's budgeted 2017 expense for its CMEP (comprised of (i) Reliability Assurance and Compliance Monitoring and (ii) Enforcement Management) is \$15,421,797, which is \$40,732 (0.3%) higher than its 2016 budget. Budgeted Personnel Expenses for CMEP are increasing by \$183,773 (1.9%) over the 2016 budget, while budgeted Meetings and Travel expenses are decreasing by \$81,600 (12.9%) and budgeted Consultants & Contracts Expense is decreasing by \$91,200 (37.4%) from the 2016 budget for the CMEP. The decrease in budgeted Meetings and Travel expenses for this program reflects historical experience as well as anticipated levels of activities in 2017. The decrease in budgeted Consultants & Contracts Expense is enabled by the process improvements and efficiency gains being achieved through implementing risk-based compliance monitoring, resulting in less need for contractor services.

The changes in the 2017 budget as compared to the 2016 budget for the other statutory programs are as follows: (i) RAPA, increase of \$227,533 (8.4%); (ii) Training, Education and Operator Certification, decrease of \$31,088 (3.1%); and (iii) Situation Awareness and Infrastructure Security, increase of \$304,553 (107.8%).<sup>76</sup> The increased budget for RAPA includes additional Consultants & Contracts Expense for studies, models and tools for the Eastern Interconnection Reliability Assessment Group (ERAG). The increased budget for Situation Awareness and Infrastructure Security is due primarily to the increased staffing for this program, which results in both increased Personnel Expenses and an increase in allocated Indirect Expenses.

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<sup>76</sup> In 2015, ReliabilityFirst eliminated Reliability Standards as a separate program and allocated all of the resources associated with the Reliability Standards Program to the Reliability Assurance and Compliance Monitoring Program as a result of the reorganization necessary to advance the Reliability Assurance Initiative. Therefore, ReliabilityFirst has no budget for Reliability Standards.

ReliabilityFirst's total budgeted 2017 Administrative Services expenditures (which are allocated to the statutory program budgets on the basis of total FTEs in each statutory program) are \$5,738,319, an increase of \$206,267 (3.7%) over the 2016 budget. Budgeted Personnel Expenses for the Administrative Services functions are increased by \$116,007 (3.2%) over the 2016 budget. Budgeted Operating Expenses for the Administrative Services functions are increased by \$33,481 (1.8%) from the 2016 budget, due primarily to an increase in budgeted Office Costs of \$69,506 (20.8%), due primarily to increased budgeted expenses for Computer Supplies and Maintenance for extended warranties on computer equipment and an annual fee for a new budget tool. The budgeted expenses for Meetings, Travel, Consultants & Contracts, Office Rent and Professional Services for the Administrative Services departments are all reduced from the 2016 budget. The Administrative Services budget also includes, in Fixed Assets additions, an increase of \$61,000 for Computer Hardware & Software CapEx (due mainly to replacement of aging telephone system hardware) and \$50,000 for Leasehold Improvements over the 2016 budget, partially offset by a decrease of \$40,000 in Furniture and Fixtures CapEx.

ReliabilityFirst's target Working Capital and Operating Reserve balance at December 31, 2017 is \$3,399,357, comprised of \$2,399,357 for Working Capital Reserve and \$1,000,000 for Operating Reserve. The Operating Reserve target is unchanged from the 2016 budget, while the Working Capital Reserve target is increased from \$645,000 in the 2016 budget. The target Working Capital Reserve is being increased in an effort to better manage and stabilize future assessments, and will be used in the future as needed to stabilize, and minimize large fluctuations in, the annual assessments. The increase in the target Working Capital Reserve amount will be largely funded by a budget under-run (actual costs less than budget of \$1,133,456) experienced

in 2015,<sup>77</sup> and by Penalty Sanctions revenue for the 12 months ended June 30, 2016.

ReliabilityFirst's projected Working Capital and Operating Reserves balance at December 31, 2016 is \$3,246,489 (comprised of \$2,246,489 in the Working Capital Reserve and \$1,000,000 in the Operating Reserve), which is approximately \$1,600,000 greater than its target Working Capital and Operating Reserve balance at December 31, 2016 as presented in its 2016 Business Plan and Budget. As noted above, the large projected Working Capital Reserve balance at December 31, 2016 is largely due to a significant budget under-run experienced in 2015. With ReliabilityFirst's proposed 2017 assessment amount constituting only a 1.0% increase over its 2016 assessments, as described above, ReliabilityFirst is proposing to retain its substantial projected Working Capital Reserve balance at December 31, 2016, for use in stabilizing future years' assessments when needed, rather than to reduce its 2017 assessments to an increase of less than 1.0% or a decrease from 2016. As a result, ReliabilityFirst's requested assessment amount for 2017 reflects an incremental adjustment of \$152,868, which, along with an adjustment to reserves of \$158,074 due to transactions recorded on the Statement of Financial Position that do not impact the Statement of Activities (income statement) (refer to footnote 1 on Table B-1), will enable ReliabilityFirst to attain the desired combined Working Capital and Operating Reserve amount of \$3,399,357 at December 31, 2017.

ReliabilityFirst plans no non-statutory activities in 2017 and therefore has no 2017 Budget for non-statutory activities.

## **5. SERC**

SERC's total statutory budget for 2017 is \$17,482,403, an increase of \$1,615,558 (10.2%) from its 2016 budget. SERC's proposed 2017 assessment of \$15,706,023 is an increase

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<sup>77</sup> See **Attachment 5** (ReliabilityFirst) to NERC's *2015 Budget True-up Report*.

of \$1,975,037 (14.4%) from its 2016 assessment. The increased assessment reflects (i) the increased budget; (ii) a decrease in Penalty Sanctions offsets of \$453,500, from \$648,500 in 2016 to \$195,000; (iii) a reduction in budgeted Funding from Workshops of \$34,050 compared to the 2016 budget (due primarily to holding more Workshops at facilities of SERC or SERC members rather than in facilities rented from third parties, which also reduces Meetings Expense); and (iv) a reduction in budgeted Miscellaneous Funding of \$60,500 (due primarily to anticipated reduced activity to perform the CEA responsibilities in 2017 for the FRCC and SPP registered functions, and therefore reduced payments from these entities);<sup>78</sup> partially offset by (v) a larger decremental adjustment to assessments than in the 2016 budget, by \$188,571, to achieve SERC's targeted Working Capital Reserve amount at December 31, 2017 (the decremental adjustment to reduce assessments is \$1,020,855 in the 2017 budget as compared to \$832,284 in the 2016 budget).

The largest components of the increase in SERC's 2017 budget are increases in budgeted Personnel Expenses of \$815,566 (6.6%) and in budgeted Consultants & Contracts Expense of \$623,008 (42%) from the 2016 budget. The increase in budgeted Personnel Expenses is due in part to a decrease in the vacancy rate from the vacancy rate used in the 2016 budget, as well as increases in Payroll Taxes and in Benefits costs. These changes affect all programs. The increase in budgeted Consultants & Contracts Expense includes a (i) \$410,426 increase in Consultants & Contracts Expense for IT, based on a decision to use contract support rather than employees for certain IT functions, (ii) a \$181,000 increase for RAPA, due to the need to

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<sup>78</sup> In SERC's 2017 budget, Miscellaneous Funding payments from FRCC and SPP for performing the CEA responsibilities for those entities' registered functions are \$30,000 from FRCC (a decrease of \$45,000 from the 2016 budget) and \$41,000 from SPP (a reduction of \$34,000 from the 2016 budget). SERC's Miscellaneous Funding also includes payments from the other seven Regional Entities for the coordinator position for joint Regional Entity projects, which is filled by a SERC employee. For 2017, SERC is budgeting \$297,500 in payments from the other Regional Entities (\$42,500 per Regional Entity) for the coordinator position, an increase of \$3,500 from the 2016 budget.



perform, in 2017, certain recurring studies (Under Frequency Load Shedding Study and Dynamic Reduction Study) that were not conducted in 2016, and a decrease in the budgeted offset for the ERAG to better reflect historical experience; (iii) a \$140,500 increase in Human Resources, primarily for a biennial compensation and benefits study that was not performed in 2016 and for increased training; and (iv) an increase of \$120,225 in General & Administrative, which is the net effect of additional utilization of contractors for management support and the reclassification of certain contractor and consultant projects to other programs. These increases are partially offset by a decrease of \$300,000 in budgeted Consultants & Contracts Expense for Training and Education, due to non-recurrence of one-time costs included in the 2016 budget for development of training materials and processes and a decrease in budgeted costs for the SERC Restoration Drill due to the non-recurrence of one-time costs budgeted in 2016 for simulation exercises.

SERC's budgeted total staffing for 2017 for statutory programs and administrative functions is 75.00 FTEs, a decrease of 3.12 FTEs from its 2016 budget. The reduction in budgeted FTE staffing for 2017 reflects a decrease of 1.70 in headcount, due to staggering the hire dates for four FTEs. Budgeted staffing for statutory programs is reduced by 1.43 FTE from the 2016 budget while budgeted staffing for administrative programs is reduced by 1.69 FTE from the 2016 budget. Increased staffing is budgeted for RAPA (1.52 FTE), Situation Awareness and Infrastructure Security (0.47 FTE), General & Administrative (0.25 FTE), and Finance and Accounting (0.10 FTE). Decreased staffing is budgeted for Reliability Standards (0.28 FTE), CMEP (2.61 FTEs), Training and Education (0.53 FTE), Technical Committees and Member Forums (1.29 FTE), Legal and Regulatory (0.45 FTE), and Human Resources (0.30 FTE). As in the 2016 budget, no FTEs are budgeted for IT. These changes in staffing include a number of reclassifications or reallocations of personnel between and among statutory programs

and administrative departments, as described in **Attachment 7**.

SERC's 2017 budget for its CMEP is \$11,816,885, which is an increase of \$821,243 (7.5%) from the 2016 budget. Budgeted 2017 staffing for SERC's CMEP is 34.31 FTEs, which, as noted above, is a decrease of 2.61 FTEs from the 2016 budget. With the reduced staffing, budgeted Personnel Expenses are decreased from the 2016 budget; however, budgeted Consultants & Contracts Expense is increased due to the use of contractor support for compliance audits and compliance enforcement. The largest component of the increased budget for the CMEP is increased Indirect Expenses and allocated Fixed Asset expenditures.

SERC is budgeting the following increases and decreases in expenditures for its other statutory programs: Reliability Standards, decrease of \$113; RAPA, increase of \$951,519 (48.2%); Training, Education and Operator Certification, decrease of \$420,930 (33.4%); and Situation Awareness and Infrastructure Security, increase of \$263,613 (25.8%). The increased budget for RAPA reflects increased staffing, as described above, which increases both budgeted Personnel Expenses and allocated Indirect Expenses; as well as an increase in budgeted Consultants & Contracts Expense, as described above. The decrease in budgeted expenditures for Training, Education, and Operator Certification is due primarily to decreased staffing, as described above, which reduces budgeted Personnel Expenses and allocated Indirect Expenses; and the \$300,000 reduction in budgeted Consultants & Contracts Expense, as described above. The increased budget for Situation Awareness and Infrastructure Security is primarily due to increased staffing, which results in increased Personnel Expenses as well as increased allocation of Indirect Expenses and Fixed Assets expenditures.

SERC's budgeted 2017 expenditures for the Administrative Services functions, which are allocated to the statutory programs on the basis of the number of FTEs in each statutory program,

are \$8,177,174, an increase of \$1,197,251 (17.2%) from its 2016 budget. A principal component of this increase is an increase of \$713,551 (89.2%) in budgeted Consultants & Contracts Expense, principally in RAPA, General & Administrative, IT and Human Resources, as described above. Budgeted Office Rent is increased by \$73,066 (14.1%) from the 2016 budget, due to additional space being leased. Compared to the other Regional Entities, SERC budgets more resources in the administrative services category of Technical Committees and Member Forums; SERC's 2017 budget for this function is \$919,634 (and budgeted staffing is 4.70 FTEs), comprising about 11% of SERC's overall 2017 budget for Administrative Services.

SERC's target Working Capital Reserve at December 31, 2017 is \$1,000,000. This represents a reduction in the target Working Capital Reserve at December 31, 2016, of \$2,456,000, as presented in SERC's 2016 Business Plan and Budget. The \$2,456,000 Working Capital reserve target was comprised of a \$1,600,000 operating reserve and an \$856,000 temporary increase to the operating reserve.<sup>79</sup> For 2017, SERC is reducing its operating reserve target from \$1,600,000 to \$1,000,000, and utilizing the \$856,000 temporary increase in operating reserve from the 2016 budget, to reduce the assessment increase. SERC's Table B-1 shows a projected Working Capital Reserve at December 31, 2016 of \$2,020,855, resulting in a decremental adjustment to SERC's 2017 assessments of \$1,020,855 to achieve the target Working Capital Reserve at December 31, 2017.

SERC plans no non-statutory activities in 2017 and therefore has no 2017 budget for non-statutory activities.

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<sup>79</sup> See Table B-1 in Attachment 7 (SERC) to the 2016 Business Plan and Budget Filing. SERC's working capital and reserve policy provides for a cash reserve of up to 10% of budgeted annual statutory operating costs. Under SERC's working capital and operating reserve policy, excess income greater than two months of statutory operating costs is treated as a temporary increase in SERC's operating reserves.

## 6. SPP RE

SPP RE's total 2017 statutory budget is \$10,865,511, an increase of \$769,691 (7.6%) from its 2016 budget. SPP RE's proposed assessment amount for 2017 is \$9,092,553, which is an increase of \$456,802 (5.4%) from its 2016 assessment amount. The increase in the 2017 assessment compared to 2016 is due to the increased budget, partially offset by (i) an increase in Penalty Sanctions offsets of \$176,750 over 2016, and (ii) a decremental adjustment for Working Capital Reserve of \$1,403,208, compared to a decremental adjustment for Working Capital Reserve in the 2016 budget of \$1,276,068 (*i.e.*, the adjustment for Working Capital Reserve decreases the SPP RE assessment by \$127,140 more than in the 2016 budget).

SPP RE's budgeted total staffing for statutory and administrative programs for 2017 is 33.25 FTEs, an increase of 1.00 FTE from its 2016 budget. SPP RE is increasing budgeted staffing by 0.40 FTE in its CMEP and by 1.13 in RAPA, and is decreasing budgeted staffing by 0.3 FTE in its Reliability Standards program and by 0.50 FTE (from 0.50 FTE to zero) in its Training and Education program. The increase in budgeted staff for the CMEP represents a transfer of staff resources from Training and Education to provide outreach support for the transition to the Version 5 CIP standards and the completion of this outreach in Training and Education. The increase in budgeted staffing for RAPA is due to an increasing number and scope of annual reliability assessments and special engineering studies to be performed. The staffing requirements (Personnel Expenses) for Training and Education are accounted for within the Compliance Group in the CMEP (50%) and the General & Administrative program (50%). No staffing changes from the 2016 budget are budgeted for any of the administrative programs.

SPP RE's 2017 budget for its CMEP is \$8,126,399, which is an increase of \$339,361 (4.4%) from the 2016 budget. Budgeted 2017 staffing for the CMEP is 21.75 FTEs, which, as noted above, represents an increase in staffing of 0.40 FTE from the 2016 budget. While

budgeted Personnel Expenses are increasing from the 2016 budget, budgeted Meetings and Travel Expenses are decreased by \$98,200 (23.7%), budgeted Consultants & Contracts Expense is decreasing by \$104,432 (11.8%), to \$778,610, and budgeted Miscellaneous Expense is decreasing from \$51,445 in the 2016 budget to zero in the 2017 budget. Budgeted Travel Expenses are decreasing by \$118,200 (29.5%) due to a reduction in travel associated with a number of CIP audits for Multi-Regional Registered Entities (MRRE) for which SPP RE is not the lead region, and completion of Version 5 CIP standards outreach by the SPP RE CIP audit team. The reduction in budgeted Consultants & Contracts Expense is due primarily to the CIP MRRE audits for which SPP RE is not the lead region. However, SPP RE continues to make significant use of consultants to assist in both operations and planning compliance audits and CIP compliance audits, as well as in processing noncompliances and reviewing mitigation plans. The reduction in budgeted Miscellaneous Expense is primarily due to the reclassification of employee training expenses to Benefits Expense.

The 2017 budgeted amounts for SPP RE's four other statutory programs show the following changes from the 2016 budget: Reliability Standards, decrease of \$33,141 (30.3%); RAPA, increase of \$627,552 (32.8%); Training and Education, decrease of \$166,222 (67.7%); and Situation Awareness, increase of \$2,141 (5.2%). The increased 2017 budget for RAPA is due primarily to the increased staffing, which increases Personnel Expenses and the allocation of Indirect Expenses; and to an increase of \$156,000 in budgeted Consultants & Contracts Expense, primarily for completion of the Engineering Model Data Validation software tool. The decreased 2017 budget for Training and Education is primarily due to the decreased staffing, as described above, which reduces budgeted Personnel Expenses and the allocation of budgeted Indirect Expenses, as well as a decrease in budgeted Travel Expense.

SPP RE's 2017 budgeted Administrative Services expenditures are \$1,856,983, which is an increase of \$185,874 (11.1%) from the 2016 budget. This total is comprised of \$502,228 in budgeted charges for support services provided by SPP Inc. and allocated to SPP RE (an increase of \$22,132 (4.6%) from the 2016 budget) and \$1,354,755 for administrative services performed or managed by SPP RE staff (an increase of \$163,742 (13.7%) from the 2016 budget). The principal factors in the increase in budgeted expenses for administrative services performed or managed by SPP RE staff are annual Personnel Expense (Salary, Benefits, and Retirement Costs) increases; and an increase in budgeted Professional Services expense of \$55,000 (37.6%) for increased Independent Trustee fees due to the addition of an Independent Trustee for SPP RE. The budgeted expense for support services provided by SPP Inc. is based on application of the revised formula for determining the costs for services performed by SPP, Inc. staff to be charged to SPP RE, that was developed and used in preparing SPP RE's 2016 budget. The new method uses allocation factors for various expense items based on appropriate measures per expense category such as square footage of office space, numbers of devices used, and headcount. Section E of SPP RE's 2017 Business Plan and Budget (**Attachment 8**) shows the calculation of the estimated SPP Inc. indirect expense charge. As in prior years, calculation of the estimated SPP Inc. indirect expense charges for purposes of SPP RE's budget is based on SPP Inc. cost data for the last year for which actual data is available, 2015. SPP RE's actual financial results for 2017 will be based on an SPP Inc. indirect expense charge calculated using actual 2017 costs.

As discussed in previous years' Business Plan and Budget filings and in other filings, SPP RE has determined it does not need to establish or budget for a Working Capital Reserve, because it has access to operating cash balances and bank lines of credit of SPP, Inc. for short-term funding needs. However, Table B-1 in Section B of **Attachment 8** shows that SPP RE

would have a Working Capital Reserve of \$1,403,208 at December 31, 2016. Accordingly, SPP RE has reduced its requested 2017 assessment amount by \$1,403,208.

As in prior years' budget filings, SPP RE is unable to provide a 2017 Budget for SPP, Inc.'s non-statutory activities because SPP, Inc.'s annual budget for 2017 will not be approved, in accordance with SPP, Inc.'s normal planning and budgeting cycle, until October 2016. SPP RE has included the SPP, Inc. 2016 budget, as well as the SPP, Inc. 2015 actual results, in Section C of SPP RE's Business Plan and Budget, for information.

## **7. Texas RE**

Texas RE's total 2017 statutory budget is \$12,167,256, an increase of \$385,042 (3.3%) from its 2016 budget. Texas RE's proposed 2017 assessment amount is \$9,595,256, which is an increase of \$34,808 (0.4%) from its 2016 assessment amount. The increase in the 2017 assessment amount, which is smaller than the increase in the budget, reflects (i) the increased budget, (ii) a decrease of \$287,000 in Penalty Sanctions funding from the 2016 budget, (iii) a small increase (\$1,000) in budgeted Interest Income, and (iv) a larger decremental adjustment to assessments, by \$636,233, for Working Capital Reserve than in the 2016 budget.

Texas RE's budgeted total staffing for statutory and administrative programs for 2017 is 60 FTEs, the same as in its 2016 budget (and its 2015 and 2014 budgets). Budgeted 2017 staffing remains at 46.25 FTEs for the statutory programs and 13.75 FTEs for the administrative programs. Within the statutory programs, budgeted 2017 staffing is reduced by 0.25 FTE in each of Reliability Standards and RAPA and is increased by 0.50 in the CMEP, due to a reallocation of personnel resources from the former two programs to the latter. No changes in staffing are budgeted for any of the administrative programs. Texas RE's budgeted 2017 Personnel Expenses are higher by \$84,282 (0.9%) than its 2016 budget; although budgeted Salaries Expense, Payroll Taxes and Retirement Costs are all lower than in the 2016 budget, budgeted

Benefits Expense is higher by \$207,408 (19.3%) than the 2016 budget, due to an anticipated 20% increase in health benefits costs.

Texas RE's 2017 budget for Operating Expenses reflects increases from its 2016 budget in Consultants & Contracts Expense (\$91,052 (26.6%)), Office Rent (\$127,655 (26.1%)) and Office Costs (\$71,693 (10.7%)). Budgeted Consultants & Contracts Expense is increased by \$45,948 in CMEP, primarily for projected operating costs for webCDMS; and by \$33,104 in General & Administrative for a compensation study. Budgeted Office Rent is increasing due to utilities and maintenance costs (budgeted in Office Rent) for Texas RE's additional conference center facilities. Budgeted Office Costs are increasing primarily due to increases in budgeted expenses for Computer Supplies & Maintenance and Software & Software Maintenance.

Texas RE's 2017 budget for its CMEP is \$9,171,887, which is an increase of \$361,984 (4.1%) from the 2016 budget. This increase is primarily due to increased Consultants & Contracts Expense, noted above, and increased staffing in the CMEP relative to the other statutory programs, which increases the allocation of Indirect Expenses to this program. As with Texas RE's overall 2017 budget, Salaries Expense, Payroll Taxes and Retirement Costs are all lower, but budgeted Benefits Expense is higher by \$135,123 (24.2%), than in the 2016 budget.

The changes in Texas RE's 2017 budget for the other statutory programs from the 2016 budget are: (i) Reliability Standards, decrease of \$22,835 (4.9%); (ii) RAPA, increase of \$72,839 (3.8%); and (iii) Training, Education, and Operator Certification, decrease of \$26,947 (4.6%). Texas RE eliminated Situation Awareness and Infrastructure Security as a separate program in its 2015 budget and now includes these activities in its RAPA Program.

Texas RE's budgeted 2017 Administrative Services expenditures are \$4,675,805, which is an increase of \$451,399 (10.7%) from its 2016 budget. The principal factors in this increase



are increases of \$233,885 in budgeted Personnel Expenses, \$42,104 in budgeted Consultants & Contracts Expense (due primarily to the compensation study referred to above), \$127,655 in budgeted Office Rent (as described above), and \$66,448 in budgeted Office Costs (for the reasons described above).

Texas RE's desired Working Capital Reserve at December 31, 2017 is \$2,182,756, representing a \$2,000,000 cash reserve plus an additional \$183,000. Texas RE's Table B-1 shows a projected Working Capital Reserve balance of \$4,702,756 at December 31, 2016. As a result, Texas RE's proposed 2017 statutory assessment is reduced by \$2,520,000 to achieve its target Working Capital Reserve at December 31, 2017.

Texas RE's total non-statutory budget for 2017 is \$1,059,945 (*see* Section C of **Attachment 9**). Texas RE's non-statutory activities consist of acting as the ERCOT Region Reliability Monitor for the Public Utility Commission of Texas (PUCT) and in that role, performing audits, investigations, monthly metrics reviews, and other monitoring and reporting of market participants' compliance with the reliability-related Protocols and Operating Guides of ERCOT and with PUCT Regional Rules, as well as monitoring the ERCOT Regional Rules creation and modification process and providing technical support to the PUCT regarding reliability-related proposed changes to Regional Rules.

## **8. WECC**

WECC's 2017 total statutory budget is \$26,796,928, a decrease of \$588,028 (2.1%) from its 2016 budget. WECC's proposed 2017 statutory assessment is \$25,282,000, which is an increase of \$249,866 (1.0%) from its 2016 statutory assessment. Although WECC's 2017 budget is decreased from its 2016 budget, its proposed 2017 assessment is increased from the 2016 assessment due to (i) a \$924,200 reduction in Penalty Sanctions funding, (ii) a \$541,624 reduction in budgeted funding from Workshop fees, and (iii) a \$9,000 reduction in budgeted

Interest income, partially offset by (iv) a smaller (by \$636,930) incremental adjustment to the 2017 assessments for Working Capital Reserve (*i.e.*, WECC's 2016 assessments were increased by \$844,379 for Working Capital Reserve but its 2017 assessments are being increased by a smaller amount, \$207,448, for Working Capital Reserve as a result of WECC's assessment stabilization initiative). The reduction in Workshops revenue is primarily due to elimination of WECC's System Operator Training Program and a projected reduction in revenue from outreach meetings.

The principal factors contributing to the decrease in WECC's 2017 budget from its 2016 budget are decreases in budgeted Meetings Expense (\$93,432 (11.4%)), Consultants & Contracts Expense (\$772,900 (23.6%)), Office Costs (\$101,169 (6.1%)), and Professional Services Expense (\$65,525 (6.2%)). The reduction in budgeted Meetings Expense is primarily due to elimination of the System Operator Training Program and a planned reduction in compliance workshops. The reduction in budgeted Consultants & Contracts Expense is primarily due to completion of certain Remedial Action Scheme modeling enhancements and other one-time projects in RAPA and the elimination of the System Operator Training Program, which required consultant support. The reduction in budgeted Office Costs is primarily due to a reduction in budgeted expense for Computer Suppliers and Maintenance, due to cancellation of licensing fees for the Base Case Coordination System (which was terminated in 2015) and the system operator training simulation program. The reduction in budgeted Professional Services expense is primarily due to a reduction in budgeted Accounting and Audit Fees.

WECC's budgeted total staffing for statutory and administrative programs for 2017 is 140.0 FTEs, which is a decrease of 0.5 FTE from the budgeted 2016 staffing. The budgeted 2017 staffing is comprised of 97.0 FTEs (increase of 2.9 FTEs) in statutory programs and 43.0

FTEs (decrease of 3.4 FTEs) in Administrative functions. WECC is budgeting an increase in staffing of 1.0 FTE for its CMEP and 3.5 FTEs for RAPA, and a decrease in staffing of 1.0 FTE for its Reliability Standards Program and 0.6 FTE for its Training and Education Program, with no change in budgeted staffing for Situation Awareness and Infrastructure Security. In the Administrative functions, WECC is budgeting an increase in staffing of 1.0 FTE in Legal and Regulatory and decreases in staffing of 2.4 FTEs in General & Administrative and 2.0 FTEs in IT from its budgeted 2016 staffing. The staffing changes in individual programs primarily reflect reallocations of personnel resources among programs. The increased staffing in RAPA also reflects that WECC is adding three engineering positions in RAPA to broaden its analytical capabilities. WECC's 2017 budgeted Personnel Expense is higher by \$296,129 (1.6%) than in its 2016 budget; however, the largest component of this increase is \$144,920 (7.0%) for Benefits Expense, with anticipated increases in Medical Insurance premiums and increased use by employees of Education benefits being the primary causes. The change in budgeted Personnel Expenses also reflects continued refinement of the labor vacancy rate adjustment based on experience.

WECC's 2017 budget for its CMEP is \$13,963,714, which is a \$152,277 (1.1%) increase from its 2016 budget. The primary components of this increase are (i) increased budgeted Personnel Expenses (\$93,535 (1.3%)), reflecting the increased staffing and the increased Benefits Expense noted above, and (ii) increased budgeted Office Costs (\$47,858 (15.7%)).

The changes in budgeted total costs for each of WECC's other four statutory programs from the 2016 budget are as follows: (i) Reliability Standards, decrease of \$213,665 (19.8%); (ii) RAPA, decrease of \$187,908 (1.7%); (iii) Training, Education and Operator Certification, decrease of \$348,533 (23.9%); and (iv) Situation Awareness and Infrastructure Security, increase

of \$9,801 (4.2%). The budget for the Reliability Standards program is decreasing primarily due to the decreased staffing, which reduces both budgeted Personnel Expenses and the allocation of Indirect Expenses to this program. Although budgeted staffing for RAPA is increasing, as described above, thereby increasing budgeted Personnel Expenses and the allocation of budgeted Indirect Expenses, these increases are more than offset by the \$788,000 decrease in budgeted Consultants & Contracts Expense, also described above, and an \$81,850 decrease in budgeted Office Costs. The 2017 budget for Training, Education, and Operator Certification is decreased from 2016 due to the elimination of the WECC System Operator Training Program; due to declining attendance and increased training offerings from other NERC-approved providers, continuing to provide training for NERC certification is no longer in the best interests of WECC or its stakeholders. Elimination of the System Operator Training Program reduces the budgeted Meetings Expense, Consultants & Contracts Expense, Office Rent, and Office Costs for Training, Education, and Operator Certification.

WECC's total budgeted 2017 Corporate Services (Administrative Services) expenditures are \$10,371,251, a decrease of \$121,774 (1.2%) from its 2016 budget. As noted above, budgeted 2017 staffing for Corporate Services is reduced from the 2016 budget, resulting in a reduction in budgeted Personnel Expenses; and budgeted 2017 Professional Services Expense is reduced by \$65,525 from the 2016 budget, also as noted above. These decreases are partially offset by increases in Travel and Meetings Expense (\$71,186 (19.6%)), due primarily to expenses for WECC Board meetings; and in Consultants & Contracts Expense (\$105,000 (25.8%)), due to costs for a compensation study and for use of consultant and contract support in IT in lieu of employees. Within Corporate Services, WECC has reclassified the budget for the Board of Directors (approximately \$1.2 million) from Technical Committees and Member

Forums to General & Administrative.

WECC's target Working Capital Reserve at December 31, 2017 is \$5,197,561, based on a Board-approved Working Capital Reserve target of one to two months of Personnel Expenses, Meeting Expenses and Operating Expenses. WECC projects a Working Capital Reserve balance of \$4,990,113 at December 31, 2016. As a result, WECC's adjustment to its 2017 assessments to reach its target Working Capital Reserve at December 31, 2017, is \$207,448, as shown on WECC's Table B-1.

WECC's 2017 budget for non-statutory expenses is \$1,744,309, and its total non-statutory Funding requirement for 2017 is \$1,769,110. WECC's non-statutory activity is the maintenance and operation of the Western Renewable Energy Generation Information System.

WECC's allocation of its assessment to the AESO for the Province of Alberta has been reduced by \$969,620, representing WECC CMEP costs (including allocated Indirect Costs and Fixed Assets) considered duplicative of the AESO's compliance and enforcement programs. The AESO credit amount is allocated to the remainder of the LSEs (Balancing Authorities) in the WECC Region on the basis of NEL. Appendix C to WECC's 2017 Business Plan and Budget (**Attachment 10**) shows the calculation of the adjustment to the AESO assessment.

### **C. Metrics Related to Regional Entity Budgets**

Consistent with NERC's February 18, 2015 *Request to Revise Certain "Metrics" Filing Components for its Annual Business Plan and Budget Filings and its Annual Actual Cost-to-Budget True-Up Filings* in Docket No. RR15-6-000, and the Commission's June 15, 2015 letter order approving NERC's request, NERC is providing the metrics information listed below in **Attachment 14** and **Attachment 15** to this filing.

#### **Attachment 14: Metrics Comparing Regional Entity Operations Based on the 2017 Budgets**

**Attachment 14** provides the following information relating to the Regional Entities'

operations based on their 2017 Business Plans and Budgets:

1. Numbers of registered entities
2. Numbers of registered functions
3. Total NEL (GWh)
4. NEL (GWh) per registered entity
5. Total ERO Funding (sum of assessments plus Penalty sanctions collections)
6. ERO Funding per registered entity
7. ERO Funding per registered function
8. Total Budget (sum of Total Expenses plus Capital Expenditures)
9. Total Budget per registered entity
10. Total Budget per registered function
11. Total Statutory FTE (FTE are based on working 2,080 hours per year)
12. Registered entity per Statutory FTE
13. Registered function per Statutory FTE
14. Total Compliance Budget (sum of Direct Expenses, Indirect Expenses allocated to the Compliance Program, and Capital Expenditures)
15. Compliance budget per registered entity
16. Compliance budget per registered function
17. Total Compliance FTE
18. Registered entity per Compliance FTE
19. Registered function per Compliance FTE

In addition, **Attachment 14** provides the following metrics and graphics based on the Regional Entities' 2017 Business Plans and Budgets:

20. Compliance Budget per Number of Registered Functions and per Number of Registered Entities.

21. Number of Registered Functions per Registered Entity
22. Compliance Program Budget as a Function of Number of Registered Entities and Number of Registered Functions
23. Number of Registered Entities per Compliance Program FTE and Number of Registered Functions per Compliance Program FTE
24. Comparisons of Number of Registered Entities per Compliance program FTE and Number of Registered Functions per Compliance Program FTE for the current year (2016) and the budget year (2017).

**Attachment 15: Metrics on NERC and Regional Entity Administrative (Indirect) Costs Based on the 2016 and 2017 Budgets**

**Attachment 15** provides the following metrics on the budgeted Administrative Services costs of NERC and each Regional Entity, based on their budgets for 2016 and 2017.<sup>80</sup>

1. Statutory Indirect Budget as a Percentage of Total Statutory Budget, for 2016 and 2017.
2. Ratio of Statutory Direct Budget to Statutory Indirect Budget, for 2016 and 2017.
3. Statutory Indirect (Administrative) FTEs as a Percentage of Total Statutory FTEs, for 2016 and 2017.
4. Number of Direct Statutory FTEs per Indirect (Administrative) FTE, for 2016 and 2017.

**VI. CONCLUSION**

Based on the information in this filing, NERC requests that the Commission issue an order pursuant to 18 C.F.R. §39.4, by November 2, 2016: (1) accepting NERC's proposed 2017 Business Plan and Budget (which includes the proposed Assessment Stabilization Reserve transactions described in §IV.C above) in **Attachment 2**; (2) accepting the proposed 2017 Business Plans and Budgets of the eight Regional Entities for statutory activities in **Attachments 3 through 10**; (3) accepting the proposed budget and funding requirement of WIRAB for 2017

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<sup>80</sup> In preparing **Attachment 15**, NERC found that incorrect numbers for Total Statutory Budget and Total Statutory Indirect Budget in SPP RE's 2016 Budget were reported in Attachment 15 to NERC's 2016 Business Plan and Budget Filing. The correct numbers for Total Statutory Budget and Total Statutory Indirect Budget in SPP RE's 2016 Budget are reported in **Attachment 15** to this 2017 filing.

in **Attachment 11**; and (4) approving the proposed assessments to each LSE or designee or other entities to be billed within each Region, as set forth in Appendix 2 to **Attachment 2**, to be billed to and paid by each such load-serving entity or designee or other entity to fund the portion of NERC's 2017 Funding requirement allocated to the United States and the 2017 Funding requirement for statutory activities of each Regional Entity and WIRAB allocated to the U.S.

Respectfully submitted,

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**DOCKET NO. RR16-\_\_-000**

**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**2017 BUSINESS PLAN AND BUDGET FILING**

**ATTACHMENT 1**

**SUMMARY TABLES FOR NERC AND REGIONAL ENTITY**

**PROPOSED 2017 BUDGETS AND ASSESSMENTS**

**NERC'S Proposed Budget by Program<sup>1</sup>**

NERC Program	2016 Budget for Statutory Functions	2017 Budget for Statutory Functions
Reliability Standards	\$ 8,193,116	\$ 8,100,282
Compliance Monitoring and Enforcement and Organization Registration and Certification		
Compliance Assurance	\$ 9,420,903	\$ 7,858,599
Compliance Analysis, Certification and Registration	\$ 4,632,871	\$ 3,646,289
Compliance Enforcement	\$ 5,293,298	\$ 5,800,647
Reliability Assessments and Performance Analysis		
Reliability Assessments and System Analysis	\$ 6,342,917	\$ 7,535,594
Performance Analysis	\$ 3,575,811	\$ 4,908,855
Training, Education and Operator Certification	\$ 3,912,231	\$ 3,757,501
Reliability Risk Management		
Event Analysis	\$ 5,355,795	\$ 5,446,206
Situation Awareness	\$ 3,692,197	\$ 4,032,862
E-ISAC	\$ 16,767,525	\$ 18,515,341
<b>Total Budget</b>	<b>\$ 67,186,665</b>	<b>\$ 69,602,175</b>

<sup>1</sup>Does not include the proposed provision for Working Capital reserve funding

**Proposed Budget for Statutory Activities of NERC, each Regional Entity and WIRAB<sup>1</sup>**

	2016 Budget for Statutory Functions	2017 Budget for Statutory Functions
NERC	\$ 67,186,665	\$ 69,602,175
FRCC	\$ 7,261,527	\$ 7,177,854
MRO	\$ 11,354,641	\$ 11,226,668
NPCC	\$ 15,072,997	\$ 15,147,054
RF	\$ 19,367,209	\$ 19,908,939
SERC	\$ 15,866,845	\$ 17,482,403
SPP RE	\$ 10,095,820	\$ 10,865,511
TRE	\$ 11,782,215	\$ 12,167,256
WECC	\$ 27,384,956	\$ 26,796,928
WIRAB	\$ 1,370,274	\$ 1,229,080
<b>Total Budget</b>	<b>\$ 186,743,149</b>	<b>\$ 191,603,868</b>

<sup>1</sup>Does not include the proposed provision for Working Capital reserve funding

**Proposed Assessments for Statutory Activities of NERC and each Regional Entity**

	Assessments for Statutory Functions 2016		Allocation to U.S. 2016		Assessments for Statutory Functions 2017		Allocation to U.S. 2017	
NERC	\$	57,081,445	\$	51,785,828	\$	59,856,314	\$	54,326,337
FRCC	\$	6,628,457	\$	6,628,457	\$	6,163,896	\$	6,163,896
MRO	\$	10,891,562	\$	9,071,087	\$	10,494,345	\$	8,717,286
NPCC	\$	14,349,196	\$	8,959,216	\$	14,255,060	\$	8,894,696
RFC	\$	19,367,209	\$	19,367,209	\$	19,560,881	\$	19,560,881
SERC	\$	13,730,986	\$	13,730,986	\$	15,706,023	\$	15,706,023
SPP RE	\$	8,626,751	\$	8,626,751	\$	9,092,553	\$	9,092,553
TRE	\$	9,560,448	\$	9,560,448	\$	9,595,256	\$	9,595,256
WECC <sup>1</sup>	\$	26,272,132	\$	22,771,314	\$	26,183,452	\$	22,775,539
<b>Total Budget</b>	<b>\$</b>	<b>166,508,186</b>	<b>\$</b>	<b>150,501,296</b>	<b>\$</b>	<b>170,907,780</b>	<b>\$</b>	<b>154,832,467</b>

<sup>1</sup> Includes assessments for WECC and WIRAB

**DOCKET NO. RR16-\_\_-000**

**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**2017 BUSINESS PLAN AND BUDGET FILING**

**ATTACHMENT 2**

**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**PROPOSED 2017 BUSINESS PLAN AND BUDGET**

**NERC**

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

# 2017 Business Plan and Budget

Final

August 10, 2016

**RELIABILITY | ACCOUNTABILITY**



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## About NERC

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### Overview

The North American Electric Reliability Corporation (NERC) is a not-for-profit entity organized under the New Jersey Nonprofit Corporation Act. NERC's mission is to improve and ensure the reliability of the Bulk Power System (BPS)<sup>1</sup> in North America. NERC's area of responsibility spans the continental United States and portions of Canada and Mexico. Entities under NERC's jurisdiction are the users, owners, and operators of the BPS—a system that serves the needs of over 340 million people, includes installed electricity production capacity of approximately 1,200 gigawatts, operates 475,000 miles of high-voltage transmission (100 kV and above), and is comprised of assets worth more than one trillion dollars.

### Electric Reliability Organization (ERO)

The Federal Energy Regulatory Commission (FERC or Commission) certifies and has oversight of NERC as the electric reliability organization (ERO) within the United States to establish and enforce reliability standards for the U.S. portion of the BPS, pursuant to Section §215 of the Federal Power Act (§215). As of June 18, 2007, FERC granted NERC the legal authority to enforce reliability standards with all U.S. users, owners, and operators of the BPS and made compliance with those standards mandatory and enforceable. Equivalent relationships have been sought and, for the most part, realized in Canada and Mexico.

### International Relations

Prior to adoption of §215 in the United States, the Canadian provinces of Ontario (in 2002) and New Brunswick (in 2004) adopted all NERC reliability standards that were approved by the NERC Board of Trustees (Board) as mandatory and enforceable within their respective jurisdictions through market rules. Reliability legislation is in place, or NERC has memoranda of understanding with, provincial authorities in Ontario, New Brunswick, Nova Scotia, Québec, Manitoba, Saskatchewan, British Columbia, and Alberta, and with the National Energy Board of Canada (NEB). NERC's standards are mandatory and enforceable in Ontario and New Brunswick as a matter of provincial law. Manitoba has adopted legislation, and standards are also mandatory. In addition, NERC has been designated as the "electric reliability organization" under Alberta's Transmission Regulation, and certain reliability standards have been approved in that jurisdiction; others are pending. NERC reliability standards are now mandatory in British Columbia and Nova Scotia. NERC and the Northeast Power Coordinating Council (NPCC) have been recognized as standards-setting bodies by the Régie de l'énergie of Québec, and Québec has the framework in place for reliability standards to become mandatory. NEB has made reliability standards mandatory for international power lines between the U.S. and Canada.

In Mexico, the Comisión Federal de Electricidad has signed the Western Electricity Coordinating Council's (WECC's) reliability management system agreement, which applies only to Baja California Norte.

### Membership and Governance

An 11-member Board of Trustees (the Board), comprised of 10 independent trustees and NERC's president and chief executive officer serving as the management trustee, governs NERC. The Board has formed several committees to facilitate oversight of the organization in the areas of finance and audit, governance and human resources, compliance, standards oversight and technology, nominations and, most recently, enterprise-wide risk.

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<sup>1</sup> NERC's standards, compliance and enforcement activities are focused on the [Bulk Electric System \(BES\)](#), which is comprised of certain BPS facilities.



Membership in NERC is open to any person or entity that has an interest in the reliability of the North American BES. Membership is voluntary and affords participants the opportunity to engage in the governance of the organization through election to the Member Representatives Committee (MRC).<sup>2</sup> More than 600 entities and individuals are members of NERC.

### **Scope of Oversight**

As the international, multijurisdictional ERO in North America, NERC is authorized to:

- Propose, support the development of, monitor compliance with, and enforce mandatory reliability standards for the North American BPS, subject to regulatory oversight and approvals from FERC in the United States and applicable authorities in Canada;
- Conduct near-term and long-term reliability assessments of the North American BPS;
- Certify BPS operators as having and maintaining the necessary knowledge and skills to perform their reliability responsibilities;
- Maintain situational awareness of events and conditions that may threaten BPS reliability;
- Coordinate efforts to improve physical security and cybersecurity for the BPS of North America;
- Conduct detailed analyses and investigations of system disturbances and unusual events as well as measure ongoing system trends to determine root causes, uncover lessons learned, and issue relevant findings as advisories, recommendations, guidelines, and essential actions to the industry to mitigate and control risks to reliability; and
- Identify and prioritize risks to reliability and use a broad toolkit to mitigate and control risks to reliability, including the potential need for new or modified reliability standards, improved compliance monitoring and enforcement methods, or other initiatives.

### **Delegated Authorities**

In executing its responsibility, NERC delegates certain authorities to eight regional reliability entities (Regional Entities or the Regions) to perform aspects of the ERO functions described through delegation agreements. FERC has approved delegation agreements between NERC and the eight Regional Entities (Florida Reliability Coordinating Council (FRCC), Midwest Reliability Organization (MRO), Northeast Power Coordinating Council, Inc. (NPCC), ReliabilityFirst, SERC Reliability Corporation (SERC), Southwest Power Pool Regional Entity (SPP RE), Texas Reliability Entity, Inc. (Texas RE), and the Western Electricity Coordinating Council (WECC)). These agreements describe the authorities delegated and responsibilities assigned to the Regional Entities in the United States to address, among other things: (1) developing regional reliability standards, (2) monitoring compliance with and enforcement of mandatory reliability standards (both North American-wide and regional), (3) certifying registered entities and registering owners, operators, and users of the BES, (4) assessing reliability and analyzing performance, (5) training and education, (6) event analysis and reliability improvement, and (7) situation awareness and infrastructure security. NERC expects Regional Entities whose territories and geographic footprints extend into Canadian provinces and Mexico to perform equivalent functions in those jurisdictions.

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<sup>2</sup> The [Member Representatives Committee](#) (MRC) comprises 28 voting representatives elected from the 12 membership sectors. The MRC elects the independent trustees and, along with the Board, votes on amendments to the Bylaws. The MRC also provides policy advice and recommendations to the Board on behalf of stakeholders with respect to annual budgets, business plans, and other matters pertinent to the purpose and operation of the organization.

## **ERO Enterprise Operating Model**

The collective network of leadership, experience, judgment, skills, and technologies shared among NERC and the eight Regional Entities is referred to as the ERO Enterprise (the Enterprise). In 2014, a common operating model, Improving Coordinated Operations across the ERO Enterprise,<sup>3</sup> was developed to define how NERC and the Regional Entities achieve excellence in the oversight and execution of statutory functions by collaborating to mitigate reliability risks. The model also defines the division of the roles and responsibilities for NERC and the Regional Entities to efficiently and effectively execute services performed as the collective Enterprise. In 2015, implementation of this model progressed with oversight plans developed for Compliance Monitoring and Enforcement programs, and Registration. Further, NERC and the Regional Entities deepened their coordination activities to identify, prioritize and address risks to reliability.

NERC has unique responsibilities within the Enterprise to design the oversight of program areas; develop operational oversight and leadership; set qualifications and expectations for the performance of delegated activities; and assess, train, and give feedback to corresponding regional programs. NERC also reviews and provides input to the annual Regional Entity business plans and budgets, including but not limited to review of resource allocations, staffing capacity assessments, and program performance assessments. NERC input and review occurs before regional board approval.

Similarly, the Regional Entities have a mirrored set of responsibilities that include being responsive to the design of the operational model, providing input into the overall development of each ERO program area, providing training and development to meet ERO qualifications, being receptive to feedback from the ERO, and making responsive adjustments. Regional Entities also have an obligation to meet professional standards of independence and objectivity, and provide the best available expertise for addressing risks.

With due recognition and awareness of the distinction between individual roles, responsibilities, and corporate status, NERC and the Regional Entities are continually refining their individual and collective operating and governance practices in support of an agreed-upon set of strategic goals and objectives that are designed to ensure the ERO fulfills its statutory obligations.

## **Statutory and Regulatory Background**

NERC's authority as the ERO in the United States is based on Section 215 of the Federal Power Act, as added by the Energy Policy Act of 2005,<sup>4</sup> and the Commission's regulations and orders issued pursuant to Section 215. In Canada, NERC's authorities are established by the memoranda of understanding and regulations previously mentioned.

### **Funding**

Section 215 of the Federal Power Act and the Commission's regulations specify procedures for NERC's funding in the United States. NERC's annual business plan and budget is subject to Commission approval in the United States. Once approved, NERC's annual funding is provided through assessments to load-serving entities. These assessments are allocated on a net-energy-for-load (NEL) basis. Equivalent funding mechanisms are provided in Canada, subject to the specific laws and regulations of each province.

The Regional Entities' funding requirements are addressed separately in their respective business plans and budgets, which must be reviewed and approved by NERC and FERC in the United States. Assessments for the Regional Entity budgets are included in the overall NERC assessments to load-serving entities.

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<sup>3</sup> [Improving Coordinated Operations Across the ERO Enterprise](#)

<sup>4</sup> This was codified in section 215 of the Federal Power Act, 16 United States C. 824o.

# Introduction and Executive Summary

TOTAL RESOURCES (in whole dollars)				
	2017 Budget	U.S.	Canada	Mexico
Statutory FTEs	189.88			
Non-statutory FTEs				
<b>Total FTEs</b>	189.88			
Statutory Expenses	\$ 66,921,632			
Non-Statutory Expenses	\$ -			
<b>Total Expenses</b>	\$ 66,921,632			
Statutory Inc (Dec) in Fixed Assets	\$ 2,680,543			
Non-Statutory Inc (Dec) in Fixed Assets	\$ -			
<b>Total Inc (Dec) in Fixed Assets</b>	\$ 2,680,543			
Statutory Funding of Reserves	\$ 530,402			
Non-Statutory Funding of Reserves				
<b>Total Working Capital Requirement</b>	\$ 530,402			
<b>Proceeds from Financing Activities</b>	\$ 19,083			
Total Statutory Funding Requirement	\$ 70,151,660			
Total Non-Statutory Funding Requirement	\$ -			
<b>Total Funding Requirement</b>	\$ 70,151,660			
	<b>TOTAL</b>	<b>US</b>	<b>CANADA</b>	<b>MEXICO</b>
<b>Statutory Funding Assessments</b>	\$ 59,856,314	\$ 54,326,337	\$ 5,353,026	\$ 176,951
<b>Non-Statutory Fees</b>				
NEL	4,514,633,135	3,983,687,261	518,227,758	12,718,116
NEL%	100.00%	88.24%	11.48%	0.28%

## Strategic Goals and Metrics

The ERO Enterprise strategic plan<sup>5</sup> and framework is informed by the following activities completed in 2015: (1) NERC's State of Reliability Report; (2) the Reliability Issues Steering Committee's (RISC's) ERO Reliability Risk Priorities Report and Supplemental Technical Summary, which includes identified risk profiles; and (3) input from the NERC Board and Regional Entity Boards. In 2015, these inputs were used by ERO Enterprise leadership to:

- **Update ERO Enterprise Longer-term Strategic Planning Considerations** – The ERO Enterprise makes any necessary adjustments to its longer-term strategic planning considerations, which takes into consideration Bulk Electric System (BES) reliability issues over a 5 to 15-year planning horizon.
- **Update the Three-year ERO Enterprise Strategic Goals** – The ERO Enterprise makes any necessary adjustments to its strategic goals for the next three years.
- **Develop Annual ERO Enterprise Metrics** – The ERO Enterprise develops annual metrics to measure the ERO Enterprise's progress in attaining the strategic goals.
- **Develop Annual Business Plans and Budgets** – Working collaboratively, NERC and each of the Regional Entities develop annual business plans and budgets (BP&Bs) that reflect the resources necessary to support achievement of the goals set forth in the strategic plan.

## Evolving Reliability Risks

Over the past five years, NERC has transformed its activities towards being more risk-based, ensuring that the right activities are focused on the most pertinent risks to the reliable operation of the bulk power system. The RISC is an advisory committee to the Board, providing key insights, priorities, and high-level leadership for issues of strategic importance to BPS reliability. The 2015 RISC report presents the results of their continued work to define and prioritize risks, and offer recommendations to the Board to inform the development of NERC's risk strategy. The report recommendations are considered as the Strategic Plan, Goals and supporting activities are updated for the coming years. In 2015, the RISC recommended a high level of focus and priority in the following areas:

- **Regulatory Uncertainty (Markets, states, and federal/provincial)**  
These risks arise where the impacts from regulatory initiatives are uncertain in their extent, timing, and potential reliability considerations. These uncertainties are accentuated by the interplay among these three arenas, each of which reflects policy, regulatory, and legislative dimensions which may not include sufficient reliability coordination.
- **Resources (Changing resource mix, inadequate planning coordination, and ineffective resource planning)**  
This set of evolving risks reflects interdependent aspects from the continued and accelerated rapid transformation of the resource mix. As part of the increased and accelerated integration of new types of variable, renewable, and distributed energy resources, planners must ensure that sufficient Essential Reliability Services (ERSs) and operator flexibility are available to maintain reliability.
- **Resiliency: Cyber security**  
These risks reflect aspects of resilience related to potential cyber disruptions of the BPS. As cyber aspects evolve, they require more assertive and flexible approaches to provide adequate assurances of reliability.

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<sup>5</sup> [ERO Enterprise Strategic Plan 2016-2019](#)

## **2016-2019 Strategic Goals**

The ERO Enterprise has five strategic goals, adopted by the NERC Board in November 2015, enabling the Enterprise to successfully carry out its mission as further described in the Strategic Plan. For each goal, a detailed description and activities that contribute to its success are provided below, followed by additional information about the allocation of NERC's resources toward achievement of the goal. The associated metrics in support of these goals have been approved for 2016<sup>6</sup>; updated strategic goals and associated metrics will be finalized later in 2016 for the 2017 year, with opportunities for stakeholder feedback prior to their approval. At this time it is not anticipated that these updates will have a material impact on NERC's overall budget or resource allocation among operating areas for 2017. However, the updates may potentially affect priorities and workload within particular departments and will inform resource planning and allocation for the 2018 budget year.

### **Goal 1**

#### **Timely and Risk-Responsive Reliability Standards**

Reliability standards establish threshold requirements for assuring the BES is planned, operated, and maintained to minimize risks of cascading failures, avoid damage to major equipment, or limit interruptions of bulk electric supply. Reliability standards are clear, timely, responsive to reliability risks and cost-effective.

#### **Contributing Activities**

- Conduct periodic reviews and assessment of whether the reliability standard is properly structured for emerging risks.
- Assess reliability standards compared to the BES risk profile; address the most important unmitigated risks, including applicable high-impact, low-frequency risks.
- Develop and implement ERO Enterprise feedback loops to identify and address gaps or ambiguities in reliability standards, including the evaluation of significant BES events (including all category 3 and above).
- Develop and implement procedures for assessing the cost impact of reliability standards.

### **Goal 2**

#### **Objective and Risk-informed Compliance Monitoring, Enforcement, and Organization Certification and Registration**

The ERO Enterprise is a strong enforcement authority that is independent, without conflict of interest, objective, and fair, and promotes a culture of reliability excellence through risk-informed compliance monitoring, enforcement, certification, and registration. The ERO Enterprise retains and refines its ability to use standards enforcement when warranted and imposes penalties and sanctions commensurate with risk.

#### **Contributing Activities**

- Consistently register and deregister entities based on risk to the BES and the BES definition.
- Evaluate the certification program for effectiveness and implement consistently across the ERO Enterprise.
- Develop Compliance Oversight Plans for registered entities that address the relevant risks.

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<sup>6</sup> See [2016 ERO Enterprise and Corporate Metrics](#) for details.

- Focus Compliance Monitoring and Enforcement activities on the most significant risks to the BES.
- Process non-compliance using the appropriate method, considering the risk to the BES.
- Implement Compliance Monitoring and Enforcement consistently, timely, and transparently to industry.

### **Goal 3**

#### **Identification and Mitigation of Significant Current Risks to Reliability**

The ERO Enterprise identifies the most significant risks to reliability, provides assurance for mitigating reliability risks, and promotes a culture of reliability excellence. The ERO Enterprise supports the Electricity Information Sharing and Analysis Center (E-ISAC), the Cybersecurity Risk Information Sharing Program (CRISP), reliability assessments, situational awareness, and physical security and cybersecurity preparedness.

#### **Contributing Activities**

- Perform reliability data-grounded analyses and sustain independent, technical assessments of proposed regulatory rules or proposed statutes (state, provincial, or federal) as well as significant market rules to determine potential impacts to reliability.
- Maintain a BES risk profile to prioritize and rank reliability risks.
- Develop project plans and business case assessments for high-priority risks including cost and practicality of assessment; implement or facilitate initiatives to address high-priority risks.
- Integrate risk data sources, such as event analysis, Transmission Availability Data System, Generating Availability Data System, and relay misoperations as well as other occurrences (e.g., AC equipment failures) to provide lessons learned, recommendations, identified risks, and their mitigation to promote reliability.
- Analyze system performance and significant events (e.g., sampling of Category 2 events in addition to assessing all Category 3 and above) to identify gaps in reliability standards, compliance effectiveness, registration, and risk controls effectiveness, as well as the development of lessons learned or other information sharing activities that promote BES reliability.
- Enhance communications among the E-ISAC, the Telecommunications Information Sharing and Analysis Center, and Natural Gas Information Sharing and Analysis Center.
- Facilitate the availability, sharing and value of physical security and cybersecurity threat and vulnerability information, analytics, and analysis.

### **Goal 4**

#### **Identification and Assessment of Emerging Risks to Reliability**

The ERO Enterprise identifies, evaluates, studies and independently assesses emerging risks to reliability.

#### **Contributing Activities**

- Develop sufficiency/adequacy guidelines for ERS including emerging risks. Include consideration of the range of reliability attributes based on a diverse resource mix and load behavior, such as ramping, fast regulation, reserve services, and interdependent sector performance.
- Enhance reliability assessments to reflect changing resource mix behavior, including distributed energy resources and ERS, with probabilistic approaches, considering the variable and energy-limited nature of the resource shifts.

- Evaluate the impacts on BES recovery and restoration plans including consideration of distributed resources.

## **Goal 5**

### **Effective, Efficient, and Collaborative ERO Enterprise**

The ERO Enterprise improves transparency, consistency, quality, efficiencies, cost-effectiveness, and timeliness of results and operates as a collaborative enterprise.

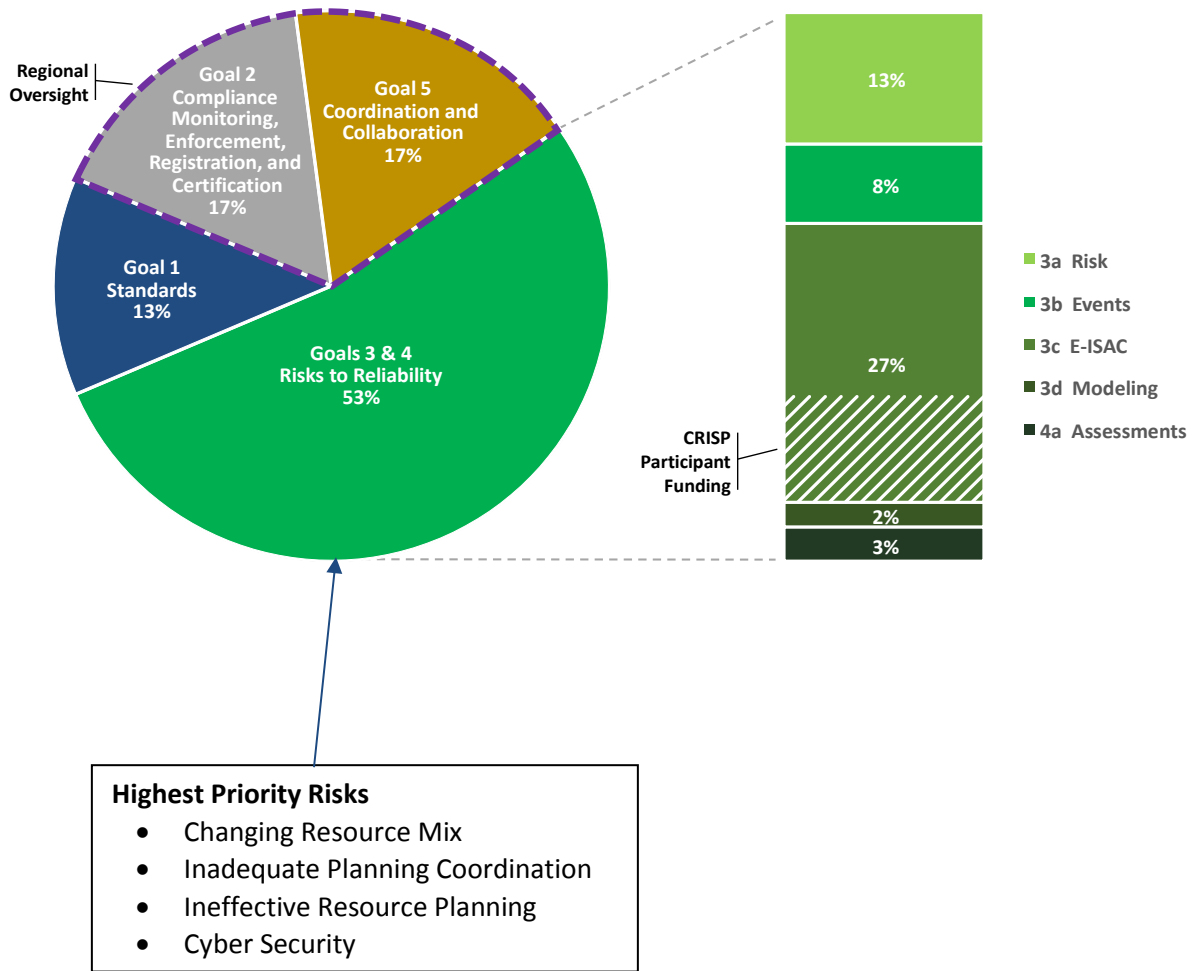
#### **Contributing Activities**

- Articulate a shared vision of reliability excellence and support and inspire stakeholders continent-wide, including in international jurisdictions, in working to attain that vision.
- Engage the support and expertise of stakeholders in prioritizing and resourcing reliability initiatives.
- Communicate expectations clearly and foster collaboration to deliver important results in advancing system reliability.
- Acquire, engage, and retain highly qualified talent with requisite technical expertise to execute the ERO Enterprise's statutory functions.
- Understand and manage ERO Enterprise internal risks.
- Processes and procedures are consistent, effective, and efficient.
- Clearly delineate ERO Enterprise roles and responsibilities using the ERO Enterprise Operating Model to mature the collaborative processes.

### **Allocation of NERC Resources to Strategic Goals and Risk Priorities**

The charts below provide an overview of the allocation of NERC's 2017 resources associated with each strategic goal, as well as the RISC priorities. Using FTEs and funding as a guide, the charts reflect the relative amount of total NERC resources (people and dollars) focused on supporting each of the five strategic goals noted above. Obviously many NERC departments work on multiple activities that further multiple goals, and precision in forecasting all activities supporting each goal is not feasible. However, these charts provide a general picture regarding how the company's resources are allocated.

## NERC Resource Allocation to Strategic Goal Areas



### Ongoing Focus on Cost Control and Efficiency

NERC and the Regional Entities continue to work collaboratively to improve efficiency, evaluate resources, and leverage combined skillsets to improve various ERO Enterprise activities and control costs. This collaboration and the resulting efficiencies can be found in a number of areas, including but not limited to:

- **ERO Enterprise IT Investments:** NERC and the Regional Entities, working collaboratively under the oversight of NERC’s Standards Oversight and Technology Committee, have developed a long-term enterprise information technology program resulting in a number of enterprise tools. The goals is to enhance operations and reduce costs at the regional and registered entity level. For example, enterprise tools have helped and will further facilitate efficiency of registration and data submittals, improved consistency in registered entity resources devoted to compliance, and improved overall reliability through information sharing on Events Analysis and Situation Awareness.
- **Enforcement:** NERC has worked closely with Regional Entities to streamline enforcement staff in connection with the development of more efficient and risk-based enforcement mechanisms.



- **Standards:** As standards development has matured, NERC management has reallocated Standards staff towards more critical activities like cyber security and analytical capabilities.
- **Legal:** As a result of the aforementioned efficiencies and the maturity of NERC's and ERO Enterprise's business processes, the legal department has reduced its resource requirements, reallocating limited resources to more critical priorities without increasing the company's overall staffing requirements.
- **Forums:** As further described in the quarterly forum reports to the NERC Board of Trustees, NERC and the Regional Entities continue to leverage the transmission and generation forums to jointly address risks to reliability to mitigate their impacts on the reliable operation of the BES.
- **Industry:** The Enterprise continues to collaborate with, and rely on, industry resources and expertise through the various standing committees, working groups and task forces which are critical to both identifying and supporting key initiatives and priorities.

## 2017 Key Business Planning Assumptions

As part of the annual business planning process, NERC and the Regional Entities developed a set of common business planning assumptions supporting the development their respective business plans and budgets. The Regional Entities used these assumptions to evaluate their projected workloads and determine resource levels and allocation required to complete necessary tasks and meet the obligations of their Regional Delegation Agreements. These common business planning assumptions are set forth in Exhibit A.

### Application of Section 215 Criteria

In its order approving NERC's *2013 Business Plan and Budget*, FERC required NERC to establish criteria for determining whether its proposed activities are eligible for funding under Section 215. In an order dated April 19, 2013, FERC approved NERC's proposed criteria, with certain modifications.<sup>7</sup> Exhibit B summarizes the major activities NERC proposes to undertake in 2017 and the approved Section 215 criteria applicable to such activities.

### Overview of 2017 Budget and Funding Requirements

NERC's 2017 combined expense and fixed asset (capital) budget is approximately \$69.6M, which represents an increase of approximately \$2.4M (3.6%) from the 2016 budget. Total expenses are increasing approximately \$1.0M (1.5%) over 2016. The total fixed asset (capital) budget, excluding depreciation,<sup>8</sup> is approximately \$4.4M, an increase of \$461k over 2016. Approximately \$8.3M (11.9%) of NERC's 2017 budget is related to CRISP. In the absence of CRISP, the 2017 budget would increase \$2.1M (3.5%) over 2016. As further explained in Section A – Electricity Information Sharing and Analysis Center (E-ISAC), the majority of the NERC CRISP budget will be funded by participating utilities, with only a small portion funded through assessments. A comparative statement of activities presenting NERC's 2017 budget with and without CRISP is set forth later in this section.

NERC's proposed 2017 assessment is approximately \$59.9M, which represents an increase of approximately \$2.8M (4.9%) from 2016 and reflects the proposed release of \$1.1M of funds from the Assessment Stabilization Reserve to reduce 2017 assessments. The balance in the Assessment Stabilization Reserve, from which NERC proposes to release \$1.1M to reduce 2017 assessments, includes \$500k of Penalty collections during the 12 months ended June 30, 2016, which NERC proposes to deposit

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<sup>7</sup> North American Electric Reliability Corporation, Order on Compliance, 143 FERC ¶ 61,052 (2013).

<sup>8</sup> NERC and the Regional Entities budget Depreciation as an Operating Expense with an equal and offsetting credit against budgeted Fixed Asset Additions; as a result, the budgets do not include depreciation in the funding requirements.

in the Assessment Stabilization Reserve. Without the proposed release of funds from the Assessment Stabilization Reserve to offset assessments (as further discussed below), NERC's total average assessments would increase \$3.9M (6.8%) over 2016. One of the primary differences between NERC's current 2017 budget increase of 3.6% and the 6.8% 2017 assessment increase (unadjusted) results from eliminating the one-time application of the Penalty funds collected during the 12 months ended June 30 preceding the budget year to offset U.S. assessments in 2017; instead, NERC proposes that these Penalty funds be deposited in the Assessment Stabilization Reserve and that a larger amount, \$1.1M, be released from the Assessment Stabilization Reserve to reduce assessments. This loss of penalty offsets from the Penalties collected during the 12 months ended June 30, 2016 will not impact Canadian or Mexican assessments since U.S. penalty funds are only used to reduce U.S. assessments.<sup>9</sup> Other factors contributing to the difference between the proposed assessment increase and the unadjusted assessment increase include debt assumptions and projected reserve requirements, all of which impact assessments in the United States, Canada, and Mexico.

As a long-term strategy to stabilize assessments and align budget and assessment increases more closely, NERC has undertaken a multi-year strategy to manage assessment increases. NERC's policy *Accounting, Financial Statement and Budgetary Treatment of Penalties Imposed and Received for Violations of Reliability Standards* and NERC Rule of Procedure (ROP) §1107.2 specifies that penalties received during the period July 1 through the following June 30 are to be used in the subsequent budget period to offset assessment billings. However, ROP §1107.4 provides for exceptions or alternatives to this treatment if approved by the Commission. In February 2015, NERC's Board approved an amendment to the company's Working Capital and Operating Reserve Policy.<sup>10</sup> Among the approved changes to this policy was the creation of an Assessment Stabilization Reserve.<sup>11</sup> This reserve was established to address the strategic goal of more closely aligning annual budget and assessment increases and to provide resources to better manage year-to-year assessment increases. The eventual goal is to narrow the gap between annual percentage changes in NERC's budget and annual changes in assessments, that results from year-to-year variations in penalty collections.

NERC proposes (1) to deposit the \$500k of Penalties collected during the period July 1, 2015 – June 30, 2016, in the Assessment Stabilization Reserve, and (2) to release \$1.1M from the Assessment Stabilization Reserve to reduce 2017 assessments. As a result, NERC proposes an overall average 2017 assessment increase of 4.9%, which reflects the proposed release of \$1.1M from the Assessment Stabilization Reserves to offset U.S. assessments. The allocation of assessments to Canadian entities will depend on the final determination and allocation of certain compliance and enforcement costs to Canadian entities pursuant to NERC's policy on the allocation of compliance costs.<sup>12</sup>

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<sup>9</sup> Accounting, Financial Statement and Budgetary Treatment of Penalties Imposed and Received for Violations of Reliability Standards, December 8, 2008 and as amended August 15, 2013

<sup>10</sup> [NERC's Working Capital and Operating Reserve Policy](#). NERC filed a petition with FERC on March 6, 2015 for approval of this policy; the Commission conditionally approved the revised policy in an order issued June 18, 2015, in Docket No. RR15-8-000. *North American Electric Reliability Corporation, Order Conditionally Accepting Revisions to Working Capital and Operating Reserve Policy*, 151 FERC ¶ 61,225 (2015). On August 14, 2015, NERC submitted a compliance filing to the June 18, 2015 order with a modification to the policy, which the Commission accepted by letter order dated September 18, 2015 (Docket No. RR15-8-001).

<sup>11</sup> In accordance with the approved Working Capital and Operating Policy, this reserve may be funded with penalty funds and surplus operating reserves. The actual amount of the contribution, as well as releases from the fund to reduce assessments, is determined annually as part of NERC's business plan and budget process, based on recommendation by the Board's Finance and Audit Committee and requiring both Board and FERC approval.

<sup>12</sup> Expanded Policy on Allocation of Certain Compliance and Enforcement Costs, July 29, 2008.

The following table provides a high-level year-over-year comparison of the major categories of expenses, total budget, and FTEs.

<b>Statement of Activities and Fixed Assets Expenditures 2016 and 2017 Budgets</b>						
<b>STATUTORY</b>						
	<b>2016</b>	<b>2016</b>	<b>Projection v</b>	<b>2017</b>	<b>2017 Budget v</b>	
	<b>Budget</b>	<b>Projection</b>	<b>2016 Budget</b>	<b>Budget</b>	<b>2016 Budget</b>	<b>% Over</b>
			<b>Over(Under)</b>		<b>Over (Under)</b>	<b>(Under)</b>
<b>Funding</b>						
NERC Assessments	\$ 57,081,445	\$ 57,081,445	\$ (0)	\$ 59,856,314	\$ 2,774,868	4.9%
Penalty Sanctions	1,439,000	1,439,000	-	1,100,000	(339,000)	
Third-Party Funding (CRISP)	6,830,738	7,335,757	505,019	6,990,447	159,709	
Testing Fees	1,867,972	1,867,972	-	1,921,900	53,928	
Services & Software	50,000	50,000	-	50,000	-	
Workshops	230,000	269,201	39,201	230,000	-	
Interest	3,000	35,898	32,898	3,000	-	
<b>Total Funding (A)</b>	<b>\$ 67,502,155</b>	<b>\$ 68,079,475</b>	<b>\$ 577,320</b>	<b>\$ 70,151,660</b>	<b>\$ 2,649,505</b>	<b>3.9%</b>
<b>Expenses</b>						
Personnel Expenses	\$ 37,283,807	\$ 37,288,967	\$ 5,161	\$ 38,641,331	\$ 1,357,525	3.6%
Meeting Expenses	3,620,286	3,646,564	26,278	3,372,886	(247,400)	-6.8%
Operating Expenses	24,903,515	25,947,939	1,044,424	24,800,690	(102,825)	-0.4%
Other Non-Operating Expenses	110,000	100,668	(9,332)	106,725	(3,275)	-3.0%
<b>Total Expenses</b>	<b>\$ 65,917,608</b>	<b>\$ 66,984,139</b>	<b>\$ 1,066,531</b>	<b>\$ 66,921,632</b>	<b>\$ 1,004,024</b>	<b>1.5%</b>
<b>Fixed Assets</b>						
Depreciation	\$ (2,641,943)	\$ (2,558,606)	\$ 83,336	\$ (1,691,457)	\$ 950,486	
Computer & Software CapEx	2,447,000	2,362,402	(84,598)	2,572,000	125,000	
Equipment CapEx	1,464,000	1,545,797	81,797	1,800,000	336,000	
<b>Inc(Dec) in Fixed Assets</b>	<b>1,269,057</b>	<b>1,349,593</b>	<b>80,535</b>	<b>2,680,543</b>	<b>1,411,486</b>	
<b>TOTAL BUDGET</b>	<b>\$ 67,186,665</b>	<b>\$ 68,333,732</b>	<b>\$ 1,147,067</b>	<b>\$ 69,602,175</b>	<b>\$ 2,415,510</b>	<b>3.6%</b>
<b>FTEs</b>	<b>192.5</b>	<b>188.6</b>	<b>(3.9)</b>	<b>189.9</b>	<b>(2.6)</b>	<b>-1.3%</b>

NERC's 2017 budget and funding requirements reflect the resources necessary to support achievement of the goals and objectives set forth in the Strategic Plan. The 2017 budget is comprised of both operating and capital (fixed asset) costs. Operating costs generally include personnel, consulting, office space, software licensing, third-party data management, and communications and other customary services to support office operations. Fixed asset (capital) costs primarily reflect investments in equipment and software to support operations, including investments in the development of software applications and infrastructure to facilitate improved business processes and efficiency.

### Key Budget Assumptions

Key assumptions used in the development of NERC's 2017 budget include the following:

- Maintaining FTEs at a similar level as 2016. Management routinely reviews resource allocation to ensure that the appropriate amount and type of resources are being dedicated to key priorities and activities. As operations in some areas become more efficient and/or major initiatives are completed, resources are redeployed to priority areas. For example, as work on reliability standards reduced as regulatory obligations were addressed, it was possible to reallocate some of those resources to support additional compliance assurance, reliability risk assessment, and security needs without increasing the company's overall FTE budget.
- Applying a 6.0% reduction to FTEs (vacancy rate) to account for attrition and hiring delays. This assumption is based on a review and analysis of historic attrition and vacancy rates, as well as the time it takes to recruit and onboard new staff. This is reduction in the historical vacancy rate

assumptions and reflects the ongoing management focus on recruiting and retaining appropriate resources.

- Market-based compensation for personnel. Executive and staff compensation and benefits are established based on guidelines established by NERC's Corporate Governance and Human Resources Committee and comprehensive market compensation and benefit information provided by a leading nationally recognized compensation and benefits consulting firm, as well as other available data. An updated market study was completed in late 2015 under the oversight of NERC's Corporate Governance and Human Resources Committee.
- Anticipating market increases in medical and dental benefit plan costs. Medical and dental premium cost estimates are based on market data provided by the company's benefits consultant. Current 2017 budget estimates are in the upper end of the range provided by NERC's benefits consultant. This estimate will continue to be evaluated prior to finalization of the recommended 2017 budget. No other changes to retirement or other benefit plans have been assumed for 2017.
- In 2015, the Electricity Subsector Coordinating Council (ESCC)<sup>13</sup> presented its recommendations resulting from a review of the E-ISAC operations performed that year. These recommendations included a request to evaluate and potentially enhance the user interface and underlying functionality of the E-ISAC portal. In 2015, the ESCC established a Member Executive Committee (MEC) to provide guidance with respect to various E-ISAC matters, including improvements to the E-ISAC portal. As part of an approved 2016 work plan, the E-ISAC staff worked closely with the MEC to develop a business case and funding estimates for these improvements. A power point presentation summarizing the business case, funding estimate and additional detail regarding the portal improvement project is attached as Exhibit F.

The 2017 E-ISAC budget includes \$1M for the portal enhancements (\$250,000 of which is allocated to CRISP) for the portal project. The annual impact of the proposed \$1M investment on assessments will be approximately \$250,000 since projects of this nature are typically financed through NERC's capital financing program and funded over a three year period. The MEC has provided written comments in support of this investment.<sup>14</sup>

- Meeting and travel expenses are being held flat based on a review of 2015 and 2016 costs. The company has undertaken a number of significant efforts over the past several years to reduce travel and meeting expenses. For example, the company has worked closely with Regional Entities to share meeting space where possible, which has helped reduce meeting costs.
- Contractor and consulting expenses are developed on a department-by-department basis and reflect both known and anticipated expenses, based on historic and current information.

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<sup>13</sup> The Electricity Subsector Coordinating Council (ESCC) serves as the principal liaison between the federal government and the electric power sector, with the mission of coordinating efforts to prepare for, and respond to, national-level disasters or threats to critical infrastructure. The ESCC includes utility CEOs and trade association leaders representing all segments of the industry. Its counterparts include senior Administration officials from the White House, relevant Cabinet agencies, federal law enforcement, and national security organizations.

<sup>14</sup> MEC's comments are available on [NERC's website](#)

The following table summarizes total year-over-year contractor and consulting costs by department.

Consultants & Contracts	2016 BUDGET	2017 BUDGET	2017 vs 2016
			Budget
Compliance Assurance	200,000	50,000	(150,000)
Event Analysis	56,000	-	(56,000)
Compliance Investigation, Registration and Certification	50,000	-	(50,000)
Reliability Assessments and System Analysis	575,000	525,000	(50,000)
Performance Analysis	509,039	528,082	19,044
Situation Awareness	1,211,475	1,295,850	84,375
E-ISAC	663,335	899,835	236,500
CRISP	5,888,594	5,888,594	-
System Operator Certification	327,600	219,800	(107,800)
Continuing Education, Training & Education	348,200	360,800	12,600
General & Administrative	95,000	15,000	(80,000)
Information Technology	2,094,671	2,312,787	218,116
Human Resources	550,000	575,000	25,000
Finance and Accounting	297,000	457,000	160,000
<b>TOTAL CONSULTANTS AND CONTRACTS</b>	<b>12,865,914</b>	<b>13,127,749</b>	<b>261,835</b>

The Compliance Assurance department will require ongoing, though significantly reduced, consulting support for implementation of compliance assurance reform initiatives. Contract and consulting expenses for Reliability Assessment and System Analysis and for Performance Analysis are largely for software and services supporting reliability data management and analysis. Situation Awareness costs are primarily related to licenses and services supporting Situation Awareness for FERC, NERC, and the Regional Entities (SAFNR), and other reliability information and notification (e.g., alerts) systems.

E-ISAC consulting costs for 2017 include support for GridEx and analytical tools. Approximately \$6M of the total E-ISAC contract and consulting costs are CRISP related (as shown separately in the table above) and funded by CRISP participants.

Training, Education, and Operator Certification contract and consulting costs include the cost of operator certification, training, and continuing education programs, and training NERC personnel. It also includes cost for supporting compliance and enforcement (risk-based CMEP) and other training initiatives.

Information Technology (IT) contract and consulting support is primarily for systems and software maintenance and support services, including costs for enhancements to and maintenance of enterprise applications. Costs associated with IT security programs and the ongoing implementation and support of a document management program are also included. Software development costs are primarily budgeted under fixed (capital) assets and are discussed further below.

Human Resources contract and consulting costs are primarily for employee training, various surveys, compensation studies, and consulting services to support improvements in human resource information systems.

Finance and Accounting costs are primarily for audit and consulting services to support the Enterprise Risk Management and Internal Control audit plan and Compliance and Certification Committee (CCC) audit plan, as well as consulting services to implement new financial reporting tools and review insurance strategy and solutions.

### Fixed Asset (Capital) Budget and Capital Financing

NERC's 2017 capital budget is approximately \$4.4M (excluding depreciation), which represents an increase of approximately \$461k from 2016. The table below provides a summary of the major capital budget components.

NERC CAPITAL BUDGET	<u>2016</u>	<u>2017</u>
ERO Application Development	\$ 1,500,000	\$ 700,000
E-ISAC Portal Development		1,000,000
Document Management	465,000	335,000
Hardware (Storage, servers, laptops)	955,000	991,000
Other Equipment	535,000	885,000
Disaster Recovery	200,000	150,000
NERC Software licenses	256,000	311,000
<b>Total Capital Budget</b>	<b><u>\$ 3,911,000</u></b>	<b><u>\$ 4,372,000</u></b>

NERC has budgeted \$2.2M (both operating expenses and capital expenditures) in 2017 for services related to the planning, design, and implementation of software applications supporting the development of enterprise tools for common NERC and Regional Entity operations. These ERO Enterprise related costs include \$700k in capital expenditures and \$1.5M in other IT operating costs. Senior management from NERC and the Regional Entities refined and updated the ERO Enterprise's long-term IT architecture and data management plans and the specific applications that will be under development in 2017. Section A, Information Technology department, below, offers further detail regarding updates to the Enterprise IT Strategy; the current status of the development of Enterprise IT applications; and projects that will be under development in 2017. The proposed \$2.2M budget for 2017 related to enterprise application development and support is less than the 2017 projection presented in NERC's *2016 Business Plan and Budget* due primarily to the decision to delay the development of a replacement for the current compliance monitoring and enforcement reporting and tracking system (CRATS) to 2018. Further information regarding the ERO Enterprise application development plan and budget is contained in Section A – Information Technology department. NERC's 2017 capital budget also includes ongoing funding for IT security, disaster recovery, data storage, replacement of servers and laptops, and software license costs.

The 2017 budget projection assumes that approximately \$1.5M of the total \$4.4M capital budget will be financed through the capital financing program that was described and put in place as part of NERC's *2014 Business Plan and Budget*. Further information regarding capital financing may be found in Exhibit D.

### **Working Capital and Operating Reserves**

Management is proposing an overall reserve budget of \$7.8M for Working Capital, the four categories of Operating Reserves and the Assessment Stabilization Reserve under the company's Working Capital and Operating Reserve Policy. This represents a decrease of \$1.1M (11.9%) from the total reserve amounts included in NERC's approved 2016 budget. While individual categories reflect increases and decreases resulting from operating needs and uses, the 2017 budget does not reflect additional working capital requirements in total. Pursuant to the company's Working Capital and Operating Reserve Policy, funds reserved for future liabilities are now budgeted under a separate reserve category entitled Future Obligation Reserve. This reserve is primarily comprised of existing funds and is budgeted to be \$2.6M for 2017. The second category of operating reserves is the System Operating Certification Reserve. The 2017 System Operator Certification Reserve is budgeted at \$714k and comprised of existing funds. The third category of operating reserves is the CRISP Operating Reserve, which represents funds dedicated to support CRISP. Similar to 2016, these reserves are established pursuant to a CRISP budget agreed to and funded entirely by utilities participating in CRISP. These reserves have no impact on assessments and they are segregated from other reserves pursuant to the terms of the CRISP agreements. The CRISP reserves are projected to be \$500k in the 2017 budget.

The fourth category of operating reserves is the Operating Contingency Reserve. This reserve includes funds for expenditures that were not anticipated at the time the company's budget was prepared or for which the timing was uncertain. NERC's current policy on Operating Contingency Reserves requires a reserve target of 3.5–7.0%, except as otherwise approved by the Board after review and recommendation by the NERC Finance and Audit Committee. This percentage is calculated against NERC's total budget for operating and capital expenditures, less those costs related to CRISP and System Operator Certification, each of which has a separate reserve category. For this draft of the 2017 budget, management is recommending an Operating Contingency Reserve of approximately \$2.2M, or 3.7% of total budgeted operating and capital costs, excluding CRISP and System Operator costs, which is slightly less than the minimum recommended in the policy but within the discretion of the NERC Board of Trustees to approve, upon review and recommendation of NERC's Finance and Audit Committee.

In addition to the four categories of operating reserves and as previously discussed, the company's amended Working Capital and Operating Reserve Policy also provides for an Assessment Stabilization Reserve. To date, this reserve has been funded entirely by previously received penalties and is projected to have a balance of \$2.7M as of January 1, 2017, including the proposed deposit of \$500k of Penalties received during the period July 1, 2015 – June 30, 2016 (subject to requisite approvals). For purposes of the company's *2017 Business Plan and Budget*, management proposes the release of \$1.1M in Assessment Stabilization Reserve funds to offset assessments. The use of \$1.1M to offset assessments in 2017 yields an average increase of 4.9% over the 2016 assessments. The remaining balance of \$1.7M in the Assessment Stabilization Reserve will be used to reduce assessments in one or more future periods, subject to review and approval by the NERC Board and the Commission in the applicable year's business plan and budget. A further discussion of the use of this remaining Assessment Stabilization Reserve balance may be found below in the section entitled 2018-2019 Projections.

### **Department Budget and FTE Comparisons**

The following tables set forth a 2016–2017 total budget comparison by department. The amounts shown below reflect all direct and indirect departmental costs, including fixed asset costs. Costs incurred for general and administrative and other overheads are considered indirect, and are allocated to the statutory departments based on the ratio of that department's budgeted FTEs to total budgeted FTEs.

## 2016–2017 Total Budget by Department

Total Budget	Budget 2016	Budget 2017	Change 2017 Budget v 2016 Budget	% Change
Reliability Standards	8,193,116	8,100,282	(92,834)	-1.1%
Compliance Assurance	9,420,903	7,858,599	(1,562,305)	-16.6%
Compliance Analysis, Certification and Registration	4,632,871	3,646,289	(986,582)	-21.3%
Compliance Enforcement	5,293,298	5,800,647	507,349	9.6%
Reliability Assessments and Performance Analysis				
Reliability Assessments and System Analysis	6,342,917	7,535,594	1,192,677	18.8%
Performance Analysis*	3,575,811	4,908,855	1,333,044	37.3%
Reliability Risk Management				
Event Analysis	5,355,795	5,446,206	90,411	1.7%
Situation Awareness	3,692,197	4,032,862	340,664	9.2%
E-ISAC	16,767,525	18,515,341	1,747,816	10.4%
Training, Education and Operator Certification	3,912,231	3,757,501	(154,731)	-4.0%
<b>Total Budget</b>	<b>67,186,665</b>	<b>69,602,175</b>	<b>2,415,511</b>	<b>3.6%</b>

\*Internally managed under Reliability Risk Management Department

The decreases in the Compliance Analysis, Certification and Registration, and Compliance Assurance departments' costs are primarily due to the transfer of resources from these departments as part of the ongoing process of internal reorganization to better align resources to support strategic goals and risk priorities. The increase in the Reliability Assessment and Performance Analysis program area<sup>15</sup> and Event Analysis department budget are due to the reallocation of resources to those areas to further support increased reliability risk assessment and analysis resource priorities. The increase in the Situation Awareness department budget is primarily due to enhancement or modification of reliability-related situation awareness and monitoring tools. The increase in the E-ISAC department budget is primarily due to planned enhancements to the E-ISAC portal and to the 2017 GridEx (which was not held in 2016).

The following table presents a 2017 versus 2016 comparison of budgeted FTEs by department and reflects 2016 personnel additions, interdepartmental transfers, and attrition assumptions. The number of FTEs represents the number of employees employed full time during the year, plus the number of employees employed part time (less than full schedule) or during a portion of the year converted to a full-time basis. Headcount represents the total number of personnel employed during the year, regardless of the length of their employment during that year. FTEs will be less than headcount, unless there are no part-time employees or employees who are employed less than a full year. The company's 2017 personnel budget is based upon existing headcount and associated compensation and benefit costs, as well as assumptions on the number and cost of new hires and the assumed vacancy rate, all within an overall FTE budget. An average vacancy rate is applied to each position and its associated costs to arrive at an overall personnel cost budget. The vacancy rate represents an adjustment, which is applied in the calculation of budgeted personnel costs to account for attrition and for variations from the budget assumptions on the timing of new hires.

<sup>15</sup> The Reliability Assessment and Performance Analysis program area has been reorganized into two separate departments: (1) Reliability Assessments and System Analysis; and (2) Performance Analysis. The Performance Analysis department is internally managed by the Vice President of Reliability Risk Management.



## 2016–2017 Year-Over-Year Comparison of FTEs by Department

Total FTE's by Program Area	Budget 2016	Budget 2017	Change from 2016 Budget	% Change from 2016
<b>STATUTORY</b>				
<b>Operational Programs</b>				
Reliability Standards	17.98	17.16	(0.8)	-4.6%
Compliance Assurance	19.36	15.51	(3.9)	-19.9%
Compliance Analysis, Certification and Registration	10.14	7.52	(2.6)	-25.8%
Compliance Enforcement	12.22	13.16	0.9	7.7%
Reliability Assessments and System Analysis	11.75	14.10	2.3	20.0%
Performance Analysis	6.92	9.40	2.5	35.9%
Event Analysis	11.06	11.28	0.2	2.0%
Situation Awareness	5.53	5.64	0.1	2.0%
E-ISAC	18.90	19.74	0.8	4.4%
Training, Education and Operator Certification	7.38	7.05	(0.3)	-4.4%
<b>Total FTEs Operational Programs</b>	<b>121.24</b>	<b>120.56</b>	<b>(0.7)</b>	<b>-0.6%</b>
<b>Administrative Programs</b>				
General & Administrative	17.52	16.92	(0.6)	-3.4%
Legal and Regulatory	12.22	11.28	(0.9)	-7.7%
Information Technology	22.13	23.27	1.1	5.1%
Human Resources	2.77	2.82	0.0	1.8%
Finance and Accounting	16.60	15.04	(1.6)	-9.4%
<b>Total FTEs Administrative Programs</b>	<b>71.23</b>	<b>69.33</b>	<b>(1.9)</b>	<b>-2.7%</b>
<b>Total FTEs</b>	<b>192.47</b>	<b>189.88</b>	<b>(2.5)</b>	<b>-1.3%</b>

\*Reflects 2017 additions and transfers between departments, anticipated timing of 2017 hires, and assumes 6% attrition in all programs

Total FTEs in the Administrative Programs is decreasing by 1.9 FTE (2.7%), reflecting reallocation of resources among the various departments. The increase in Information Technology FTEs is due to the reallocation of personnel to strengthen project management oversight over NERC and ERO Enterprise software application development and implementation.

The NERC 2017 organizational chart can be found in Appendix 1. The difference between the number of positions reflected in the 2017 organizational chart and total 2017 budgeted FTEs is due to assumptions regarding vacancy rates and timing of new hires.

The following pages include a statement of activities comparing the 2016 budget and the proposed 2017 budget, followed by a statement of activities comparing the 2016 budget and the proposed 2017 budget with and without CRISP.

Introduction and Executive Summary

Statement of Activities and Fixed Assets Expenditures 2016 and 2017 Budgets

STATUTORY

	2016		Variance 2016 Projection v 2016		Variance 2017 Budget v 2016		% Inc 2017 over 2016
	Budget	Projection	Budget Over(Under)	2017 Budget	Budget Over(Under)		
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ 57,081,445	\$ 57,081,445	\$ (0)	\$ 59,856,314	\$ 2,774,868		4.9%
Penalty Sanctions	1,439,000	1,439,000	-	1,100,000	(339,000)		
<b>Total NERC Funding</b>	<b>\$ 58,520,445</b>	<b>\$ 58,520,445</b>	<b>\$ (0)</b>	<b>\$ 60,956,314</b>	<b>\$ 2,435,868</b>		
Third-Party Funding (CRISP)	6,830,738	7,335,757	505,019	6,990,447	159,709		
Testing Fees	1,867,972	1,867,972	-	1,921,900	53,928		
Services & Software	50,000	50,000	-	50,000	-		
Workshops	230,000	269,201	39,201	230,000	-		
Interest	3,000	35,898	32,898	3,000	-		
Miscellaneous	-	202	202	-	-		
<b>Total Funding (A)</b>	<b>\$ 67,502,155</b>	<b>\$ 68,079,475</b>	<b>\$ 577,320</b>	<b>\$ 70,151,660</b>	<b>\$ 2,649,505</b>		<b>3.9%</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 28,842,336	\$ 29,052,918	\$ 210,581	\$ 30,073,438	\$ 1,231,102		
Payroll Taxes	1,871,367	1,830,724	(40,643)	1,847,130	(24,237)		
Benefits	3,579,280	3,390,190	(189,090)	3,643,806	64,526		
Retirement Costs	2,990,823	3,015,135	24,312	3,076,956	86,134		
<b>Total Personnel Expenses</b>	<b>\$ 37,283,807</b>	<b>\$ 37,288,967</b>	<b>\$ 5,161</b>	<b>\$ 38,641,331</b>	<b>\$ 1,357,525</b>		<b>3.6%</b>
<b>Meeting Expenses</b>							
Meetings	\$ 1,096,500	\$ 1,194,500	\$ 98,000	\$ 1,071,500	\$ (25,000)		
Travel	2,203,786	2,190,184	(13,602)	2,203,786	(0)		
Conference Calls	320,000	261,880	(58,120)	97,600	(222,400)		
<b>Total Meeting Expenses</b>	<b>\$ 3,620,286</b>	<b>\$ 3,646,564</b>	<b>\$ 26,278</b>	<b>\$ 3,372,886</b>	<b>\$ (247,400)</b>		<b>-6.8%</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 12,865,914	\$ 13,972,958	\$ 1,107,044	\$ 13,127,749	\$ 261,835		
Office Rent	3,054,287	3,224,287	170,000	3,117,009	62,722		
Office Costs	3,795,572	3,740,288	(55,284)	4,359,340	563,768		
Professional Services	2,509,300	2,414,300	(95,000)	2,468,135	(41,165)		
Miscellaneous	36,500	37,500	1,000	37,000	500		
Depreciation	2,641,943	2,558,606	(83,336)	1,691,457	(950,486)		
<b>Total Operating Expenses</b>	<b>\$ 24,903,515</b>	<b>\$ 25,947,939</b>	<b>\$ 1,044,424</b>	<b>\$ 24,800,690</b>	<b>\$ (102,825)</b>		<b>-0.4%</b>
<b>Total Direct Expenses</b>	<b>\$ 65,807,608</b>	<b>\$ 66,883,471</b>	<b>\$ 1,075,863</b>	<b>\$ 66,814,907</b>	<b>\$ 1,007,299</b>		<b>1.5%</b>
<b>Indirect Expenses</b>	<b>\$ -</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>		
<b>Other Non-Operating Expenses</b>	<b>\$ 110,000</b>	<b>\$ 100,668</b>	<b>\$ (9,332)</b>	<b>\$ 106,725</b>	<b>\$ (3,275)</b>		<b>-3.0%</b>
<b>Total Expenses (B)</b>	<b>\$ 65,917,608</b>	<b>\$ 66,984,139</b>	<b>\$ 1,066,531</b>	<b>\$ 66,921,632</b>	<b>\$ 1,004,024</b>		<b>1.5%</b>
<b>Change in Assets</b>	<b>\$ 1,584,548</b>	<b>\$ 1,095,336</b>	<b>\$ (489,211)</b>	<b>\$ 3,230,028</b>	<b>\$ 1,645,481</b>		
<b>Fixed Assets</b>							
Depreciation	\$ (2,641,943)	\$ (2,558,606)	83,336	\$ (1,691,457)	\$ 950,486		
Computer & Software CapEx	2,447,000	2,362,402	(84,598)	2,572,000	125,000		10.5%
Furniture & Fixtures CapEx	-	-	-	-	-		
Equipment CapEx	1,464,000	1,545,797	81,797	1,800,000	336,000		
Leasehold Improvements	-	-	-	-	-		
Allocation of Fixed Assets	\$ (0)	\$ (0)	\$ 0	\$ 0	\$ 0		
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>1,269,057</b>	<b>1,349,593</b>	<b>80,535</b>	<b>2,680,543</b>	<b>1,411,486</b>		
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 67,186,665</b>	<b>\$ 68,333,732</b>	<b>\$ 1,147,067</b>	<b>\$ 69,602,175</b>	<b>\$ 2,415,510</b>		<b>3.6%</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)<sup>1</sup></b>	<b>\$ 315,490</b>	<b>\$ (254,257)</b>	<b>\$ (569,747)</b>	<b>\$ 549,485</b>	<b>\$ (716,491)</b>		
<b>FTEs</b>	<b>192.5</b>	<b>188.6</b>	<b>(3.9)</b>	<b>189.88</b>	<b>(2.6)</b>		<b>-1.3%</b>

<sup>1</sup>The budgeted change in working capital reflects both a reduction in excess working capital and operating reserves and the assumptions related to capital financing. Refer to Table B-1 on page 81 for a complete analysis of the Working Capital and Operating Reserve balance.

Introduction and Executive Summary

Statement of Activities and Fixed Assets Expenditures 2016 and 2017 Budgets

STATUTORY

	2016 Budget	2016 CRISP Budget	2016		2017 Budget	2017 CRISP Budget	2017		Variance 2017 Budget v 2016 Budget w/out CRISP Over(Under)	% Inc 2017 over 2016
			Budget w/out CRISP	CRISP			Budget w/out CRISP	CRISP		
<b>Funding</b>										
<b>ERO Funding</b>										
NERC Assessments	\$ 57,081,445	\$ 1,108,641	\$ 55,972,805	\$ 59,856,314	\$ 1,275,681	\$ 58,580,633	\$ 2,607,828	4.7%		
Penalty Sanctions	1,439,000	33,572	1,405,428	1,100,000	26,243	1,073,757	(331,671)			
<b>Total NERC Funding</b>	<b>\$ 58,520,445</b>	<b>\$ 1,142,213</b>	<b>\$ 57,378,232</b>	<b>\$ 60,956,314</b>	<b>\$ 1,301,923</b>	<b>\$ 59,654,390</b>	<b>\$ 2,276,158</b>			
Third-Party Funding (CRISP)	6,830,738	6,830,738	\$ -	6,990,447	6,990,447	\$ -	-			
Testing Fees	1,867,972	-	1,867,972	1,921,900	-	1,921,900	53,928			
Services & Software	50,000	-	50,000	50,000	-	50,000	-			
Workshops	230,000	-	230,000	230,000	-	230,000	-			
Interest	3,000	68	2,932	3,000	70	2,930	(2)			
Miscellaneous	-	-	-	-	-	-	-			
<b>Total Funding (A)</b>	<b>\$ 67,502,155</b>	<b>\$ 7,973,019</b>	<b>\$ 59,529,136</b>	<b>\$ 70,151,660</b>	<b>\$ 8,292,440</b>	<b>\$ 61,859,220</b>	<b>\$ 2,330,084</b>	3.9%		
<b>Expenses</b>										
<b>Personnel Expenses</b>										
Salaries	\$ 28,842,336	\$ 592,724	\$ 28,249,612	\$ 30,073,438	\$ 603,432	\$ 29,470,007	\$ 1,220,394			
Payroll Taxes	1,871,367	32,899	1,838,469	1,847,130	32,329	1,814,801	(23,668)			
Benefits	3,579,280	50,247	3,529,034	3,643,806	68,375	3,575,431	46,398			
Retirement Costs	2,990,823	65,802	2,925,021	3,076,956	64,236	3,012,721	87,700			
<b>Total Personnel Expenses</b>	<b>\$ 37,283,807</b>	<b>\$ 741,671</b>	<b>\$ 36,542,131</b>	<b>\$ 38,641,331</b>	<b>\$ 768,371</b>	<b>\$ 37,872,960</b>	<b>\$ 1,330,825</b>	3.6%		
<b>Meeting Expenses</b>										
Meetings	\$ 1,096,500	\$ 30,000	\$ 1,066,500	\$ 1,071,500	\$ 30,000	\$ 1,041,500	\$ (25,000)			
Travel	2,203,786	37,455	2,166,331	2,203,786	37,455	2,166,331	(0)			
Conference Calls	320,000	2,000	318,000	97,600	2,237	95,363	(222,637)			
<b>Total Meeting Expenses</b>	<b>\$ 3,620,286</b>	<b>\$ 69,455</b>	<b>\$ 3,550,831</b>	<b>\$ 3,372,886</b>	<b>\$ 69,692</b>	<b>\$ 3,303,194</b>	<b>\$ (247,637)</b>	-7.0%		
<b>Operating Expenses</b>										
Consultants & Contracts	\$ 12,865,914	\$ 5,888,594	\$ 6,977,320	\$ 13,127,749	\$ 5,888,594	\$ 7,239,155	\$ 261,835			
Office Rent	3,054,287	-	3,054,287	3,117,009	-	3,117,009	62,722			
Office Costs	3,795,572	304,027	3,491,545	4,359,340	305,683	4,053,657	562,112			
Professional Services	2,509,300	175,000	2,334,300	2,468,135	175,000	2,293,135	(41,165)			
Miscellaneous	36,500	250	36,250	37,000	250	36,750	500			
Depreciation	2,641,943	-	2,641,943	1,691,457	5,297	1,686,159	(955,783)			
<b>Total Operating Expenses</b>	<b>\$ 24,903,515</b>	<b>\$ 6,367,871</b>	<b>\$ 18,535,644</b>	<b>\$ 24,800,690</b>	<b>\$ 6,374,824</b>	<b>\$ 18,425,865</b>	<b>\$ (109,779)</b>	-0.6%		
<b>Total Direct Expenses</b>	<b>\$ 65,807,608</b>	<b>\$ 7,178,997</b>	<b>\$ 58,628,611</b>	<b>\$ 66,814,907</b>	<b>\$ 7,212,888</b>	<b>\$ 59,602,019</b>	<b>\$ 973,409</b>	1.7%		
<b>Indirect Expenses</b>	<b>\$ -</b>	<b>\$ 650,361</b>	<b>\$ (650,361)</b>	<b>\$ 0</b>	<b>\$ 687,169</b>	<b>\$ (687,169)</b>	<b>\$ (36,809)</b>			
<b>Other Non-Operating Expenses</b>	<b>\$ 110,000</b>	<b>\$ -</b>	<b>\$ 110,000</b>	<b>\$ 106,725</b>	<b>\$ -</b>	<b>\$ 106,725</b>	<b>\$ (3,275)</b>	-3.0%		
<b>Total Expenses (B)</b>	<b>\$ 65,917,608</b>	<b>\$ 7,829,358</b>	<b>\$ 58,088,250</b>	<b>\$ 66,921,632</b>	<b>\$ 7,900,057</b>	<b>\$ 59,021,575</b>	<b>\$ 933,325</b>	1.6%		
<b>Change in Assets</b>	<b>\$ 1,584,548</b>	<b>\$ 143,662</b>	<b>\$ 1,440,886</b>	<b>\$ 3,230,028</b>	<b>\$ 392,383</b>	<b>\$ 2,837,645</b>	<b>\$ 1,396,759</b>			
<b>Fixed Assets</b>										
Depreciation	\$ (2,641,943)	\$ -	\$ (2,641,943)	\$ (1,691,457)	\$ (5,297)	\$ (1,686,159)	\$ 955,783			
Computer & Software CapEx	2,447,000	100,000	2,347,000	2,572,000	350,000	2,222,000	(125,000)			
Furniture & Fixtures CapEx	-	-	-	-	-	-	-			
Equipment CapEx	1,464,000	-	1,464,000	1,800,000	-	1,800,000	336,000			
Leasehold Improvements	-	-	-	-	-	-	-			
Allocation of Fixed Assets	\$ (0)	\$ 43,105	\$ (43,105)	\$ 0	\$ 47,681	\$ (47,681)	\$ (4,575)			
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>1,269,057</b>	<b>143,105</b>	<b>1,125,952</b>	<b>2,680,543</b>	<b>392,383</b>	<b>2,288,160</b>	<b>1,162,208</b>	103.2%		
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 67,186,665</b>	<b>\$ 7,972,463</b>	<b>\$ 59,214,202</b>	<b>\$ 69,602,175</b>	<b>\$ 8,292,440</b>	<b>\$ 61,309,735</b>	<b>\$ 2,095,533</b>	3.5%		
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)<sup>1</sup></b>	<b>\$ 315,490</b>	<b>\$ 556</b>	<b>\$ 314,934</b>	<b>\$ 549,485</b>	<b>\$ -</b>	<b>\$ 549,485</b>	<b>\$ 234,551</b>			
<b>FTEs</b>	<b>192.47</b>	<b>2.8</b>	<b>189.71</b>	<b>189.88</b>	<b>2.8</b>	<b>187.06</b>	<b>(2.6)</b>	-1.4%		

Projections for 2018–2019

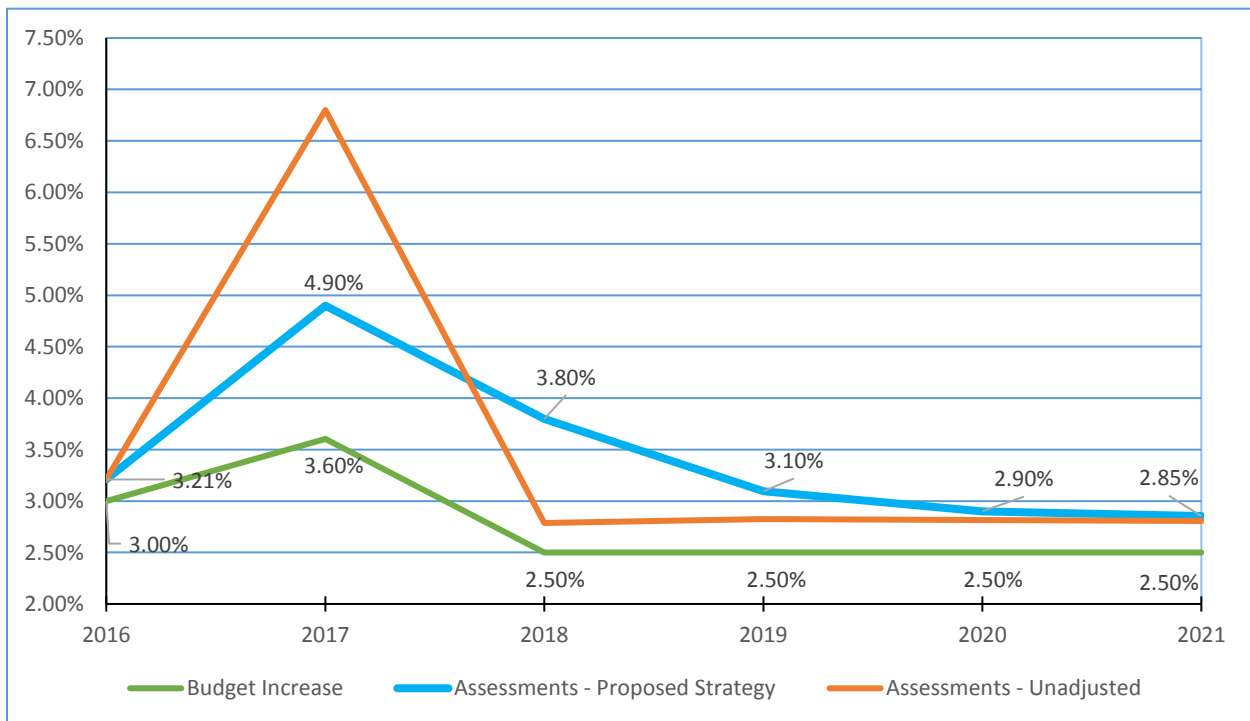
Management has developed preliminary operating and fixed asset (capital) projections for 2018 and 2019. The significant assumptions considered in preparing these projections include:

- No increases in total FTEs over the 2017 budget
- Personnel and benefit cost increases per FTE are consistent with the 2017 budget assumptions
- Operating costs, including contractor and consulting expenses, are slightly higher due to increases in costs for rent, maintenance costs associated with software applications supporting ERO Enterprise Operations, and ongoing implementation of improved budgeting and financial reporting tools.

- Debt service repayment obligations in connection with the company’s Capital Financing Program are consistent with the projected Enterprise IT Applications capital forecast
- No increase in CRISP-related expenditures, except for personnel and benefit cost increases as noted above

Assessments are projected to increase by gradually declining percentages during the next three years as NERC implements an assessment stabilization strategy. The goal of this strategy is to align budgeted costs and assessment increases more closely so that the year-to-year variations in receipt of penalties will not cause large variations in future assessments. Currently, NERC projects assessments to increase 4.5% in 2017, 3.8% in 2018, and 3.1% in 2019 with declining releases each year from the Assessment Stabilization Reserve to meet these targets. A summary of these projections and reserve releases is shown in the table below. An annual budget increase of 2.5% was used for modeling purposes and is subject to change. The assessment stabilization strategy is also depicted in the graph below, showing the assumed budget increases, unadjusted assessment increases, and implementation of the assessment stabilization strategy.

Year	Budget	Assessment	----- Assessment Stabilization Reserve -----		
	Increase	Increase	Additions	Uses	Balance
2016	3.00%	3.21%	\$ 3,710,000	\$ (1,439,000)	\$ 2,271,000
2017	3.60%	4.90%	500,000	(1,100,000)	1,671,000
2018	2.50%	3.80%	500,000	(410,000)	1,761,000
2019	2.50%	3.10%	-	(270,000)	1,491,000



The model does not assume any penalties beyond those NERC currently expects to receive in 2016 and 2017 and assumes that the NERC Board and the Commission will approve the contribution to the Assessment Stabilization Reserve of the \$500k in penalty funds which NERC is scheduled receive in 2017 under the terms of an existing settlement agreement. While the current balance of the Assessment Stabilization reserve is substantial and there could be unexpected receipt of additional penalties

subsequent to June 30, 2016 (in addition to the \$500k scheduled to be received in May 2017), funds in the Assessment Stabilization Reserve could be used, with Board and Commission approval, to stabilize future years' assessments in the event of unexpected budget increases, an anticipated ERO system development projects, or other one-time costs.<sup>16</sup>

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<sup>16</sup> The company's Working Capital and Operating Reserve Policy requires that in determining the amount of the Assessment Stabilization Reserve that is released each year, the NERC Finance and Audit Committee and Board is to review a three-year forecast of assessments, as well as the availability of funding for the Assessment Stabilization Reserve from surplus funds and penalty funds. The actual contributions to and releases from the Assessment Stabilization Reserve in any year must be approved by the Board and the Commission as part of NERC's annual business plan and budget process, with opportunity for review and input by stakeholders.

## Introduction and Executive Summary

### Statement of Activities and Fixed Assets Expenditures 2017 Budget & Projected 2018 and 2019 Budgets

	2017 Budget	2018 Projection	\$ Change 18 v 17	% Change 18 v 17	2019 Projection	\$ Change 19 v 18	% Change 19 v 18
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ 59,856,314	\$ 62,143,946	\$ 2,287,633	3.8%	\$ 64,088,553	\$ 1,944,607	3.1%
Assessment Stabilization Reserve - Penalties	1,100,000	410,000	(690,000)	-62.7%	-	(410,000)	-100.0%
<b>Total NERC Funding</b>	<b>\$ 60,956,314</b>	<b>\$ 62,553,946</b>	<b>\$ 1,597,633</b>	<b>2.6%</b>	<b>\$ 64,088,553</b>	<b>\$ 1,534,607</b>	<b>2.5%</b>
Third-Party Funding (CRISP)	6,990,447	6,990,447	-	0.00%	6,990,447	-	0.00%
Testing Fees	1,921,900	1,921,900	-	0.00%	1,921,900	-	0.00%
Services & Software	50,000	50,000	-	0.00%	50,000	-	0.00%
Workshops	230,000	230,000	-	0.00%	230,000	-	0.00%
Interest	3,000	3,000	-	0.00%	3,000	-	0.00%
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 70,151,660</b>	<b>\$ 71,749,293</b>	<b>\$ 1,597,633</b>	<b>2.3%</b>	<b>\$ 73,283,900</b>	<b>\$ 1,534,607</b>	<b>2.1%</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 30,073,438	\$ 31,035,788	\$ 962,350	3.2%	\$ 31,966,862	\$ 931,074	3.0%
Payroll Taxes	1,847,130	1,869,296	22,166	1.2%	1,893,597	24,301	1.3%
Benefits	3,643,806	3,887,941	244,135	6.7%	4,152,321	264,380	6.8%
Retirement Costs	3,076,956	3,141,573	64,616	2.1%	3,264,094	122,521	3.9%
<b>Total Personnel Expenses</b>	<b>\$ 38,641,331</b>	<b>\$ 39,934,598</b>	<b>\$ 1,293,267</b>	<b>3.3%</b>	<b>\$ 41,276,874</b>	<b>\$ 1,342,276</b>	<b>3.4%</b>
<b>Meeting Expenses</b>							
Meetings	\$ 1,071,500	\$ 1,081,500	\$ 10,000	0.9%	\$ 1,071,500	(10,000)	-0.9%
Travel	2,203,786	2,203,786	-	0.0%	2,203,786	-	0.0%
Conference Calls	97,600	97,600	-	0.0%	97,600	-	0.0%
<b>Total Meeting Expenses</b>	<b>\$ 3,372,886</b>	<b>\$ 3,382,886</b>	<b>\$ 10,000</b>	<b>0.3%</b>	<b>\$ 3,372,886</b>	<b>\$ (10,000)</b>	<b>-0.3%</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 13,127,749	13,595,592	467,844	3.6%	14,367,077	771,485	5.7%
Office Rent	3,117,009	3,099,048	(17,961)	-0.6%	3,104,557	5,509	0.2%
Office Costs	4,359,340	4,359,340	-	0.0%	4,359,340	-	0.0%
Professional Services	2,468,135	2,652,075	183,940	7.5%	2,661,992	9,917	0.4%
Miscellaneous	37,000	37,000	-	0.0%	37,000	-	0.0%
Depreciation	1,691,457	1,194,345	(497,112)	-29.4%	932,549	(261,796)	-21.9%
<b>Total Operating Expenses</b>	<b>\$ 24,800,690</b>	<b>\$ 24,937,400</b>	<b>\$ 136,711</b>	<b>0.6%</b>	<b>\$ 25,462,516</b>	<b>\$ 525,116</b>	<b>2.1%</b>
<b>Total Direct Expenses</b>	<b>\$ 66,814,907</b>	<b>\$ 68,254,885</b>	<b>\$ 1,439,978</b>	<b>2.2%</b>	<b>\$ 70,112,277</b>	<b>\$ 1,857,392</b>	<b>2.7%</b>
<b>Indirect Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>
<b>Other Non-Operating Expenses</b>	<b>\$ 106,725</b>	<b>\$ 114,000</b>	<b>\$ 7,275</b>	<b>6.8%</b>	<b>\$ 116,000</b>	<b>\$ 2,000</b>	<b>1.8%</b>
<b>Total Expenses (B)</b>	<b>\$ 66,921,632</b>	<b>\$ 68,368,885</b>	<b>\$ 1,447,253</b>	<b>2.2%</b>	<b>\$ 70,228,277</b>	<b>\$ 1,859,392</b>	<b>2.7%</b>
<b>Change in Assets</b>	<b>\$ 3,230,028</b>	<b>\$ 3,380,408</b>	<b>\$ 150,380</b>	<b>4.7%</b>	<b>\$ 3,055,623</b>	<b>\$ (324,785)</b>	<b>-9.6%</b>
<b>Fixed Assets</b>							
Depreciation	\$ (1,691,457)	\$ (1,194,345)	\$ 497,112	-29.4%	\$ (932,549)	\$ 261,796	-21.9%
Computer & Software CapEx	2,572,000	2,562,000	(10,000)	-0.4%	2,112,000	(450,000)	-17.6%
Furniture & Fixtures CapEx	-	-	-	-	-	-	-
Equipment CapEx	1,800,000	1,585,000	(215,000)	-11.9%	1,705,000	120,000	7.6%
Leasehold Improvements	-	-	-	-	-	-	-
Allocation of Fixed Assets	-	-	-	-	-	-	-
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>\$ 2,680,543</b>	<b>\$ 2,952,655</b>	<b>\$ 272,112</b>	<b>10.2%</b>	<b>\$ 2,884,451</b>	<b>\$ (68,204)</b>	<b>-2.3%</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 69,602,175</b>	<b>\$ 71,321,540</b>	<b>\$ 1,719,364</b>	<b>2.5%</b>	<b>\$ 73,112,727</b>	<b>\$ 1,791,188</b>	<b>2.5%</b>
<b>FTEs</b>	<b>189.88</b>	<b>189.88</b>	<b>-</b>	<b>-</b>	<b>189.88</b>	<b>-</b>	<b>-</b>

## Section A — 2017 Business Plan and Budget Program Area and Department Detail

### Reliability Standards

<b>Reliability Standards Program</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	17.98	17.16	(0.82)
Direct Expenses	\$ 3,888,768	\$ 3,861,666	\$ (27,102)
Indirect Expenses	4,234,020	4,180,279	(53,741)
Other Non-Operating Expenses	-	-	-
Inc(Dec) in Fixed Assets	70,328	58,337	(11,991)
<b>TOTAL BUDGET</b>	<b>\$ 8,193,116</b>	<b>\$ 8,100,282</b>	<b>\$ (92,835)</b>

### Background and Scope

The reliability standards program carries out the ERO's statutory responsibility to develop, adopt, obtain approval of, and modify (as and when appropriate) mandatory reliability standards (both continent-wide standards and regional reliability standards) for the reliable planning, operation, and critical infrastructure protection of the North American BES. The major activities undertaken by the Standards department include:

- **Delivering high-quality, continent-wide reliability standards:** NERC standard developers and other standards staff provide project management and leadership to develop solutions necessary to address reliability risks identified through the Reliability Risk Management Process (RRMP). These may include the development of, or modifications to, NERC reliability standards through standard development outreach activities, facilitation of drafting team activities, drafting support, assisting drafting teams in maintaining adherence to the development process as outlined in the *Standard Processes Manual*, and ensuring that the quality of documents produced is appropriate for approval by industry and the Board.
- **Facilitating continent-wide industry engagement:** NERC manages the work of over 200 industry contributors who serve on the Standards Committee, subgroups, and other project teams for the development of NERC reliability standards through the standards development program.
- **Conducting balloting, disseminating information, and supporting regulatory filings:** Through NERC's commenting and ANSI-accredited balloting process, industry consensus is built by engaging thousands of industry volunteers within hundreds of registered entities throughout North America who review, comment on, and approve the standards created by the standard drafting teams. The department also supports the filing of standards with regulatory authorities and provides support with regulatory proceedings.

The reliability standards program provides a mechanism for the eight Regional Entities to process regional standards when unique regional reliability gaps are detected, or incorporate Regional variances into continent-wide standards. The NERC Standards department staff supports regional standards development processes by providing technical advice, final quality review of regional standards,

presentation to the Board, and preparation of regional standards materials for submission for standard adoption to the applicable regulatory authorities in the United States and Canada.

### **Stakeholder Engagement and Cost Effectiveness Project**

As part of the standard development process, industry technical experts scope, draft, and review the new or revised NERC reliability standards for approval by the industry ballot body, adoption by the Board, and filing with regulatory authorities in the United States and Canada. Additionally, Federal, State and Provincial regulatory authorities, the NERC Board of Trustees, Regional Entities, and many industry stakeholders have expressed interest in the identification of costs incurred from implementing NERC reliability standards compared to risks they address. The objective is to ensure that these elements are considered during the standards development and revision process. A pilot was conducted in 2016 to develop an approach to determine the level of cost versus the reliability benefit to mitigate an identified risk. Work will continue in 2017 on refining the approach.

### **Key Efforts Underway**

NERC will ensure that the Reliability Standards Development Plan (RSDP) is effectively executed and that reliability standards are focused on and mitigate significant risks to BES reliability. Department resources will be focused on supporting the ERO Enterprise Strategic Plan, including but not limited to support of the RRMP and resolving FERC directives. The Standards department will:

1. **Focus on the selection of projects undertaken.** Resources will be expended on issues determined to be a reliability risk through the RRMP (also see the Reliability Assessment and System Analysis section and the Performance Analysis section, below, for additional detail). The department will apply broader project management skills to implement a variety of solutions to a reliability concern. An effective solution to an identified reliability risk may be a Reliability Standard, or it may be a guideline, information request, training, NERC Alert, technical conference, research, or a combination of these or other tools.
2. **Address FERC directives and respond to FERC orders** through standards development projects, as necessary. Each project will determine whether: (1) the directive will be complied with as issued, (2) there is an equally effective and efficient way to address the concern that fostered the directive, or (3) if there is technical justification (including that the directive has been overcome by events, processes, or advances in technology) that resolution of the directive is no longer needed.
3. **Perform Enhanced Periodic Reviews.** In 2016, as the reliability standards reach steady state, industry, NERC, and FERC will determine whether there is a need to make further improvements to the standards through enhanced periodic reviews, that include: (1) a measured review of the content of standards, considering whether the requirements could more effectively mitigate risks to the BPS; (2) whether the standards are results based and drafted with high quality; (3) whether the standards are concise or if the number of requirements could be reduced; and (4) whether compliance expectations are clear.
4. **Facilitate smooth transition to new standards.** This includes working with the Compliance Monitoring and Enforcement and Organization Registration and Certification, Reliability Assessment and System Analysis, and Performance Analysis programs to develop guidelines, webinars, and other activities to support auditor and industry training for the new standards.

The 2017–2019 RSDP will be developed in 2016 in conjunction with the Standards Committee, RISC, and RRMP. It will outline the work plan for the continued evaluation of NERC reliability standards, the Standards department’s support of Reliability Risk Management, and resolution of FERC directives.



Additionally, associated metrics will be developed and deployed to measure the overall quality of the reliability standard as a basis for measuring needed improvements.

### **2017 Goals and Deliverables**

The transformation of the reliability standards to steady state is nearing completion.<sup>17</sup> Specifically, the majority of FERC directives will be addressed, as well as the remaining recommendations for retiring requirements made by the Paragraph 81 project and the independent experts. The body of standards will be improved while considering quality and content criteria as well as results-based standards principles. The NERC Standards staff will continue to address any new directives issued by FERC as well any reliability risks identified through RRMP or by the RISC for which a Reliability Standard is part of the solution.

### **Resource Requirements**

#### **Personnel**

As in prior years, industry engagement is vital to the successful development of standards. The continued transformation of NERC standards to steady state will require additional industry engagement throughout 2016. In 2017, industry subject matter expert engagement requirements will be ongoing as enhanced periodic reviews are performed.

The NERC standards department continues to focus resources on the production of quality standards, rather than solely on the monitoring and execution of the standards process. Workload in the standards area during 2017 is anticipated to remain stable, with no additional personnel resources planned for 2017. The departmental travel expenses are expected to be the same as the 2016 levels, given the anticipated amount of outreach for the number of standards reviews expected to be in process, coupled with cost savings resulting from holding more meetings at NERC's Atlanta and Washington, DC, offices. The FTE reduction (0.82 FTE) shown in the table at the end of this section is the result of the allocation of standards staff towards more critical activities like cyber security and analytical capabilities.

#### **Contractors and Consultants**

No contractor and consulting support is budgeted in 2017, which is consistent with the 2016 budget.

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<sup>17</sup>As defined in the 2015-2017 RSDP, "steady state" means a stable set of clear, concise, high-quality and technically sound reliability standards that are results based, including retirement of requirements that do little to promote reliability.

**Statement of Activities and Fixed Assets Expenditures  
2016 Budget & Projection, and 2017 Budget**

**RELIABILITY STANDARDS**

	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 7,869,295	\$ 7,869,295	\$ (0)	\$ 7,835,213	\$ (34,082)
Assessment Stabilization Reserve - Penalties	218,376	218,376		159,642	(58,734)
<b>Total NERC Funding</b>	<b>\$ 8,087,671</b>	<b>\$ 8,087,671</b>	<b>\$ (0)</b>	<b>\$ 7,994,855</b>	<b>\$ (92,816)</b>
Third-Party Funding	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	105,000	105,000	-	105,000	-
Interest	445	5,374	4,929	427	(18)
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 8,193,116</b>	<b>\$ 8,198,045</b>	<b>\$ 4,929</b>	<b>\$ 8,100,282</b>	<b>\$ (92,834)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 2,260,735	\$ 2,349,773	\$ 89,039	\$ 2,340,405	\$ 79,671
Payroll Taxes	163,064	168,710	5,646	151,658	(11,406)
Benefits	327,239	289,808	(37,432)	307,085	(20,154)
Retirement Costs	250,560	265,961	15,401	259,407	8,847
<b>Total Personnel Expenses</b>	<b>\$ 3,001,598</b>	<b>\$ 3,074,252</b>	<b>\$ 72,654</b>	<b>\$ 3,058,556</b>	<b>\$ 56,958</b>
<b>Meeting Expenses</b>					
Meetings	\$ 207,000	\$ 207,000	\$ -	\$ 207,000	\$ -
Travel	271,988	230,000	(41,988)	271,988	-
Conference Calls	133,000	100,000	(33,000)	40,565	(92,435)
<b>Total Meeting Expenses</b>	<b>\$ 611,988</b>	<b>\$ 537,000</b>	<b>\$ (74,988)</b>	<b>\$ 519,553</b>	<b>\$ (92,435)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -
Office Rent	-	-	-	-	-
Office Costs	64,622	42,784	(21,838)	51,336	(13,286)
Professional Services	-	-	-	-	-
Miscellaneous	500	500	-	500	-
Depreciation	210,060	231,843	21,783	231,721	21,661
<b>Total Operating Expenses</b>	<b>\$ 275,182</b>	<b>\$ 275,127</b>	<b>\$ (55)</b>	<b>\$ 283,556</b>	<b>\$ 8,375</b>
<b>Total Direct Expenses</b>	<b>\$ 3,888,768</b>	<b>\$ 3,886,379</b>	<b>\$ (2,389)</b>	<b>\$ 3,861,666</b>	<b>\$ (27,102)</b>
<b>Indirect Expenses</b>	<b>\$ 4,234,020</b>	<b>\$ 4,458,581</b>	<b>\$ 224,561</b>	<b>\$ 4,180,279</b>	<b>\$ (53,741)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 8,122,788</b>	<b>\$ 8,344,959</b>	<b>\$ 222,171</b>	<b>\$ 8,041,945</b>	<b>\$ (80,843)</b>
<b>Change in Assets</b>	<b>\$ 70,328</b>	<b>\$ (146,914)</b>	<b>\$ (217,242)</b>	<b>\$ 58,337</b>	<b>\$ (11,991)</b>
<b>Fixed Assets</b>					
Depreciation	\$ (210,060)	\$ (231,843)	\$ (21,783)	\$ (231,721)	\$ (21,661)
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 280,388	231,639	(48,749)	290,058	9,670
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>70,328</b>	<b>(204)</b>	<b>(70,532)</b>	<b>58,337</b>	<b>(11,991)</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 8,193,116</b>	<b>\$ 8,344,755</b>	<b>\$ 151,639</b>	<b>\$ 8,100,282</b>	<b>\$ (92,834)</b>
<b>FTEs</b>	<b>17.98</b>	<b>18.27</b>	<b>0.29</b>	<b>17.16</b>	<b>(0.82)</b>

## Compliance Monitoring and Enforcement and Organization Registration and Certification

The Compliance Monitoring, Enforcement, and Organization Registration and Certification Program Area's purpose is to monitor, enforce, and ensure registered entity compliance with the ERO's mandatory reliability standards. This program area is addressed by three operational groups: Compliance Assurance (addressing compliance monitoring), Compliance Analysis, Certification and Registration (addressing Assurance, Organization Registration and Certification), and Compliance Enforcement.

### Compliance Assurance

Compliance Assurance addresses the Regional Entities' implementation of the compliance monitoring section of the Compliance Monitoring and Enforcement Program (CMEP). The group works in tandem with Compliance Enforcement, Standards, and Reliability Risk Management.

#### *Compliance Assurance*

<b>Compliance Assurance</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	19.36	15.51	(3.85)
Direct Expenses	\$ 4,559,233	\$ 3,816,924	\$ (742,308)
Indirect Expenses	4,559,714	3,779,431	(780,283)
Other Non-Operating Expenses	-	-	-
Inc(Dec) in Fixed Assets	301,956	262,244	(39,712)
<b>TOTAL BUDGET</b>	<b>\$ 9,420,903</b>	<b>\$ 7,858,599</b>	<b>\$ (1,562,304)</b>

### Background and Scope

NERC's Compliance Assurance group works collaboratively with the eight Regional Entities to ensure effective implementation of risk-based compliance monitoring under the CMEP across the entire ERO Enterprise. This program ensures that Regional Entities monitor registered entities for compliance according to their own specific facts and circumstances, including the entity's inherent risks, evaluation of controls in place to mitigate the inherent risks, and any aggravating factors. The CMEP provides for Regional Entities to develop customized compliance oversight plans (COPs) for each registered entity that identifies: 1) the standards or requirements to be monitored; 2) the monitoring processes (tools) for use by the Regional Entities, including compliance audits, self-certification, spot checking, investigations, self-reporting, periodic data submittals, and complaints; and 3) the frequency of monitoring. NERC and the Regional Entities ensure that inherent risk assessments (IRAs) for registered entities begin with a consistent framework and that Regional Entities' implementation of the CMEP coalesce around best practices, data management procedures that address data reporting requirements, integrity, retention, security, and confidentiality.

The Compliance Assurance group's responsibilities include but are not limited to the following major activities and functions:

- Oversight of the quality implementation of the risk-based compliance monitoring program;
- Development of the annual CMEP Implementation Plan (IP);

- Oversight of the use of necessary compliance-related processes, procedures, IT platforms, tools, and templates;
- Development and delivery of education and training for ERO Enterprise staff;
- Critical Infrastructure Protection (CIP) Version 5 activities related to education programs that support industry compliance and the integration of risk assessment and internal controls;
- CIP-014-1 training and outreach activities related to effective implementation of the Physical Security Reliability Standard;
- Coordination with the NERC Standards department for standard development to assist in the smooth transition for standards from development to enforceability;
- Support for Regional Entity and industry committees, working groups, and task forces, such as the NERC Compliance and Certification Committee; and
- Industry training for every Reliability Standard approved by FERC.

### **Stakeholder Engagement and Benefit**

NERC continues to promote the Regional Entities' development of customized COPs for registered entities. As the risk-based compliance monitoring approach was implemented in 2015 and 2016, Regional Entities worked closely with stakeholders to develop IRAs and appropriately scope compliance monitoring activities. As this process matures in 2017, Regional Entities will continue to develop customized uses of compliance monitoring tools and frequency of monitoring for each registered entity, based on its IRA. Additionally, NERC continues to promote registered entities' development of effective compliance programs and internal controls, which may provide a benefit in the development of their COPs.

Compliance Assurance continues to work closely with the standard development program to provide compliance information, statistics, and perspectives to drafting teams fostering the development of standards that provide an increased reliability benefit and clarify compliance risks. This collaboration with industry and Standards department staff will occur early in the standard development process by providing draft compliance monitoring guidance, including information on how compliance with draft standards will be determined, as well as input to the drafting teams on the auditability and enforceability of the draft standards. This will ensure that ERO Enterprise tools used in the auditing process, such as the reliability standards auditing worksheet (RSAW), do not expand or modify standards requirements.

NERC also continues to provide industry-focused outreach events and webinars on the ERO Enterprise's approaches to risk-based CMEP activities. The ERO Enterprise staff will continue its webinar series providing guidance on standards and requirements associated with the 2017 risk elements identified for consideration for compliance monitoring.

### **Key Efforts Underway**

#### **Regional Entity Oversight for Risk-Based Compliance Monitoring**

Consistent with the goals and objectives set forth in the strategic plan, NERC will continue to implement risk-based compliance monitoring and enforcement as part of its stated objectives of ensuring BES reliability, improving the efficiency and effectiveness of NERC and Regional Entity compliance and enforcement operations, focusing on identified risks and reducing unnecessary burdens on registered entities.

### **CIP Compliance and Transition**

NERC and the Regional Entities continue to manage the smooth implementation of compliance activities for CIP Version 5 and subsequent enhancements to the CIP Standards by providing training, webinars, and other forms of outreach. The ERO Enterprise will continue to provide educational programs to support industry compliance and the integration of risk assessment and internal controls. In addition, NERC and the Regional Entities will continue supporting the successful implementation and monitoring of the physical security reliability standard.

### **2017 Goals and Deliverables**

The Compliance Assurance group has several goals and deliverables that support the 2016-2019 *ERO Enterprise Strategic Plan*. Resources will be focused on building upon the framework and improvements implemented as a result of the risk-based compliance monitoring activities in 2016. Specific 2017 objectives for this group are:

- Continue to mature the risk-based compliance monitoring program, fully developing customized COPs for registered entities.
- Work closely with NERC's Enforcement and IT departments, as well as staff in the Regional Entities, on improvements to the existing compliance, reporting, analysis tracking system (C-RATS), and other compliance tools to support risk-based activities.
- Support the continued successful implementation of the CIP Version 5 reliability standards and subsequent enhancements that become effective in 2017 and beyond.
- Continue to monitor and support effective implementation and monitoring of the Physical Security Reliability Standard.
- Initiate a training program to support implementation of the common audit procedures for each Reliability Standard, integrating principles from the ERO Auditor Capabilities and Competencies Guide.
- Continue to integrate the standards and compliance functions for clear stakeholder implementation. Support this effort through common set of RSAWs, measures, or successors, for all standards. Initiate a compliance phase-in learning periods for new standards.

These 2017 activities are necessary to further implement risk-based compliance monitoring, including the CIP standards, and integrate the standards and compliance functions. A number of activities that support the implementation of the strategic risk-based reforms are intended to reduce regulatory burden by focusing monitoring according to each registered entity's potential impact on the BPS.

### **Resource Requirements**

#### **Personnel**

The 2017 FTE reduction set forth in the table at the end of this section reflects the reallocation of 2016 budgeted FTEs to other program areas to support key initiatives related to successful implementation and oversight of the risk-based CMEP.

#### **Contractors and Consultants**

Funds budgeted for outside consultants to assist in successful implementation of risk-based compliance monitoring have been reduced to \$50k. While at a significantly reduced level from the 2016 budget, some consultant resources continue to be needed to support the transformation of NERC's Compliance Monitoring and Enforcement Program to a risk-based design. In addition, the Information Technology budget includes funding for the maintenance of existing software tools supporting compliance assessment, registration, certification, and enforcement activities, as well as the investigation and

development of a business case for future tools supporting ERO Enterprise compliance assessment, registration, and certification and enforcement activities.

<b>Statement of Activities and Fixed Assets Expenditures</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>COMPLIANCE ASSURANCE</b>					
	<b>2016 Budget</b>	<b>2016 Projection</b>	<b>Variance 2016 Projection v 2016 Budget Over(Under)</b>	<b>2017 Budget</b>	<b>Variance 2017 Budget v 2016 Budget Over(Under)</b>
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 9,185,250	\$ 9,185,250	\$ (0)	\$ 7,713,879	\$ (1,471,371)
Assessment Stabilization Reserve - Penalties	\$ 235,174	\$ 235,174		144,334	(90,840)
<b>Total NERC Funding</b>	<b>\$ 9,420,424</b>	<b>\$ 9,420,424</b>	<b>\$ (0)</b>	<b>\$ 7,858,213</b>	<b>\$ (1,562,212)</b>
Third-Party Funding	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	479	4,710	4,231	386	(93)
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 9,420,903</b>	<b>\$ 9,425,134</b>	<b>\$ 4,231</b>	<b>\$ 7,858,599</b>	<b>\$ (1,562,305)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 3,063,004	\$ 2,367,713	\$ (695,290)	\$ 2,509,618	\$ (553,386)
Payroll Taxes	205,979	159,939	(46,040)	163,335	(42,644)
Benefits	351,727	308,546	(43,180)	333,557	(18,170)
Retirement Costs	336,902	267,268	(69,634)	276,273	(60,629)
<b>Total Personnel Expenses</b>	<b>\$ 3,957,612</b>	<b>\$ 3,103,467</b>	<b>\$ (854,145)</b>	<b>\$ 3,282,783</b>	<b>\$ (674,828)</b>
<b>Meeting Expenses</b>					
Meetings	\$ 60,000	\$ 120,000	\$ 60,000	\$ 60,000	\$ -
Travel	276,343	322,000	45,657	276,343	-
Conference Calls	20,000	20,000	-	6,100	(13,900)
<b>Total Meeting Expenses</b>	<b>\$ 356,343</b>	<b>\$ 462,000</b>	<b>\$ 105,657</b>	<b>\$ 342,443</b>	<b>\$ (13,900)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 200,000	\$ 115,000	\$ (85,000)	\$ 50,000	\$ (150,000)
Office Rent	-	-	-	-	-
Office Costs	44,779	38,880	(5,899)	141,198	96,419
Professional Services	-	-	-	-	-
Miscellaneous	500	500	-	500	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 245,279</b>	<b>\$ 154,380</b>	<b>\$ (90,899)</b>	<b>\$ 191,698</b>	<b>\$ (53,581)</b>
<b>Total Direct Expenses</b>	<b>\$ 4,559,233</b>	<b>\$ 3,719,847</b>	<b>\$ (839,386)</b>	<b>\$ 3,816,924</b>	<b>\$ (742,309)</b>
<b>Indirect Expenses</b>	<b>\$ 4,559,714</b>	<b>\$ 3,687,419</b>	<b>\$ (872,294)</b>	<b>\$ 3,779,431</b>	<b>\$ (780,283)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 9,118,947</b>	<b>\$ 7,407,267</b>	<b>\$ (1,711,681)</b>	<b>\$ 7,596,355</b>	<b>\$ (1,522,592)</b>
<b>Change in Assets</b>	<b>\$ 301,956</b>	<b>\$ 2,017,868</b>	<b>\$ 1,715,912</b>	<b>\$ 262,244</b>	<b>\$ (39,712)</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 301,956	\$ 191,574	(110,382)	262,244	(39,712)
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ 301,956</b>	<b>\$ 191,574</b>	<b>\$ (110,382)</b>	<b>\$ 262,244</b>	<b>\$ (39,712)</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 9,420,903</b>	<b>\$ 7,598,841</b>	<b>\$ (1,822,062)</b>	<b>\$ 7,858,599</b>	<b>\$ (1,562,305)</b>
<b>FTEs</b>	<b>19.36</b>	<b>15.11</b>	<b>(4.25)</b>	<b>15.51</b>	<b>(3.85)</b>

## Compliance Analysis, Certification and Registration

Compliance Analysis, Certification and Registration (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	10.14	7.52	(2.62)
Direct Expenses	\$ 2,086,784	\$ 1,686,689	\$ (400,093)
Indirect Expenses	2,387,951	1,832,451	(555,499)
Other Non-Operating Expenses	-	-	-
Inc(Dec) in Fixed Assets	158,136	127,149	(30,988)
TOTAL BUDGET	\$ 4,632,871	\$ 3,646,289	\$ (986,581)

### Background and Scope

The Compliance Analysis, Certification and Registration group is responsible for a range of requirements and activities embodied in Section 500 (Organization Registration and Certification) and Appendices 5A and 5B of the NERC Rules of Procedure. The group provides technical resource support to standards development, compliance monitoring, and enforcement and (1) ensures that all entities impacting the BES are registered commensurate with risk; (2) ensures that all RCs, TOPs, and BAs are certified; (3) conducts industry reliability assurance activities; and (4) ensures that compliance gaps identified in reportable events are assessed and addressed if appropriate. Specific activities of the group include:

- **Registration** – Identifies and registers BES users, owners, and operators who are responsible for compliance with reliability standards. Organizations that are registered are included on the NERC Compliance Registry (NCR) and are responsible for knowing the content of and complying with all applicable reliability standards. Maintains the current registration for the entire ERO for entities as they take on and drop functional responsibilities.
- **Certification** – Evaluates and certifies the competency of reliability entities; i.e., those that perform certain key reliability functions, specifically the RC, BA, and TOP functions. Entities performing these three functions must be evaluated for having the necessary personnel, knowledge, facilities, programs, and other qualifications to carry out these important responsibilities, including demonstrating the ability to meet the requirements and sub-requirements of all of the reliability standards applicable to the reliability function(s). This also includes confirming through the certification review process that a reliability entity continues to have the qualifications mentioned above following planned material changes to that entity's operation.
- **Reliability Assurance** – Conducts reliability assurance activities, including:
  - **Reliability Assurance** – Conducts activities to reasonably assure the ERO that certain actions have been taken as reported in response to NERC Alerts or guidance to industry. An example of this is the NERC Alert on Right-of-Way Clearances, which is one of the 2015 ERO Enterprise high-priority risk projects.
  - **Oversight** – Provides oversight of Regional Entity implementation of regional registration, compliance, certification, investigation, complaint programs, and processes.
  - **Investigations** – Conducts non-public, confidential investigations to identify Possible Violations of NERC reliability standards in response to complaints, BES disturbances, or

other similar triggers. The Compliance Analysis, Certification and Registration staff participates on all Regional Entity-led investigations and observers as requested on FERC-led reliability investigations and inquiries.

- **Compliance evaluations** – Works closely with regional staff to confirm that qualified events and disturbances are evaluated against the relevant approved reliability standards and ensure formal compliance monitoring occurs if indicated. These analyses are also shared with FERC staff.
- **Complaints** – Addresses formal complaints that allege the violation of reliability standards, through a confidential process.

### **Key Efforts Underway**

In 2014 and 2015, the Compliance Analysis, Certification and Registration group developed the risk-based Registration (RBR) design and registration criteria. FERC approved the design in 2015, in two orders issued March 15 and October 15, which approved the deactivation of the registered entity functions of Interchange Authorities (IAs), Load Serving Entities (LSEs) and Distribution Providers below 75 MW (DPs), as well as the creation of a NERC-led panel (Panel) to review entities for deregistration or applicability to a reduced number of standards. In 2016, the ERO Enterprise implemented the Panel. In 2017, the Panel will continue to review registration for individual entities and evaluate trends to determine emerging classes of similarly situated entities. In 2016, a review and identification of potential improvements in both the Registration and Certification programs is being undertaken. Improvements identified will be considered for implementation in 2017.

### **2017 Goals and Deliverables**

The Compliance Analysis, Certification and Registration group has several goals and deliverables that support the 2016-2019 *ERO Enterprise Strategic Plan*. Resources will be focused on building upon the improvements identified in 2016. Specific 2017 objectives for this group are:

- Continue to mature the NERC-led Panel.
- Implement registration program improvements identified in the 2016 project, and conduct any additional actions identified by the project. Conduct training as necessary.
- Implement certification program improvements identified in the 2016 project and conduct training as necessary.

### **Resource Requirements**

#### **Personnel**

No additional personnel are budgeted for 2017. The FTE count in the table at the end of this section reflects the 2016 merger of the Registration and Reliability Assurance groups.

#### **Contractor Expenses**

No contractor expenses are budgeted in 2017.



Section A — 2017 Business Plan and Budget Program Area and Department Detail

<b>Statement of Activities and Fixed Assets Expenditures</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>COMPLIANCE ANALYSIS, CERTIFICATION and REGISTRATION</b>					
	<b>2016 Budget</b>	<b>2016 Projection</b>	<b>Variance 2016 Projection v 2016 Budget Over(Under)</b>	<b>2017 Budget</b>	<b>Variance 2017 Budget v 2016 Budget Over(Under)</b>
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 4,509,458	\$ 4,509,458	\$ 0	\$ 3,576,122	\$ (933,336)
Assessment Stabilization Reserve - Penalties	\$ 123,162	\$ 123,162		69,980	(53,182)
<b>Total NERC Funding</b>	<b>\$ 4,632,620</b>	<b>\$ 4,632,620</b>	<b>\$ 0</b>	<b>\$ 3,646,102</b>	<b>\$ (986,518)</b>
Third-Party Funding	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	251	2,860	2,609	187	(64)
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 4,632,871</b>	<b>\$ 4,635,480</b>	<b>\$ 2,609</b>	<b>\$ 3,646,289</b>	<b>\$ (986,582)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 1,410,333	\$ 1,218,102	\$ (192,231)	\$ 1,125,154	\$ (285,179)
Payroll Taxes	97,779	85,268	(12,512)	76,383	(21,396)
Benefits	184,238	188,834	4,596	174,014	(10,224)
Retirement Costs	157,451	138,134	(19,317)	126,651	(30,800)
<b>Total Personnel Expenses</b>	<b>\$ 1,849,801</b>	<b>\$ 1,630,338</b>	<b>\$ (219,463)</b>	<b>\$ 1,502,203</b>	<b>\$ (347,598)</b>
<b>Meeting Expenses</b>					
Meetings	\$ 4,000	\$ 3,000	\$ (1,000)	\$ 4,000	\$ -
Travel	155,146	149,000	(6,146)	155,146	-
Conference Calls	2,000	2,000	-	610	(1,390)
<b>Total Meeting Expenses</b>	<b>\$ 161,146</b>	<b>\$ 154,000</b>	<b>\$ (7,146)</b>	<b>\$ 159,756</b>	<b>\$ (1,390)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ (50,000)
Office Rent	-	-	-	-	-
Office Costs	25,338	17,169	(8,169)	24,231	(1,106)
Professional Services	-	-	-	-	-
Miscellaneous	500	500	-	500	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 75,838</b>	<b>\$ 67,669</b>	<b>\$ (8,169)</b>	<b>\$ 24,731</b>	<b>\$ (51,106)</b>
<b>Total Direct Expenses</b>	<b>\$ 2,086,784</b>	<b>\$ 1,852,007</b>	<b>\$ (234,777)</b>	<b>\$ 1,686,689</b>	<b>\$ (400,094)</b>
<b>Indirect Expenses</b>	<b>\$ 2,387,951</b>	<b>\$ 2,142,657</b>	<b>\$ (245,294)</b>	<b>\$ 1,832,451</b>	<b>\$ (555,499)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 4,474,734</b>	<b>\$ 3,994,664</b>	<b>\$ (480,071)</b>	<b>\$ 3,519,141</b>	<b>\$ (955,594)</b>
<b>Change in Assets</b>	<b>\$ 158,136</b>	<b>\$ 640,816</b>	<b>\$ 482,680</b>	<b>\$ 127,149</b>	<b>\$ (30,988)</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 158,136	\$ 111,318	(46,818)	127,149	(30,988)
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ 158,136</b>	<b>\$ 111,318</b>	<b>\$ (46,818)</b>	<b>\$ 127,149</b>	<b>\$ (30,988)</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 4,632,871</b>	<b>\$ 4,105,982</b>	<b>\$ (526,889)</b>	<b>\$ 3,646,289</b>	<b>\$ (986,582)</b>
<b>FTEs</b>	<b>10.14</b>	<b>8.78</b>	<b>(1.36)</b>	<b>7.52</b>	<b>(2.62)</b>

## Compliance Enforcement

<b>Compliance Enforcement</b> (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	12.22	13.16	0.94
Direct Expenses	\$ 2,225,938	\$ 2,371,347	\$ 145,410
Indirect Expenses	2,876,962	3,206,790	329,827
Other Non-Operating Expenses	-	-	-
Inc(Dec) in Fixed Assets	190,398	222,510	32,112
<b>TOTAL BUDGET</b>	<b>\$ 5,293,298</b>	<b>\$ 5,800,647</b>	<b>\$ 507,350</b>

### Background and Scope

The Compliance Enforcement department is responsible for overseeing enforcement processes, the application of penalties or sanctions, and activities to mitigate and prevent recurrence of noncompliance with reliability standards. The Compliance Enforcement department works collaboratively with the eight Regional Entities to ensure consistent and effective implementation of the risk-based Compliance Monitoring and Enforcement Program. Importantly, the department also focuses on ensuring that the ERO Enterprise dedicates resources to the matters that pose the greatest risk to reliability.

The NERC Compliance Enforcement department performs its responsibilities by:

- Monitoring Regional Entities' enforcement processes and providing oversight over their outcomes to ensure due process, to identify best practices and process efficiency opportunities, and to promote consistency among Regional Entities' business practices;
- Collecting and analyzing compliance enforcement data and trends to assist with the identification of emerging risks and to help inform the development of enforcement policies and processes;
- Filing notices of penalty and other submittals associated with noncompliance discovered through Regional Entity compliance monitoring and enforcement activities;
- Processing and filing notices of penalty and other submittals associated with violations discovered through NERC-led investigations and audits;
- Collaborating with other NERC departments, including Compliance Assurance, Standards, Event Analysis, and Regional Entity Coordination; and
- Delivering training of the ERO Enterprise staff and registered entities, as well as supporting other outreach efforts.

The ERO Enterprise's enforcement jurisdiction is drawn from the Energy Policy Act of 2005 (the Act), which added section 215 to the Federal Power Act (FPA). Section 215 made compliance with electric reliability standards mandatory and authorized the creation of an ERO and Regional Entities to establish and enforce reliability standards. Under section 215(e)(1) of the FPA, NERC or a Regional Entity may impose a penalty on a user, owner, or operator of the BPS for a violation of a Reliability Standard approved by FERC. As the ERO, NERC has set forth Sanction Guidelines outlined in its Rules of Procedure that govern the ERO Enterprise's penalties and non-monetary sanctions for Reliability Standard violations. This document

provides information on the ERO Enterprise's enforcement philosophy, i.e., the ERO Enterprise's approach for assessing and resolving noncompliance while continuing to work to bring entities into compliance with applicable reliability standards.

### **ERO Enterprise Core Values and Guiding Principles**

The ERO Enterprise's 2016-2019 Strategic Plan promotes the ERO Enterprise's core values and guiding principles, which are based on accountability and independence, responsiveness, fairness and inclusiveness, adaptation and innovation, excellence, efficiency, and integrity. These core values and guiding principles support the four pillars of the ERO Enterprise's efforts, namely, reliability, assurance, learning, and a risk-based approach.

### ***Strategic Goals Related to Enforcement***

Strategic Goal 2 provides that the ERO Enterprise shall:

[b]e a strong enforcement authority that is independent, without conflict of interest, objective and fair, and promote a culture of reliability excellence through risk-informed compliance monitoring and enforcement. The ERO Enterprise retains and refines its ability to use standards enforcement when warranted and imposes penalties and sanctions commensurate with risk. The ERO Enterprise retains and refines its ability to use reliability standards enforcement when warranted and imposes penalties and sanctions commensurate with risk.

The risk-based enforcement approach allows for the appropriate allocation of resources to the issues that pose a higher level of risk to the reliability of the BPS.

### ***Guiding Enforcement Principles***

The following principles serve as guidelines for the conduct and behavior of all involved in the ERO Enterprise enforcement program to ensure alignment with Strategic Goal 2 and the ERO Enterprise's core values.

#### ***Compliance Enforcement Authorities are independent, without conflict of interest, objective, and fair.***

The ERO Enterprise strives to be a strong enforcement authority that is independent, without conflict of interest, objective, and fair. NERC and each of the Regional Entities has a code of conduct addressing the professional and ethical standards applicable to its personnel. Foremost among these standards is the requirement that no person work on a matter where that work may affect the person's financial interest. The ERO Enterprise also expects its personnel to conduct themselves professionally and respectfully when engaging with registered entities or other stakeholders. Personnel who do not meet these standards are subject to discipline, up to and including termination.

#### ***Enforcement program promotes culture of reliability excellence through a risk-based approach.***

The ERO Enterprise's risk-based enforcement philosophy generally advocates reserving enforcement actions under section 5.0 of the Compliance Monitoring and Enforcement Program for those issues that pose a higher risk to the reliability of the BPS. The risk of a noncompliance is determined based on specific facts and circumstances, including any controls in place at the time of the noncompliance. The ERO Enterprise works with registered entities to ensure timely remediation of potential risks to the reliability of the BPS and prevent recurrence of noncompliance. The enforcement process allows parties to address risks collaboratively and promote increased compliance and reliability through improvement of programs and controls at the registered entities.

The ERO Enterprise applies a presumption of non-enforcement treatment of minimal risk noncompliance to entities with demonstrated internal controls who are permitted to self-log such minimal risk issues.

Regarding other issues posing a minimal risk, NERC and the Regional Entities may exercise appropriate judgment whether to initiate a formal enforcement action or resolve the issue outside of the formal enforcement processes. The availability of streamlined treatment of minimal risk noncompliance outside of the formal enforcement process encourages self-inspection by registered entities. When self-identified minimal risk noncompliance is more than likely not going to be subject to a financial penalty, registered entities are encouraged to establish more robust internal controls for the detection and correction of noncompliance. This approach allows the ERO Enterprise to oversee the activities of registered entities in a more efficient manner and to focus resources where they result in the greatest benefit to reliability. In this context, efficiency does not necessarily mean less time or effort. Rather, it is using the requisite time, knowledge, and skills required for each circumstance. In addition, this approach allows the ERO Enterprise to continue to provide clear signals to registered entities about identified areas of concern and risk prioritization, while maintaining existing visibility into potential noncompliance and emerging areas of risk. Outcomes for noncompliance are based on the risk of a specific noncompliance and may range from streamlined, non-enforcement processes, to significant monetary penalties.

***Enforcement actions are used and penalties are imposed when warranted, commensurate with risk.***

An element of a risk-based approach to enforcement is accountability of registered entities for their noncompliance. No matter the risk of the noncompliance, the registered entity still bears the responsibility of mitigating that noncompliance. Based on the risk, facts, and circumstances associated with that noncompliance, the Regional Entity decides on an appropriate disposition track, inside or outside of an enforcement action, as described above, and whether a penalty is appropriate for the noncompliance.

Penalties are generally warranted for serious risk violations (e.g., uncontrolled loss of load, CIP program failures) and for when repeated noncompliance constitutes an aggravating factor. In addition to the use of significant penalties to deter undesired behavior, the ERO Enterprise also incepts desired behaviors.<sup>18</sup> Specifically, Regional Entities may offset penalties to encourage valued behavior. Factors that may mitigate penalty amounts include registered entity cooperation, accountability (including admission of violations), culture of compliance, and self-identification of noncompliance.

Regional Entities may also grant credit in enforcement determinations for certain actions undertaken by registered entities for improvements in addition to mitigating factors. For example, Regional Entities may consider significant investments in reliability made by registered entities, beyond those otherwise planned and required, as an offset for proposed penalties in enforcement determinations. Regional Entities do not award credits or offsets for actions or investments undertaken by a registered entity that are required to mitigate noncompliance.

NERC engages in regular oversight of Regional Entity enforcement activities to confirm that the Regional Entities have followed the CMEP. This oversight evaluates the consistency of disposition methods, including assessment of a penalty or sanction, with previous resolutions of similar noncompliance involving similar circumstances. The NERC Board of Trustees Compliance Committee (the Compliance Committee) considers the recommendations of NERC staff regarding approval of Full Notices of Penalty and monitors the handling of noncompliance through the streamlined disposition methods of Spreadsheet NOPs, FFTs, and Compliance Exceptions.

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<sup>18</sup> As required by §215(e)96) of the Federal Power Act and the Commission's regulations at 18 C.F.R. §39.7(g), the Sanction Guidelines, Appendix 4B to the NERC Rules of Procedure, provide that penalties and sanctions imposed for the violation of a Reliability Standard shall bear a reasonable relation to the seriousness of the violation while also reflecting consideration of the other factors specified in the Sanction Guidelines. The Sanction Guidelines are available on [NERC's website](#).

***Actions are timely and transparent.***

The ERO Enterprise maintains an elevated level of transparency regarding enforcement matters. NERC's Rules of Procedure (including the CMEP and Sanction Guidelines) and program documents are available to the public.<sup>19</sup> NERC also posts information on enforcement actions on a monthly basis.<sup>20</sup> Moreover, information on the efficiency of the enforcement program is available to regulators, industry stakeholders and the public on a quarterly basis.<sup>21</sup>

***Noncompliance information is used as an input to other processes.***

When developing risk elements, NERC annually identifies and prioritizes risks to the reliability of the BPS, taking into account factors such as compliance findings, event analysis experiences, and data analysis. In addition, Regional Entities consider factors such as noncompliance information when conducting an IRA of a registered entity. The ERO Enterprise also uses noncompliance information as part of a feedback loop to the standards development process. This allows enhanced reliability standards through appropriate information flows from compliance monitoring and enforcement to the standards drafting process and other NERC programs. NERC regularly provides analysis and lessons learned from noncompliance information to industry stakeholders and the public.<sup>22</sup>

**Stakeholder Engagement and Benefit**

Over the past few years, NERC and the Regional Entities have made substantial progress in reducing the number of instances of noncompliance remaining to be evaluated and processed. The ERO Enterprise has held registered entities accountable for instances of noncompliance that posed a risk to the reliability of the BPS while ensuring that enforcement actions are timely and transparent. NERC promotes a culture of reliability excellence by examining registered entities' internal compliance programs and considering them as mitigating factors in penalty determinations.

**Processing Efficiencies**

In an effort to improve the efficiency of enforcement processing throughout the ERO Enterprise, NERC developed a series of key enforcement processing metrics, which are tracked and analyzed throughout the year. In addition, since 2012, NERC has established goals to reduce the number of older violations remaining to be processed. Working with NERC, the Regional Entities invested significant time and resources in processing the older violations. As a result, the ERO Enterprise as a whole reduced the number of older violations substantially.

As of the end of 2015, there were three hundred twenty (320) violations older than 24 months. Sixty-four (64) of these violations stemmed from 9 non-federal registered entities and two hundred fifty-six (256) violations derived from 13 federal registered entities. The vast majority of the violations have either been fully mitigated or have mitigation plans in progress.

The targets and thresholds for efficiency-related processing metrics remain the same in 2016. This is because the ERO Enterprise has reached a stable state with regard to enforcement processing. Achieving this state has only been possible due to the hard work of the Regional Entities and NERC Enforcement in eliminating the backlog of noncompliances and implementing new enforcement processes and procedures.

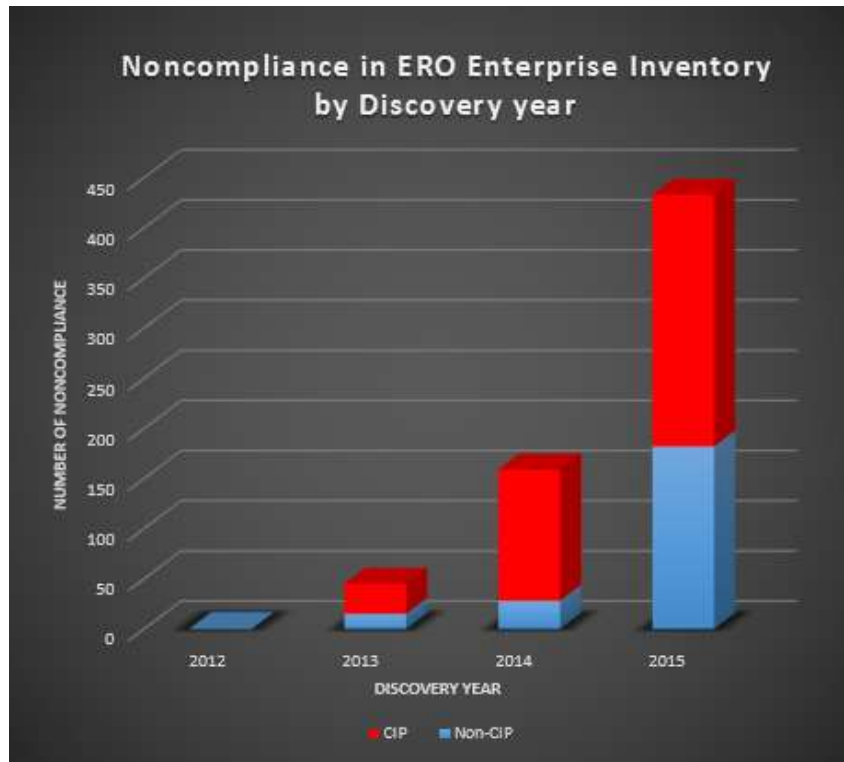
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<sup>19</sup> [The NERC Rules of Procedure](#)

<sup>20</sup> [Posted compliance exceptions, Spreadsheet Notices of Penalty, and Full Notices of Penalty](#)

<sup>21</sup> [Quarterly enforcement program](#)

<sup>22</sup> [Quarterly compliance reports](#)



### Continued Outreach Efforts in 2016 and Beyond

In 2016, NERC and the Regional Entities will continue to conduct outreach activities that focus on self-logging, compliance exceptions, risk elements, CIP Version 5, Inherent Risk Assessments, and internal controls. NERC plans to use existing industry events, such as the Standards and Compliance workshops and industry webinars, to provide information on compliance monitoring and enforcement activities.

In addition, NERC and the Regional Entities will conduct industry outreach on reliability standards approved by FERC in 2016. These events will focus on the approved new standards or modifications to existing standards along with implementation timelines. Although most events will take place via webinar, some events will be delivered as workshops.

### Risk-Based CMEP Implementation

On February 19, 2015, FERC approved the implementation of the risk-based CMEP.<sup>23</sup> The goal of the risk-based CMEP is to shift the compliance and enforcement approach from one in which all instances of noncompliance are evaluated as Possible Violations to an approach that strengthens management practices and reserves the enforcement process for instances of noncompliance that have been found to pose a greater risk to reliability. The programs discussed below, in conjunction with compliance outreach encouraging the development of strong management practices, will advance NERC's progress toward this goal.

### Compliance Exceptions

A compliance exception is an alternative disposition method and is not a dismissal, Find, Fix, Track (FFT), or Notice of Penalty. It is essentially the exercise of enforcement judgment with respect to a noncompliance regardless of its method of discovery (self-report, self-certification, compliance audit

<sup>23</sup> *North American Electric Reliability Corp., Order on Electric Reliability Organization Reliability Assurance Initiative and Requiring Compliance Filing*, 150 FERC ¶ 61,108 (2015).

finding, etc.). The process of identifying and recording a compliance exception builds on the FFT program. The ERO Enterprise uses judgment in the process by taking into account the facts and circumstances of the noncompliance, the risk posed by the noncompliance to the reliability of the BPS, and the deterrent effect of an enforcement action or penalty, among other things. Compliance exception treatment is available for issues that pose a minimal risk to the BPS that would be mitigated within 12 months of the date the compliance exception is posted.

In 2013 and 2014, the use of compliance exceptions (as the alternative disposition for noncompliance posing a minimal risk to the reliability of the BPS) was limited to allow the testing of the new process. In 2015, this disposition track became available throughout the ERO Enterprise. Use of compliance exceptions as a disposition track has increased steadily. Minimal risk issues continue to be the majority of the caseload. Regional Entities have continued to use the compliance exception disposition method and increasingly relied upon it for minimal-risk issues. The increase in compliance exception use has corresponded with a decline in the use of the FFT disposition track.

**Disposition Method for Minimal Risk Issues in 2015**



### Self-Logging

NERC and Regional Entity enforcement staff also have worked closely with stakeholders to identify potential improvements to self-reporting and other enforcement processes. A number of improvements were designed and implemented in 2013 and 2014. The self-logging program allows registered entities that have demonstrated effective management practices to keep track of minimal-risk noncompliance (and related mitigation) on a log that is periodically reviewed by the Regional Entity.

In November 2015, FERC approved the ERO Enterprise Self-Logging Program document, which includes the method to evaluate eligibility.<sup>24</sup> The program is available to any registered entity that would like to be evaluated by its Regional Entity in accordance with the program requirements. Self-logging became available to all registered entities that met the program qualifications at the start of 2015, and 42 registered entities have been approved by Regional Entities to self-log as of December 31, 2015. NERC is conducting a review of the self-logging program, in coordination with FERC staff, during 2016.

<sup>24</sup> *North American Electric Reliability Corporation*, 153 FERC ¶ 61,130 (2015). The *ERO Self-Logging Program* document is available on [NERC's website](#)

## **NERC Oversight of Risk-Based CMEP Implementation**

For 2016, ensuring the successful implementation of NERC's risk-based CMEP remains the priority of Compliance Enforcement's oversight plan. As part of that oversight and in addition to offering regular feedback to the Regional Entities, NERC will continue to identify areas for improvement or promoting consistency through training, guidance, or adjustment the following year. NERC also produces an ERO Enterprise CMEP annual report, which includes an assessment of the risk-based CMEP implementation. NERC expects to publish that report during Q1 2017.

NERC performs oversight of the Regional Entities' enforcement programs primarily through the review of the processes, supporting evidence, and other information provided by the Regional Entities over the course of focused engagements of program areas that are scheduled throughout the year. NERC communicates the recommendations and findings to the Regional Entities to help the ERO Enterprise develop responsive strategies and solutions to potential issues and ensure uniform and consistent implementation of the CMEP. Such recommendations and findings also help identify priority areas for training of ERO Enterprise staff during the year.

## **Other Key Enforcement Efforts Underway**

### **Regional Entity Training**

NERC Enforcement will provide training to Regional Entity staff on the most important elements of risk-based enforcement, including risk assessment of noncompliance and the determination of appropriate penalties and sanctions for noncompliance. NERC is developing this training based on observations from its oversight activities of Regional Entity settlement agreements, as well as the process reviews described above.

### **2017 Goals and Deliverables**

Specific 2017 objectives for the Compliance Enforcement department include:

- Refining and improving the risk-based CMEP processes;
- Implementing in a transparent manner an ERO Enterprise enforcement philosophy that is risk focused and drives desired behaviors by registered entities;
- Expanding the feedback loop of information from Enforcement to Standards and other program areas; and
- Working closely with NERC's Compliance Assurance and Information Technology departments, as well as staff in the Regional Entities, regarding the evaluation of improvements in the existing compliance, reporting, analysis tracking system, and other compliance tools to support risk-based activities.

## **Resource Requirements**

### **Personnel**

The additional Enforcement staffing in 2017 is to provide resources to support a proposed internship program.

### **Contractor Expenses**

No Consultant and Contractor expenses are budgeted in Compliance Enforcement; however, the Information Technology budget includes funding for the maintenance, evaluation, and development of enterprise tools supporting technical feasibility exceptions, registration, and enforcement activities.



Section A — 2017 Business Plan and Budget Program Area and Department Detail

<b>Statement of Activities and Fixed Assets Expenditures</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>COMPLIANCE ENFORCEMENT</b>					
	<b>2016 Budget</b>	<b>2016 Projection</b>	<b>Variance 2016 Projection v 2016 Budget Over(Under)</b>	<b>2017 Budget</b>	<b>Variance 2017 Budget v 2016 Budget Over(Under)</b>
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 5,144,612	\$ 5,144,612	\$ 0	\$ 5,677,854	\$ 533,242
Assessment Stabilization Reserve - Penalties	148,384	148,384		122,465	(25,919)
<b>Total NERC Funding</b>	<b>\$ 5,292,996</b>	<b>\$ 5,292,996</b>	<b>\$ 0</b>	<b>\$ 5,800,319</b>	<b>\$ 507,323</b>
Third-Party Funding	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	302	3,682	3,380	327	25
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 5,293,298</b>	<b>\$ 5,296,678</b>	<b>\$ 3,380</b>	<b>\$ 5,800,647</b>	<b>\$ 507,349</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 1,629,233	\$ 1,755,799	\$ 126,566	\$ 1,790,859	\$ 161,627
Payroll Taxes	109,485	113,380	3,895	117,205	7,720
Benefits	222,877	176,404	(46,473)	184,106	(38,771)
Retirement Costs	181,419	196,458	15,039	198,694	17,275
<b>Total Personnel Expenses</b>	<b>\$ 2,143,014</b>	<b>\$ 2,242,042</b>	<b>\$ 99,028</b>	<b>\$ 2,290,865</b>	<b>\$ 147,851</b>
<b>Meeting Expenses</b>					
Meetings	\$ 2,500	\$ 2,500	\$ -	\$ 2,500	\$ -
Travel	56,736	55,000	(1,736)	56,736	-
Conference Calls	1,200	2,000	800	366	(834)
<b>Total Meeting Expenses</b>	<b>\$ 60,436</b>	<b>\$ 59,500</b>	<b>\$ (936)</b>	<b>\$ 59,602</b>	<b>\$ (834)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -
Office Rent	-	-	-	-	-
Office Costs	21,866	14,983	(6,883)	20,379	(1,486)
Professional Services	-	-	-	-	-
Miscellaneous	500	1,000	500	500	-
Depreciation	122	122	-	-	(122)
<b>Total Operating Expenses</b>	<b>\$ 22,488</b>	<b>\$ 16,105</b>	<b>\$ (6,383)</b>	<b>\$ 20,879</b>	<b>\$ (1,608)</b>
<b>Total Direct Expenses</b>	<b>\$ 2,225,938</b>	<b>\$ 2,317,647</b>	<b>\$ 91,708</b>	<b>\$ 2,371,347</b>	<b>\$ 145,409</b>
<b>Indirect Expenses</b>	<b>\$ 2,876,962</b>	<b>\$ 2,989,470</b>	<b>\$ 112,507</b>	<b>\$ 3,206,790</b>	<b>\$ 329,827</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 5,102,901</b>	<b>\$ 5,307,116</b>	<b>\$ 204,216</b>	<b>\$ 5,578,137</b>	<b>\$ 475,236</b>
<b>Change in Assets</b>	<b>\$ 190,398</b>	<b>\$ (10,438)</b>	<b>\$ (200,836)</b>	<b>\$ 222,510</b>	<b>\$ 32,112</b>
<b>Fixed Assets</b>					
Depreciation	(122)	(122)	-	-	122
Computer & Software CapEx	-	107,000	107,000	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 190,520	\$ 155,313	(35,207)	222,510	31,990
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ 190,398</b>	<b>\$ 262,191</b>	<b>\$ 71,793</b>	<b>\$ 222,510</b>	<b>\$ 32,112</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 5,293,298</b>	<b>\$ 5,569,308</b>	<b>\$ 276,009</b>	<b>\$ 5,800,647</b>	<b>\$ 507,349</b>
<b>FTEs</b>	<b>12.22</b>	<b>12.25</b>	<b>0.03</b>	<b>13.16</b>	<b>0.94</b>

## Reliability Assessment and System Analysis

Reliability Assessments and System Analysis (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	11.75	14.10	2.35
Direct Expenses	\$ 3,778,595	\$ 3,986,965	\$ 208,370
Indirect Expenses	2,767,102	3,435,846	668,744
Other Non-Operating Expenses	-	-	-
Inc(Dec) in Fixed Assets	(202,780)	112,782	315,563
TOTAL BUDGET	\$ 6,342,917	\$ 7,535,594	\$ 1,192,677

### Background and Scope

The Reliability Assessment and System Analysis (RASA) department carries out the ERO's statutory responsibility to conduct assessments of the reliability and adequacy of the BES. These assessments are used to provide insight and guidance about reliability risks. These insights provide a foundation for the development of new reliability standards or modifications to mandatory reliability standards, or other initiatives, such as guidelines, alert(s), webinars, etc., all focused on enhancing overall reliability. The majority of the activities in the RASA department directly address the risk priorities established by the Reliability Issues Steering Committee. In particular, the risks pertaining to changing resources and planning noted in the 2015 RISC report are of particular importance to the assessment and analysis work being performed in RASA.

NERC staff works closely with stakeholders on creating assessment development schedules, including schedules with adequate stakeholder review at every level. All NERC reliability assessments have a sponsoring technical committee, subcommittee, or other subgroup. The Long-Term and Seasonal assessments are conducted by the Reliability Assessment Subcommittee, and ultimately endorsed by the Planning Committee. Special Assessments often require a separate and specialized task force or advisory group to help construct, conduct, and produce special topic assessments such as the CPP assessments, Natural Gas interdependency assessment, and distributed energy report.

The department focuses on developing a technical framework and understanding the emerging reliability risks facing the industry. It also provides guidance and insights to stakeholders across North America. The department relies on its own engineering and analysis expertise, as well as Regional Entity and stakeholder resources. RASA is responsible for:

- Independent reliability assessments on the overall reliability and adequacy of the BES and associated emerging reliability risks that could impact the short-, mid- and the long-term (e.g., 10-year) planning horizons, and other reliability issues requiring an in-depth analysis.
- Support for the development and improvement of long-term sustainable interconnection-based power flow, dynamic, and load models that exhibit the accuracy and fidelity reflecting actual BES reliability performance and dynamic conditions.

- Interconnection-wide analysis of steady-state and dynamic conditions, including frequency, Essential Reliability Services, stability, and oscillatory behavior aspects.
- Advancement of industry and the ERO’s understanding of power system characteristics and behaviors by gathering larger Phasor Measurement Unit (PMU) datasets for advanced data analytics and modeling improvements.
- Assurance oversight that the BES electrical elements necessary for its reliable operation are identified, requiring the elements to follow the appropriate NERC Reliability Standards.
- Establishment of reliability leadership and consistent, technically sound guidance and recommendations that position industry and policy makers to enhance reliability through effective outreach and communications.

### **Stakeholder Engagement and Benefit**

RASA works with industry leaders to create a reliability strategy that is relevant, timely, and effective to address the most important reliability risks. This effort includes reviewing and addressing key priority risks identified by NERC’s Reliability Issues Steering Committee (RISC); synthesizing key information identified through analysis and assessment efforts; extracting and prioritizing the associated reliability risks; sharing and integrating risk analysis insights across the ERO Enterprise; and translating that knowledge into actionable guidance and recommendations for NERC management, the Board, and entities, along with state, federal, and provincial policy makers.

In addition, the ERO monitors the ongoing and historic reliability performance of the BES through data gathered to analyze historic trends. The ERO provides reports and recommendations regarding the anticipated conditions that could impact the reliability, security, and stability of the BPS to the industry, Regional Entities, regulatory entities, and other designated entities.

### **2017 Enhancements**

Enhancements in the 2017 BP&B are a reflection of the strategic goals and objectives identified in the Electric Reliability Organization Enterprise Strategic Plan 2016–2019. The following enhancements are attributable to Strategic Goal #4<sup>25</sup> and the objectives and valued outcomes noted within Strategic Goal #4a:

- Improve resource adequacy assessments with increased probabilistic and risk analysis
- Conduct interconnection-wide analysis to support NERC’s reliability assessments and improve industry planning
- Increase technical analysis and assessment focus on natural gas, wind, and solar resource and fuel availability
- Develop technical references and guidelines that advance and improve reliability using new technologies
- Develop quality/fidelity assessments of interconnection models

### **Key RASA Efforts Underway**

RASA focuses its efforts in the following key areas:

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<sup>25</sup> ERO Enterprise identifies, evaluates, studies, and independently assesses emerging risks to reliability.

### **Reliability Assessment**

Reliability assessments serve to evaluate the expected reliability of the BES through extensive deterministic and probabilistic analyses to identify potential reliability risks and potential mitigation approaches. These reviews include both evaluations at the edge of the planning horizon, as well as assessments of the anticipated performance during the short-term (12- to 18-month outlook). These analyses involved planned and anticipated changes to generation resources, transmission infrastructure, and load behavior compared to base-line needs of the system to remain reliable and formulate recommendations and related guidance. This assessment is often by completed by examining special scenarios and unique situations within the BES. These analyses provide a technical platform for important policy discussions on challenges facing the interconnected BES, as well as focused recommendations on mitigation to improve overall reliability or lessen reliability risks.

By identifying and quantifying emerging reliability issues, NERC is able to provide risk-informed recommendations and support a learning environment for industry to address emerging risks and pursue improved reliability performance. These efforts are expected to expand to assess the impacts on reliability from the changing resource mix, reliability behavior of resources, distributed energy resources, and loads. Many resource additions are asynchronous and energy-limited, requiring assessment of a substantial number of scenarios rather than just seasonal peak conditions. Reliability assessments must therefore include a greater focus on probabilistic approaches, assessing the sufficiency of essential reliability services as well as focusing seasonal assessments on short-term horizons to encompass more than peak condition reserve margin analyses.

Key assessments include:

- Long-Term Reliability Assessment (supplemented by the Probabilistic Assessment)
- Summer and Winter Reliability Assessments (condensed report)
- Short-Term and Special Reliability Assessments
  - a. Between one and four short-term reliability assessments are expected, driven by the need to assess emerging short-term risks to reliability
  - b. Special Assessments are selected based on high-priority/high-risk issues that require an independent assessment from the ERO.

A significant ongoing effort anticipated to involve RASA, Regional Entity staff, and stakeholders focuses on the continued development of effective Essential Reliability Services. These efforts are expected to lead to a broad set of recommendations that will culminate with defined elements, an evaluation of initial metrics and data compilation of actual performance, and refinement about the ongoing assessment of Essential Reliability Services measures.

### **System Analysis**

Understanding the technical behavior of the North American grid is the foundation for identifying crucial aspects of performance that are important for sustaining overall reliability. NERC's understanding of grid behavior is achieved through a comprehensive evaluation of system behavior through constant observation and study, analytic simulations, and forensic analysis of system disturbances. Methodically comparing the simulation results of powerflow and system dynamic performance to actual system behavior improves models critical for industry use to simulate system conditions as well as enables RASA to gain insights to enhance predictive system analysis.

The ERO Enterprise RASA team also supports the following objectives:

- Continue leading and improving NERC’s analytical capabilities to address a broad range of engineering topics,
- Support NERC Reliability Standards development with subject matter expertise,
- Support and lead technical analysis of emerging risks requiring advanced analytics and interconnection-wide assessment,
- Detailed forensic analysis of significant system disturbances

Key focus areas:

- PMU Measurement, use, and analysis improvements
  - Synchrophasor technology
  - Power plant model verification
  - Oscillation analysis
- Frequency Response Analysis, Interconnection Frequency Response Obligation Analysis, and forward-looking reliability assessment
- Interconnection-Wide Model Building Designation and Criteria administration
- Analysis of TPL Footnote 12
- Load and distributed energy resource modeling
- Event analysis – simulation and forensic analysis of major events
- Reliability Standards support
- BES Exception and Self-Determined Notification Processing

Further, RASA will continue to work closely with other organizations, including but not limited to the Electric Power Research Institute (EPRI), the Department of Energy (DOE), the Institute of Electrical and Electronic Engineers (IEEE), the Institute of Nuclear Power Operations (INPO), the North American Transmission Forum (NATF), the North American Generation Forum (NAGF), and the Canadian Electricity Association (CEA). RASA collaborates with these groups on a number of fronts, including geomagnetic disturbance (GMD), vegetation management, and variable generation integration. RASA will continue working with the Interstate Natural Gas Association of America (INGAA) and the Natural Gas Supply Association (NGSA) regarding studies pertaining to the interdependency of gas and electric systems.

## **2017 Goals and Deliverables**

In 2017, RASA will seek to achieve several specific goals and objectives as part of the strategic focus of the ERO Enterprise (Strategic Goal 4a):

1. Pioneer implementation of advanced reliability assessment and system analysis methods to address the changing nature of the grid. Issue reliability assessment reports, guidelines, and recommendations to address high priority evolving performance trends and address emerging risks to reliability.
  - a. Expand the use of probabilistic assessment tools across the ERO and gain consistency in approach

- b. Special assessments on identified high-priority risks (from RISC prioritization and recommendations)<sup>26</sup>
    - Changing resource mix and maintaining Essential Reliability Services
    - Increased penetration of Distributed Energy Resources
    - Increasing dependency on generation fueled by natural gas
    - Broaden understanding of inter-area and local system oscillations in all interconnections and their potential impact on interconnection reliability.
  - c. As part of its oversight of the Regional Entities, build and sustain an Enterprise RAPA team (ERO-RAPA) that encompasses the consistent development and implementation of risk-informed approaches and structured methods to identify and address reliability risks.
2. Provide the basis for industry to meet regulatory requirements of the NERC Reliability Standard BAL-003-1, “Frequency Response and Frequency Bias Setting;” exploratory understanding of frequency response; support interconnection-wide studies of frequency response
    - a. Frequency Response Annual Analysis and BAL-003 FERC filing
    - b. Determination of Interconnection Frequency Response Obligation (IFRO) and Balancing Authority Frequency Reporting Obligation values
  3. Support NERC Reliability Standard development by providing subject matter expertise.
  4. Provide support and leadership to (1) the Planning Committee and (2) standing committees’ subcommittees, working groups, and task forces serving the standing committees. Support the development of technical reference documents and Reliability Guidelines with support of the PC leadership and established in the annual PC work plan
  5. As necessary, support major event investigations, analyses, and reporting of findings, recommendations, and lessons learned to improve reliability.
  6. Provide feedback to interconnection-wide model-building groups on improvements to system model quality and fidelity.
  7. Assist in the development of approaches to registration and provide input to NERC staff in support of the development of CMEP risk elements, as well as support and lead the BES Definition Exception Process.

## Resource Requirements

### Personnel

Additional personnel were allocated to RASA in 2016 to address increased resource demands associated with ongoing reliability assessment, performance analysis, and system analysis activities.

### Contractor Expenses

The total contractor and consultant expenses for the RASA department are projected at \$525k, a decrease of \$50k from the 2016 budget. Further information is provided on Exhibit C.

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<sup>26</sup> [RISC Recommendations to the NERC Board of Trustees](#)

Section A — 2017 Business Plan and Budget Program Area and Department Detail

Statement of Activities and Fixed Assets Expenditures					
2016 Budget & Projection, and 2017 Budget					
RELIABILITY ASSESSMENTS and SYSTEM ANALYSIS					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 6,135,872	\$ 6,135,872	0	\$ 7,339,030	\$ 1,203,158
Assessment Stabilization Reserve - Penalties	142,718	142,718		131,213	(11,505)
<b>Total NERC Funding</b>	<b>\$ 6,278,590</b>	<b>\$ 6,278,590</b>	<b>\$ 0</b>	<b>\$ 7,470,243</b>	<b>\$ 1,191,653</b>
Third-Party Funding	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	50,000	-	(50,000)	50,000	-
Workshops	15,000	15,000	-	15,000	-
Interest	462	3,634	3,172	351	(111)
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 6,344,052</b>	<b>\$ 6,297,224</b>	<b>\$ (46,828)</b>	<b>\$ 7,535,594</b>	<b>\$ 1,191,542</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 1,826,951	\$ 2,080,813	\$ 253,862	\$ 2,247,826	\$ 420,875
Payroll Taxes	122,096	137,089	14,993	142,919	20,823
Benefits	213,866	240,723	26,857	263,230	49,364
Retirement Costs	203,274	229,385	26,111	246,609	43,335
<b>Total Personnel Expenses</b>	<b>\$ 2,366,187</b>	<b>\$ 2,688,010</b>	<b>\$ 321,823</b>	<b>\$ 2,900,585</b>	<b>\$ 534,398</b>
<b>Meeting Expenses</b>					
Meetings	\$ 109,000	\$ 109,000	\$ -	\$ 74,000	\$ (35,000)
Travel	208,338	249,000	40,662	208,338	-
Conference Calls	17,280	17,280	-	5,270	(12,010)
<b>Total Meeting Expenses</b>	<b>\$ 334,618</b>	<b>\$ 375,280</b>	<b>\$ 40,662</b>	<b>\$ 287,608</b>	<b>\$ (47,010)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 575,000	\$ 442,425	\$ (132,575)	\$ 525,000	\$ (50,000)
Office Rent	-	-	-	-	-
Office Costs	116,266	138,523	22,257	147,652	31,386
Professional Services	-	-	-	-	-
Miscellaneous	500	500	-	500	-
Depreciation	386,024	282,034	(103,991)	125,621	(260,403)
<b>Total Operating Expenses</b>	<b>\$ 1,077,790</b>	<b>\$ 863,482</b>	<b>\$ (214,308)</b>	<b>\$ 798,773</b>	<b>\$ (279,018)</b>
<b>Total Direct Expenses</b>	<b>\$ 3,778,595</b>	<b>\$ 3,926,772</b>	<b>\$ 148,177</b>	<b>\$ 3,986,965</b>	<b>\$ 208,370</b>
<b>Indirect Expenses</b>	<b>\$ 2,767,102</b>	<b>\$ 3,218,866</b>	<b>\$ 451,764</b>	<b>\$ 3,435,846</b>	<b>\$ 668,744</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 6,545,697</b>	<b>\$ 7,145,638</b>	<b>\$ 599,940</b>	<b>\$ 7,422,812</b>	<b>\$ 877,114</b>
<b>Change in Assets</b>	<b>\$ (201,645)</b>	<b>\$ (848,413)</b>	<b>\$ (646,768)</b>	<b>\$ 112,782</b>	<b>\$ 314,428</b>
<b>Fixed Assets</b>					
Depreciation	(386,024)	(282,034)	103,991	(125,621)	260,403
Computer & Software CapEx	-	53,580	53,580	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 183,244	\$ 167,231	\$ (16,013)	238,403	\$ 55,159
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ (202,780)</b>	<b>\$ (61,222)</b>	<b>\$ 141,558</b>	<b>\$ 112,782</b>	<b>\$ 315,563</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 6,342,917</b>	<b>\$ 7,084,415</b>	<b>\$ 741,498</b>	<b>\$ 7,535,594</b>	<b>\$ 1,192,677</b>
<b>FTEs</b>	<b>11.75</b>	<b>13.19</b>	<b>1.44</b>	<b>14.10</b>	<b>2.35</b>

## Performance Analysis

Performance Analysis (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	6.92	9.40	2.49
Direct Expenses	\$ 1,838,245	\$ 2,459,356	\$ 621,111
Indirect Expenses	1,629,647	2,290,564	660,917
Other Non-Operating Expenses	-	-	-
Inc(Dec) in Fixed Assets	107,919	158,936	51,017
<b>TOTAL BUDGET</b>	<b>\$ 3,575,811</b>	<b>\$ 4,908,855</b>	<b>\$ 1,333,043</b>

### Background and Scope

The Performance Analysis (PA) group provides insight and guidance about reliability risks and areas of concern based on analysis of historic system performance. This includes identifying potential risks of concern related to system, equipment, entity, and organizational performance that may indicate a need to develop remediation strategies, action plans, or data used to create, revise or retire reliability standards or consider new reliability standards. The department focuses on developing a technical framework and understanding the reliability risks facing the industry.

### Stakeholder Engagement and Benefit

The ERO monitors the reliability performance of the BES in North America through data gathered to analyze historic trends. The ERO provides reports and recommendations regarding the anticipated conditions that could impact the reliability, security, and stability of the BPS to the industry, Regional Entities, regulatory entities, and other designated entities.

The ERO works with industry leaders to create a reliability strategy that is relevant, timely, and effective at addressing the most important reliability risks. This effort includes PA's contribution (both in data gathering and in statistical analysis of data, trends, and events) toward the ERO's understanding key information identified through analysis and assessment efforts; extracting and prioritizing the associated reliability risks from that information; sharing and integrating those risk analysis insights across the ERO Enterprise; and translating that knowledge into actionable guidance and recommendations for NERC management, the Board, and entities, and state, federal, and provincial policy makers. This offers stakeholders an open and transparent approach for the development of NERC's reliability strategy, ultimately ensuring the ERO is accountable to industry, regulators, and the public at large.

### Key Efforts Underway

Performance Analysis collects transmission outage, generator performance, demand response, and protection and control misoperation data in a common format using the various industry databases. This data is used to develop and report on grid metrics that analyze outage frequency, duration, causes, and many other factors related to transmission and generator performance as well as automatic power system protection and control effectiveness. In addition to collecting simple equipment availability data, detailed information about individual outage events is collected that, when analyzed at the regional and NERC levels, provides data that may be used to improve BES reliability.



The key trends, findings, and recommendations from Performance Analysis serve as technical input to the ERO's reliability standards and standards project prioritization, compliance process improvements, event analyses, reliability assessment, and critical infrastructure protection efforts. This analysis of BES performance provides an industry reference for historical BES reliability, but it also offers analytical insights that lead toward the prioritization of specific actionable risk control steps for industry. These analyses and results are summarized in the annual state of reliability report, which provides guidance and recommendations for enhanced bulk system reliability. By January, 2017, PA will add GADS Wind Data to the data collected under Section 1600, requiring the development of a new software tool to enable this.

Performance Analysis is working with Event Analysis to develop a link between their databases. Specific equipment outages will be linked to disturbance reports filed with NERC, enabling better association of transmission and generation outages. The continued alignment between these efforts is expected to enhance the ability to conduct effective event analyses as well as identify key reliability areas for trend analyses of multiple databases. This is expected to improve the depth of event analyses across the ERO Enterprise and expand the quality of data gathered for sophisticated statistical and probabilistic analyses. This will lead to trends and insights about reliability performance, as well as effective measures and actions to address reliability risks. Further in 2016, PA has begun data mining of completed EA efforts to see if any insight might be gained from these events as the grid evolves that were not first and foremost or particularly relevant to enhanced grid reliability at the time of the original event investigation.

Performance Analysis is currently refining the composition of NERC's annual state of reliability (SOR) report to expand the GADS data trend analysis, and for 2017 begin to reflect post-seasonal reliability review, insights from analysis of transmission, generator, and demand response data systems (TADS, GADS, and DADS), and integration of event analysis and misoperations. Also, in 2016, the department will perform activities necessary to determine whether in 2017 the SOR should move from a calendar year (Q1-Q4) report to a fiscal year (2016,Q4-2017,Q3) report.

Further, Performance Analysis will continue to work closely with other organizations, including but not limited to the EPRI, the DOE, the IEEE, INPO, the NATF, the NAGF, and the CEA. PA collaborates with these groups on a number of fronts, including TADS, GADS, and DADS.

## **2017 Goals and Deliverables**

In 2017, Performance Analysis has a number of specific goals and deliverables in support of the ERO Enterprise Strategic Plan, including:

1. Issue the state of reliability report, guidelines, recommendations, alerts as needed (including the verification and validation of data and information through Regional Entities and technical committees as required)
2. Oversee and evaluate reliability trends that identify reliability risks by analyzing data contained in NERC's GADS, TADS, and DADS, along with reliability metrics and protection & controls system misoperations data.
3. Support NERC Reliability Standard development by providing subject matter expertise.
4. Provide support and leadership to the standing committees' subcommittees, working groups, and task forces serving the standing committees (primary focus on the Performance Analysis Subcommittee and its subgroups).
5. Assist in the development of approaches to registration and provide input to NERC staff in support of the development of CMEP risk elements

6. Conduct major event investigations, analyses, and reporting of major findings, recommendations, and lessons learned that will improve reliability.
7. Provide insight on emerging system protection issues, and hand-off any issues gleaned with future implications to RASA.

## **Resource Requirements**

### **Personnel**

During 2016 additional personnel (including open positions) were allocated to Performance Analysis to address increased resource demands associated with ongoing reliability assessment, performance analysis, and system analysis activities.

### **Contractor Expenses**

Performance Analysis contractor and consultant expenses are \$528k, an increase of \$19k over 2016. Additional details are provided in Exhibit C.

Section A — 2017 Business Plan and Budget Program Area and Department Detail

Statement of Activities and Fixed Assets Expenditures					
2016 Budget & Projection, and 2017 Budget					
PERFORMANCE ANALYSIS					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 3,490,625	\$ 3,490,625	\$ -	\$ 4,821,146	\$ 1,330,521
Assessment Stabilization Reserve - Penalties	84,052	84,051		87,475	3,423
<b>Total NERC Funding</b>	<b>\$ 3,574,677</b>	<b>\$ 3,574,676</b>	<b>\$ -</b>	<b>\$ 4,908,621</b>	<b>\$ 1,333,944</b>
Third-Party Funding	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	50,000	50,000	-	-
Workshops	-	-	-	-	-
Interest	-	2,554	2,554	234	234
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 3,574,677</b>	<b>\$ 3,627,230</b>	<b>\$ 52,554</b>	<b>\$ 4,908,855</b>	<b>\$ 1,334,178</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 886,643	\$ 1,280,436	\$ 393,793	\$ 1,349,579	\$ 462,936
Payroll Taxes	65,373	90,958	25,585	92,093	26,720
Benefits	126,252	142,204	15,952	143,104	16,852
Retirement Costs	98,314	144,446	46,132	149,018	50,704
<b>Total Personnel Expenses</b>	<b>\$ 1,176,582</b>	<b>\$ 1,658,044</b>	<b>\$ 481,462</b>	<b>\$ 1,733,794</b>	<b>\$ 557,212</b>
<b>Meeting Expenses</b>					
Meetings	\$ 1,000	\$ 6,000	\$ 5,000	\$ 1,000	\$ -
Travel	118,172	98,000	(20,172)	118,172	-
Conference Calls	9,720	7,000	(2,720)	2,965	(6,755)
<b>Total Meeting Expenses</b>	<b>\$ 128,892</b>	<b>\$ 111,000</b>	<b>\$ (17,892)</b>	<b>\$ 122,137</b>	<b>\$ (6,755)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 509,039	\$ 621,849	\$ 112,810	\$ 528,082	\$ 19,043
Office Rent	-	-	-	-	-
Office Costs	23,732	51,194	27,462	74,843	51,111
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	500	500
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 532,771</b>	<b>\$ 673,043</b>	<b>\$ 140,272</b>	<b>\$ 603,426</b>	<b>\$ 70,655</b>
<b>Total Direct Expenses</b>	<b>\$ 1,838,245</b>	<b>\$ 2,442,087</b>	<b>\$ 603,842</b>	<b>\$ 2,459,356</b>	<b>\$ 621,111</b>
<b>Indirect Expenses</b>	<b>\$ 1,629,647</b>	<b>\$ 2,242,712</b>	<b>\$ 613,065</b>	<b>\$ 2,290,564</b>	<b>\$ 660,917</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 3,467,892</b>	<b>\$ 4,684,799</b>	<b>\$ 1,216,907</b>	<b>\$ 4,749,920</b>	<b>\$ 1,282,028</b>
<b>Change in Assets</b>	<b>\$ 106,785</b>	<b>\$ (1,057,569)</b>	<b>\$ (1,164,353)</b>	<b>\$ 158,936</b>	<b>\$ 52,151</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	162,500	162,500	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 107,919	\$ 116,517	\$ 8,598	158,936	\$ 51,017
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ 107,919</b>	<b>\$ 279,017</b>	<b>\$ 171,098</b>	<b>\$ 158,936</b>	<b>\$ 51,017</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 3,575,811</b>	<b>\$ 4,963,816</b>	<b>\$ 1,388,005</b>	<b>\$ 4,908,855</b>	<b>\$ 1,333,044</b>
<b>FTEs</b>	<b>6.92</b>	<b>9.19</b>	<b>2.28</b>	<b>9.40</b>	<b>2.49</b>

## Reliability Risk Management

NERC’s Reliability Risk Management (RRM) group carries out the ERO’s statutory responsibility to perform assessments (real time or near real time continual awareness, detailed analysis of significant events, and longer-term broad performance assessments) of the reliability and adequacy of the BES, including identifying potential issues of concern relating to system, equipment, entity, and human performance that may indicate the need to develop and implement targeted interventions. RRM has three departments: Situation Awareness (also referred to as Bulk Power System Awareness), Event Analysis, and Performance Analysis, as described above beginning on page 49. These departments are responsible for six primary functions: (1) BES awareness; (2) event analysis and determination of root and contributing causes; (3) assessment of human performance challenges that affect BES reliability and identification of improvement opportunities; (4) continent-wide analysis and reporting of BES performance; (5) support of the NERC Operating Committee; and (6) support of the NERC Critical Infrastructure Protection Committee.

RRM’s functions and resources are directly focused on proactive awareness of BES conditions and all events over a threshold of certain risk or impact. Through awareness and continuous assessment, RRM identifies potential reliability risks to the BES. RRM analyzes events in detail, addresses the most significant risks to BES reliability, and ensures that industry is well informed of system events, emerging trends, risk analysis, and lessons learned. Through performing these functions, RRM provides data and analysis to inform the other aspects of NERC’s statutory functions. The group also provides strategic direction for using risk-based concepts in planning and executing its responsibilities.

### Situation Awareness

Situation Awareness (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	5.53	5.64	0.11
Direct Expenses	\$ 2,310,875	\$ 2,570,828	\$ 259,953
Indirect Expenses	1,302,775	1,374,338	71,563
Other Non-Operating Expenses	-	-	-
Inc(Dec) in Fixed Assets	78,547	87,695	9,148
<b>TOTAL BUDGET</b>	<b>\$ 3,692,197</b>	<b>\$ 4,032,862</b>	<b>\$ 340,664</b>

### Background and Scope

NERC’s Situation Awareness department and the eight Regional Entities monitor BES conditions, significant occurrences and emerging risks, and threats across the 14 Reliability Coordinator regions in North America to maintain an understanding of conditions and situations that could impact the bulk electric system’s reliable operation. This group also supports the development and publication of Alerts and awareness products and facilitates information sharing among industry, Regions, and the government during crisis situations and major system disturbances. The process for understanding the potential threats or vulnerabilities to the reliability of the BPS starts with understanding occurrences and events in the context in which they occur.

### **Stakeholder Engagement and Benefit**

BES conditions continually change and provide recognizable signatures through automated tools, mandatory reports and voluntary information sharing, and third-party publicly available sources. The significant majority of these signatures represents conditions and occurrences that have little or no reliability impact, either positive or adverse, on the BES. However, being cognizant of the short-term condition of the BES and the signatures associated with the entire range of reliability performance helps the ERO identify significant occurrences and events more accurately and efficiently. Registered entities continue to robustly share information and collaborate with the ERO in an effort to maintain and improve the overall reliability of the grid.

### **Key Efforts Underway**

Several reliability-related situation awareness and monitoring tools will undergo enhancement, replacement, streamlining, or modification. The following tools are being focused on during 2016: (1) operation and maintenance of Situation Awareness for NERC, FERC, and Regions, Version 2 (SAFNrv2) software application used for monitoring, to include preparation for a new RFP process in late 2016 to enhance the tool from its current state with no changes to the data used; (2) operation and maintenance of the current secure NERC Alerts tool while planning for a streamlined NERC Alert process and platform appropriately integrated with related ongoing NERC, E-ISAC and ERO Enterprise IT initiatives; (3) refresh of the Reliability Coordinator Information System (RCIS) legacy application for operability and maintainability reasons, with no significant changes to functionality; and (4) continuing to set the conditions to bring limited streaming Synchrophasor data into NERC for wide-area situational awareness and event triage applications.

### **2017 Goals and Deliverables**

In 2017, the Situation Awareness department will seek to accomplish the following specific goals and deliverables:

1. Ensure that the ERO is aware of all BES events above a threshold of impact.
2. Enable the sharing of information and data to facilitate wide-area situational awareness.
3. During crisis situations, facilitate the exchange of information among industry, Regions, and the U.S. and Canadian governments.
4. Keep industry informed of emerging reliability threats and risks to the BES, including any expected actions.
5. Conduct the annual NERC Monitoring and Situational Awareness Conference and Human Performance Conference.
6. Administer the NERC Alerts process as specified in Rules of Procedure (ROP) §810 to issue Advisory (Level 1) Alerts on significant and emerging reliability- and security-related topics as needed, and facilitate the tracking of actions specified in Recommendation (Level 2) and Essential Action (Level 3) Alerts.

The department uses the following major reliability-related tools to support department activities:

#### **Resource Adequacy (ACE Frequency) Tool**

This software application provides continuous monitoring of key resource adequacy performance metrics, including pre-established thresholds and limits defined in standards. It alerts Reliability Coordinators and resource subcommittees to conditions that could result in critical inadequacies, such as major tie errors, inaccurate load forecasts, and inadequate frequency response.

### **Inadvertent Interchange**

This tool facilitates the entering of monthly scheduling data and submittal of monthly inadvertent performance standards reports to NERC. It also assists in the monitoring and resolution of reliability issues originated by inadvertent interchange imbalances.

### **Frequency Monitoring and Analysis Tool**

This tool detects frequency events and captures key frequency response information for each interconnection.

### **Intelligent Alarms Tool**

This tool detects short-term and long-term frequency deviations using data transmitted to NERC by the Balancing Authorities. When coupled with the FNet<sup>27</sup> and Frequency Monitoring and Analysis tools, this tool allows immediate differentiation of the cause of a frequency deviation—a generator trip or a scheduling error.

### **Genscape**

The PowerIQ and PowerRT tools provide more detailed insight into current-day conditions impacting BPS conditions in both normal operations and stressed conditions.

## **Resource Requirements**

### **Personnel**

No additional personnel are projected for the Situation Awareness department in 2017. The slight increase reflected in the following table is due to a lower vacancy rate than in 2016.

### **Contractor Expenses**

The overall funding of approximately \$1.3M for contractors and consultants (which includes the cost of the tools set forth above) to support the Situation Awareness department in 2017 represents an increase of \$84k over 2016 budget levels. The detailed 2017 contractor and consulting budget for the Situation Awareness department is set forth in Exhibit C with a comparison to 2016 budgeted amounts.

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<sup>27</sup> FNet – Operated by the Power Information Technology Laboratory at the University of Tennessee, FNET is a low-cost, quickly deployable global positioning system (GPS)-synchronized wide-area frequency measurement network. High dynamic accuracy Frequency Disturbance Recorders (FDRs) are used to measure the frequency, phase angle, and voltage of the power system at ordinary 120 V outlets. The measurement data are continuously transmitted via the Internet to the FNET servers hosted at the University of Tennessee and Virginia Tech.

**Section A — 2017 Business Plan and Budget Program Area and Department Detail**

Statement of Activities and Fixed Assets Expenditures					
2016 Budget & Projection, and 2017 Budget					
SITUATION AWARENESS					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 3,624,868	3,624,868	\$ 0	\$ 3,980,236	\$ 355,369
Assessment Stabilization Reserve - Penalties	67,193	67,193	0	52,485	(14,708)
<b>Total NERC Funding</b>	<b>\$ 3,692,060</b>	<b>\$ 3,692,060</b>	<b>\$ 0</b>	<b>\$ 4,032,721</b>	<b>\$ 340,661</b>
Third-Party Funding	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	1,128	1,128	-	-
Interest	137	1,816	1,679	140	3
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 3,692,197</b>	<b>\$ 3,695,004</b>	<b>\$ 2,807</b>	<b>\$ 4,032,862</b>	<b>\$ 340,664</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 764,342	\$ 787,436	\$ 23,094	\$ 873,869	\$ 109,527
Payroll Taxes	58,235	59,443	1,208	58,749	515
Benefits	101,765	135,367	33,601	156,328	54,563
Retirement Costs	85,275	88,342	3,067	96,159	10,884
<b>Total Personnel Expenses</b>	<b>\$ 1,009,617</b>	<b>\$ 1,070,587</b>	<b>\$ 60,971</b>	<b>\$ 1,185,105</b>	<b>\$ 175,488</b>
<b>Meeting Expenses</b>					
Meetings	\$ 6,500	\$ 5,000	\$ (1,500)	\$ 6,500	\$ -
Travel	33,005	32,500	(505)	33,005	-
Conference Calls	1,000	1,000	-	305	(695)
<b>Total Meeting Expenses</b>	<b>\$ 40,505</b>	<b>\$ 38,500</b>	<b>\$ (2,005)</b>	<b>\$ 39,810</b>	<b>\$ (695)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 1,211,475	\$ 1,268,777	\$ 57,302	\$ 1,295,850	\$ 84,375
Office Rent	-	-	-	-	-
Office Costs	41,052	39,540	(1,512)	41,897	845
Professional Services	-	-	-	-	-
Miscellaneous	500	500	-	500	-
Depreciation	7,727	7,727	-	7,667	(60)
<b>Total Operating Expenses</b>	<b>\$ 1,260,754</b>	<b>\$ 1,316,544</b>	<b>\$ 55,790</b>	<b>\$ 1,345,914</b>	<b>\$ 85,160</b>
<b>Total Direct Expenses</b>	<b>\$ 2,310,875</b>	<b>\$ 2,425,631</b>	<b>\$ 114,756</b>	<b>\$ 2,570,828</b>	<b>\$ 259,953</b>
<b>Indirect Expenses</b>	<b>\$ 1,302,775</b>	<b>\$ 1,391,019</b>	<b>\$ 88,243</b>	<b>\$ 1,374,338</b>	<b>\$ 71,563</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 3,613,650</b>	<b>\$ 3,816,649</b>	<b>\$ 202,999</b>	<b>\$ 3,945,167</b>	<b>\$ 331,516</b>
<b>Change in Assets</b>	<b>\$ 78,547</b>	<b>\$ (121,645)</b>	<b>\$ (200,192)</b>	<b>\$ 87,695</b>	<b>\$ 9,148</b>
<b>Fixed Assets</b>					
Depreciation	(7,727)	(7,727)	-	(7,667)	60
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 86,273	\$ 72,268	(14,005)	95,361	9,088
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>\$ 78,547</b>	<b>\$ 64,542</b>	<b>\$ (14,005)</b>	<b>\$ 87,695</b>	<b>\$ 9,148</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 3,692,197</b>	<b>\$ 3,881,191</b>	<b>\$ 188,994</b>	<b>\$ 4,032,862</b>	<b>\$ 340,664</b>
<b>FTEs</b>	<b>5.53</b>	<b>5.70</b>	<b>0.17</b>	<b>5.64</b>	<b>0.11</b>

## Event Analysis Department

Event Analysis (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	11.06	11.28	0.22
Direct Expenses	\$ 2,650,065	\$ 2,592,388	\$ (57,676)
Indirect Expenses	2,605,551	2,748,677	143,126
Other Non-Operating Expenses	-	-	-
Inc(Dec) in Fixed Assets	100,179	105,141	4,962
TOTAL BUDGET	\$ 5,355,795	\$ 5,446,206	\$ 90,411

### Background and Scope

The Event Analysis department performs assessments of the reliability and adequacy of the BES. This includes identifying potential issues of concern related to system, equipment, entity, and human performance that may indicate a need to develop remediation strategies, action plans, or data used to revise or retire reliability standards or consider new reliability standards. The department analyzes and determines the cause of the events, promptly ensures tracking of corrective actions to prevent recurrence, and provides lessons learned to the industry. Event Analysis ensures that reporting and analysis are consistent to allow wide-area assessment of trends and risks. The department analyzes all reportable events for sequence of events, root cause, risk to reliability, and mitigation and keeps the industry well informed of system events, emerging trends, risk analysis, lessons learned, and expected actions.

Additional resources within this department focus on identifying human-error risks and those precursor factors that allow human error to impact system reliability. The department educates industry regarding risks, precursors, and mitigation methods. Resources also support compliance and standards training initiatives and trending and analysis to identify emerging reliability risks to the BES. These efforts are conducted in collaboration with industry human performance projects, including WECC's Human Performance Working Group, the NERC Operating Committee's Event Analysis Subcommittee, and others.

### Stakeholder Engagement and Benefit

The Event Analysis department coordinates event analyses to support the use of collective resources, consistency in analysis, and timely delivery of event analysis reports.<sup>28</sup> The ERO disseminates to the electric industry lessons learned and other useful information obtained from or as a result of event analysis. The Event Analysis team conducts in-depth analyses of approximately 150 events per year on average. In 2014, the team also conducted calls facilitated by the Regional Entities with over 140 registered entities to discuss in detail and finalize root and contributing causes for the categorized events analyzed. Major analysis to date includes continuing assessment of Energy Management System (EMS) outages, continued collaboration with Reliability Assessments and System Analysis on frequency response performance, analyses of substation equipment failure events and protective relay trends including ground overcurrent relay misoperations, relay communication system failures, and the importance of commissioning testing.

<sup>28</sup> The core process for Event Analysis is outlined in the approved process: Electric Reliability Organization Event Analysis Process - Version 3 (January 2016).



### **Collaboration with the Trade Associations and Forums**

The activities of the NATF, the NAGF, trade associations, and other industry groups are expected to compliment ERO Enterprise activities and limit the need to add incremental resources to the NERC and Regional Entity business plans and budgets that might otherwise be required in the absence of these forums.

NERC is supporting the NAGF's ongoing transformation into a more formal structure through 2017 and continuing through 2018 with logistical and administrative support.

NATF has been invited to participate in several reliability initiatives that are expected to continue into 2017, including protection systems misoperations reduction, physical security, various activities related to reliability assurance initiatives, improvement of modeling practices, and complementary efforts on addressing the GMD challenges.

### **2017 Goals and Deliverables**

In 2017, the Event Analysis department will seek to accomplish several specific goals and objectives as part of the strategic focus of the ERO Enterprise:

- Work with the Regional Entities to obtain and review information from registered entities on qualifying events and disturbances to advance awareness of events above a threshold level; facilitate analysis of root and contributing causes, risks to reliability, wide-area assessments, and remediation efforts; and disseminate information regarding events in a timely manner.
- Ensure that all reportable events are analyzed for sequence of events, root cause, risk to reliability, and mitigation.
- Continue to refine risk-based methods to support better identification of reliability risks, including the use of more sophisticated cause codes for analysis.
- Conduct training (webinars, workshops, and conference support) to inform industry and the ERO of lessons learned, root cause analysis, trends, human performance, and extreme weather preparedness and recommendations.
- Develop reliability recommendations and alerts as needed and track industry accountability for critical reliability recommendations.
- Ensure that industry is well informed of system events, emerging trends, risk analysis, lessons learned, and expected actions.
- Conduct major event analysis and reporting of major findings and recommendations that will improve reliability.

The Event Analysis department will also support several of the top-priority reliability risk projects during 2017 through 2018, as identified and described under the Performance Analysis department section of this document.

### **Resource Requirements**

#### **Personnel**

The slight increase in FTEs budgeted in the Event Analysis department in 2017 is due to a lower vacancy rate than in 2016.

**Contractor Expenses**

No funding is budgeted for contractors and consultants to support the Event Analysis department in 2017, as compared to \$56,000 budgeted in 2016.

<b>Statement of Activities and Fixed Assets Expenditures</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>EVENT ANALYSIS</b>					
	<b>2016 Budget</b>	<b>2016 Projection</b>	<b>Variance 2016 Projection v 2016 Budget Over(Under)</b>	<b>2017 Budget</b>	<b>Variance 2017 Budget v 2016 Budget Over(Under)</b>
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 5,181,136	\$ 5,181,136	\$ 0	\$ 5,300,955	\$ 119,819
Assessment Stabilization Reserve - Penalties	134,385	\$ 134,385		104,970	(29,415)
<b>Total NERC Funding</b>	<b>\$ 5,315,521</b>	<b>\$ 5,315,521</b>	<b>\$ 0</b>	<b>\$ 5,405,926</b>	<b>\$ 90,404</b>
Third-Party Funding	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	40,000	78,073	38,073	40,000	-
Interest	274	2,918	2,644	281	7
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 5,355,795</b>	<b>\$ 5,396,512</b>	<b>\$ 40,717</b>	<b>\$ 5,446,206</b>	<b>\$ 90,411</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 1,716,263	\$ 1,617,447	\$ (98,817)	\$ 1,708,049	\$ (8,214)
Payroll Taxes	114,132	\$ 110,186	(3,946)	108,739	(5,393)
Benefits	202,259	\$ 183,405	(18,853)	212,232	9,973
Retirement Costs	191,377	\$ 180,295	(11,082)	189,397	(1,980)
<b>Total Personnel Expenses</b>	<b>\$ 2,224,030</b>	<b>\$ 2,091,333</b>	<b>\$ (132,698)</b>	<b>\$ 2,218,416</b>	<b>\$ (5,614)</b>
<b>Meeting Expenses</b>					
Meetings	\$ 81,500	\$ 140,000	\$ 58,500	\$ 81,500	\$ -
Travel	152,487	152,000	(487)	152,487	-
Conference Calls	14,000	14,000	-	4,270	(9,730)
<b>Total Meeting Expenses</b>	<b>\$ 247,987</b>	<b>\$ 306,000</b>	<b>\$ 58,013</b>	<b>\$ 238,257</b>	<b>\$ (9,730)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 56,000	\$ 56,000	\$ -	\$ -	\$ (56,000)
Office Rent	-	-	-	-	-
Office Costs	49,181	53,576	4,395	49,634	452
Professional Services	-	-	-	-	-
Miscellaneous	500	500	-	500	-
Depreciation	72,367	85,582	13,214	85,582	13,214
<b>Total Operating Expenses</b>	<b>\$ 178,048</b>	<b>\$ 195,658</b>	<b>\$ 17,609</b>	<b>\$ 135,715</b>	<b>\$ (42,333)</b>
<b>Total Direct Expenses</b>	<b>\$ 2,650,065</b>	<b>\$ 2,592,990</b>	<b>\$ (57,075)</b>	<b>\$ 2,592,388</b>	<b>\$ (57,677)</b>
<b>Indirect Expenses</b>	<b>\$ 2,605,551</b>	<b>\$ 2,511,155</b>	<b>\$ (94,396)</b>	<b>\$ 2,748,677</b>	<b>\$ 143,126</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 5,255,616</b>	<b>\$ 5,104,145</b>	<b>\$ (151,471)</b>	<b>\$ 5,341,065</b>	<b>\$ 85,449</b>
<b>Change in Assets</b>	<b>\$ 100,179</b>	<b>\$ 292,367</b>	<b>\$ 192,188</b>	<b>\$ 105,141</b>	<b>\$ 4,962</b>
<b>Fixed Assets</b>					
Depreciation	(72,367)	(85,582)	(13,214)	(85,582)	(13,214)
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 172,546	\$ 130,463	(42,083)	190,723	18,176
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>\$ 100,179</b>	<b>\$ 44,881</b>	<b>\$ (55,298)</b>	<b>\$ 105,141</b>	<b>\$ 4,962</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 5,355,795</b>	<b>\$ 5,149,026</b>	<b>\$ (206,769)</b>	<b>\$ 5,446,206</b>	<b>\$ 90,411</b>
<b>FTEs</b>	<b>11.06</b>	<b>10.29</b>	<b>(0.77)</b>	<b>11.28</b>	<b>0.22</b>

## Electricity Information Sharing and Analysis Center (E-ISAC)<sup>29</sup>

	E-ISAC (in whole dollars)		Increase (Decrease)
	2016 Budget	2017 Budget	
Total FTEs	18.90	19.74	0.84
Direct Expenses	\$ 11,965,349	\$ 12,276,689	\$ 311,340
Indirect Expenses	4,450,914	4,810,185	359,271
Other Non-Operating Expenses	-	-	-
Inc(Dec) in Fixed Assets	351,262	1,428,467	1,077,205
TOTAL BUDGET	\$ 16,767,525	\$ 18,515,341	\$ 1,747,816

### Background and Scope

The Electricity Sector Information Sharing and Analysis Center (ES-ISAC) was formed in 1998 when the U.S. Secretary of Energy requested that NERC serve as the ISAC<sup>30</sup> for the Electricity Subsector.<sup>31</sup> This department was rebranded to the Electricity Information Sharing and Analysis Center (E-ISAC) in September 2015. The E-ISAC reduces cyber and physical risk to the Electricity Subsector across North America by providing unique insights, leadership, and coordination. The vision is to be the trusted, timely, actionable resource of grid risk information and analysis to enhance electricity reliability. The E-ISAC facilitates Electricity Subsector and cross-sector coordination regarding physical security and cybersecurity events affecting the BES.

### Maintaining Separation from Compliance and Enforcement

In February 2012, and as amended in March 2013, the Board of Trustees approved an E-ISAC Policy Statement that established a separation between the E-ISAC and NERC's compliance and enforcement program. In 2015, physical separation of the E-ISAC was completed. The company also has in place an [E-ISAC Code of Conduct](#) and [Policy on the Role of the E-ISAC vis-à-vis NERC's Compliance Monitoring and Enforcement Program](#).

### Key Efforts Underway

With industry support, in coordination with the Electricity Subsector Coordinating Council (ESCC) and its Member Executive Committee (MEC), senior management is committed to enhancing the effectiveness and capabilities of E-ISAC operations. These efforts include ongoing enhancement in organizational structure, operational and analytical capabilities, as well as the development of metrics to track the effectiveness of operations. Management will also take steps to improve the quality and value of E-ISAC products, including ongoing review of registered user needs.

<sup>29</sup> In 2015, NERC combined its Critical Infrastructure Department (CID) into the E-ISAC for both operational and financial reporting purposes.

<sup>30</sup> The Information Security Analysis Center (ISAC) construct was conceived and operates under US Government authorities derived from Presidential Decision Directive 63, which was signed in 1998. The ISACs focus specifically on information sharing, analytics and sector activities directly related to the protection of critical infrastructure.

<sup>31</sup> Subsequent administrations have sought to continue and strengthen information sharing in other sectors by establishing other sector-specific ISACs. In 2013, the Department of Energy (DOE) again reaffirmed its desire for NERC to continue to operate the E-ISAC.

During 2015, as part of a periodic review of companywide resource needs and resource allocation, NERC allocated additional resources to support the E-ISAC. Management recruited personnel to fill open positions, and recruited and appointed a senior vice president and chief security officer in charge of E-ISAC operations. Ongoing resource requirements consist primarily of personnel, contractors, consultants, software, hardware and communications infrastructure to gather, analyze, and provide information regarding cyber and physical security threats.

In the fourth quarter of 2014 and with broad industry support, NERC also assumed management responsibility for the Cybersecurity Risk Information Sharing Program (CRISP). CRISP is a public-private partnership whose purpose is to facilitate the sharing of cyber threat information and to develop situation awareness tools that enhance the electricity sector's ability to identify, prioritize, and coordinate the protection of its critical infrastructure. CRISP provides critical infrastructure owners and operators the capability to voluntarily share cyber threat data, analyze this data, and receive machine-to-machine mitigation measures. Information-sharing devices that are installed on participants' networks send encrypted data to a CRISP analysis center operated by the Pacific Northwest National Labs (PNNL), which analyzes the data it receives and sends alerts and mitigation measures back to CRISP participants and the E-ISAC through secure communications. CRISP became fully operational in 2015. The E-ISAC will continue to work with PNNL, CRISP participants and E-ISAC registered users to strengthen program execution, including both quality and timeliness aspects of information sharing. The 2017 E-ISAC budget maintains the same percentage allocation of CRISP funding requirements from assessments and from CRISP participants as 2016. In connection with the growth of the program and related support needs from E-ISAC staff, the 2017 E-ISAC budget also reflects an increase in the number of budgeted E-ISAC FTEs allocated to support CRISP.

## **Resource Requirements**

### **Personnel**

In 2016 additional open budgeted resources were re-allocated to provide support to the E-ISAC<sup>32</sup>, resulting in a net increase of 0.84 FTEs.

The E-ISAC staffing and organizational structure has recently been updated to reflect four primary focus areas (1) stakeholder engagement, (2) watch operations (3) cyber security analysis, and (4) physical security analysis. NERC's 2017 organization chart attached as Appendix 1 has been updated to reflect these changes and additional personnel on-boarded in 2016. The E-ISAC will continue to receive shared services support from NERC's corporate services departments (i.e. finance and accounting, IT, HR, legal and external affairs). Personnel providing such shared services will do so only in accordance with strict operating protocols governing access to and use of E-ISAC information as noted above.

### **Contract Expenses**

The specific nature and need for contract support for the E-ISAC falls under three major categories: Program Level Support, Software and Services, and Events and Outreach. Each of these categories is discussed further below and Exhibit C sets forth the 2017 budget for each of these categories of expense.

## **Program Level Support**

### **CRISP**

During 2016 and 2017 NERC will continue to subcontract to PNNL the majority of the resource requirements and associated costs to operate and maintain CRISP.

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<sup>32</sup> Departments with reduced staffing needs included the legal, enforcement and standards departments.

### **E-ISAC Portal Enhancement**

The E-ISAC communication portal capabilities include: publishing immediate notifications and other informational products, exchanging threat indicator information, and providing self-service access to user security awareness services. The E-ISAC is working with NERC Information Technology (in the lead) to continue development of the portal that was initiated in 2014 as part of a long-term improvement strategy. Important new enhancements and improved capabilities are presently in use and development. These include facilitating direct data exchange with E-ISAC members, other ISACs and government partners, and establishing user communities where individuals can discuss security issues. The portal's improved capabilities support E-ISAC analysts in their information analysis functions and directly tie them with their counterparts in other sectors and national laboratories.

In 2015, the ESCC presented its recommendations resulting from a review of the E-ISAC operations performed that year. These recommendations included a request to evaluate and potentially enhance the user interface and underlying functionality of the E-ISAC portal. In 2015, the ESCC established a Member Executive Committee (MEC) to provide guidance with respect to various E-ISAC matters, including improvements to the E-ISAC portal. As part of an approved 2016 work plan, the E-ISAC staff worked closely with the MEC to develop a business case and funding estimates for these improvements. Additional details summarizing the business case, funding estimate and additional detail regarding the portal improvement project is attached as Exhibit F.

The 2017 E-ISAC budget includes \$1M for the portal enhancements (\$250,000 of which is allocated to CRISP)<sup>33</sup>. The MEC has provided written comments in support of this investment.<sup>34</sup>

Additional portal enhancements in 2016 and 2017 will also extend functionality to allow for easier access to filtered data for both the cyber and physical security communities and provide for automated information sharing. Based on input from users, the E-ISAC is transitioning the current portal capability to a platform model that will provide features and extensions beyond what can currently be delivered with the existing portal. Some of the new features will include user customization, visual and graphical orientation (versus text-based), robust search and structured queries, and the ability to create on-the-fly technical analysis of information shared by users. This will be a multi-year project that will evolve as users engage the new capabilities and provide feedback. In 2017 the E-ISAC and NERC IT plan to launch the initial platform prototype with new capabilities, then add capabilities and features in 2018 and subsequent years as needed.

### **Software and Services**

#### **Software Integration Support Services**

The E-ISAC operations center includes monitors used to display intelligence information provided from various software applications. Software integration services are routinely required from vendors providing existing and new software applications. Additional software must be licensed and maintained to display and integrate BES maps that have cyber intelligence information. A portion of these costs is budgeted under Office Costs as software maintenance expenses.

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<sup>33</sup> The annual impact of the proposed \$1M investment on assessments will be approximately \$250,000 since projects of this nature are typically financed through NERC's capital financing program and funded over a three year period.

<sup>34</sup> MEC's comments are available [on NERC's website](#)

### **Analyst Workbench**

A strong technical analytic capability is needed to develop baselines and identify patterns and understandings of potential cyber-related threats. The analyst workbench toolset maintains historical information and allows a team to use and deliver consistent and repeatable analysis in both an operational (during an event) as well as nonoperational capacity. This workbench will include a threat database for historical correlation and various tools for network- and host-based analysis of malicious software.

### **Automated Information Sharing**

The E-ISAC is broadening automated information sharing beyond CRISP, looking at programs such as the Structured Threat Information Expression/Trusted Automated Exchange of Indicator Information (STIX/TAXII) initiative hosted by the US Department of Homeland Security. As part of a work plan developed in consultation with the MEC, in 2016 the E-ISAC plans to pilot and gather data on these technologies, leveraging existing implementations at Argonne National Lab. The pilot will help the E-ISAC understand the nuances of bi-directional communication, workflow, handling rules, vetting information, and learning from the technology and processes overall. The E-ISAC aims to have seven members signed up by the end of 2016, and, assuming the 2016 pilot is successful, another 10 members sign up by the end of 2017.

### **Events and Outreach**

#### Grid Security Exercises

Since 2011, NERC has sponsored a series of biennial grid security exercises (GridEx). These geographically distributed exercises are designed to exercise the electricity sector's crisis response to simulated coordinated cybersecurity and physical security threats and incidents, to strengthen utilities' crisis response functions, and to provide input for lessons learned. GridEx III, in November 2015, consisted of a two-day grid-focused operational exercise for participants across North America and a half-day tabletop discussion for executives. The E-ISAC manages the program and collects industry information during and after the exercise subject to existing data collection policies. During the exercise, E-ISAC watch and analysis staff exercise the E-ISAC mission and share severe crisis information sharing and analysis towards mitigating the threats and attacks. Lessons learned and recommendations are turned over to groups like NERC's Board of Trustees and CIPC and to the ESCC for consideration and coordination between industry and government stakeholders. GridEx IV is scheduled for November 15-16, 2017.

#### Grid Security Conferences

Since 2011, NERC has sponsored a series of annual grid security conferences (GridSecCon). These conferences bring together industry and government subject matter experts on cyber, physical and operations technology threats and solutions, with training sessions and classified or official use briefs on topics vital to grid security. The E-ISAC provides expertise and gathers appropriate speakers, panelists and training providers. GridSecCon 2016 is scheduled for October 18-21 in Quebec, Canada, with the 2017 location and dates TBD.

#### Intelligence Reporting Services

E-ISAC analytic personnel maintain a detailed understanding of emerging vulnerabilities and threats within the broad industrial control systems community, as well as within the more focused BES community. To support this intelligence role, the E-ISAC budget includes the costs for intelligence services from a specialized security information service providers that focuses closely on the electricity subsector. This service gives E-ISAC staff increased understanding of continuing trends, breaking news, and implications to the BES, which they utilize to keep registered entities informed of emerging BES risks through immediate notifications and portal security postings.

The total budgeted Consultants & Contracts expense for the E-ISAC for 2017 is approximately \$6.8 million, an increase of \$237k from the 2016 budget. Exhibit C lists the components and amounts of the 2016 and

2017 Consultants & Contracts budgets for the E-ISAC. Approximately 5.8M of the 2017 budgeted amount is for CRISP, which is flat compare the 2016 budget. The remaining \$900k budgeted for 2017 is for other E-ISAC activities, an increase of \$152k from the 2016 budget.

<b>Statement of Activities and Fixed Assets Expenditures</b>					
<b>2016 Budget &amp; Projection and 2017 Budget</b>					
<b>E-ISAC</b>					
	<b>2016 Budget</b>	<b>2016 Projection</b>	<b>2016 Projection v 2016 Budget Over(Under)</b>	<b>2017 Budget</b>	<b>2017 Budget v 2016 Budget Over(Under)</b>
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 9,636,756	9,636,756	\$ (0)	\$ 11,270,705	\$ 1,633,948
Assessment Stabilization Reserve - Penalties	229,563	229,563	0	183,698	(45,865)
<b>Total NERC Funding</b>	<b>\$ 9,866,319</b>	<b>\$ 9,866,319</b>	<b>\$ (0)</b>	<b>\$ 11,454,403</b>	<b>\$ 1,588,084</b>
Third-Party Funding (CRISP)	6,830,738	7,335,757	505,019	6,990,447	159,709
Workshops	70,000	70,000	-	70,000	-
Interest	468	-	(468)	491	24
<b>Total Funding (A)</b>	<b>\$ 16,767,525</b>	<b>\$ 17,272,076</b>	<b>\$ 504,551</b>	<b>\$ 18,515,341</b>	<b>\$ 1,747,816</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 3,373,066	\$ 3,242,857	\$ (130,209)	\$ 3,417,398	\$ 44,332
Payroll Taxes	208,610	193,941	(14,668)	204,023	(4,587)
Benefits	345,260	315,363	(29,897)	397,467	52,207
Retirement Costs	366,723	351,531	(15,192)	363,482	(3,241)
<b>Total Personnel Expenses</b>	<b>\$ 4,293,659</b>	<b>\$ 4,103,693</b>	<b>\$ (189,966)</b>	<b>\$ 4,382,370</b>	<b>\$ 88,711</b>
<b>Meeting Expenses</b>					
Meetings	\$ 230,000	\$ 229,000	\$ (1,000)	\$ 230,000	\$ -
Travel	256,488	237,455	(19,032)	256,488	-
Conference Calls	22,000	23,000	1,000	6,710	(15,290)
<b>Total Meeting Expenses</b>	<b>\$ 508,488</b>	<b>\$ 489,455</b>	<b>\$ (19,032)</b>	<b>\$ 493,198</b>	<b>\$ (15,290)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 6,551,929	\$ 7,579,159	\$ 1,027,230	\$ 6,788,429	\$ 236,500
Office Rent	-	\$ -	-	-	-
Office Costs	392,285	\$ 296,103	(96,182)	431,895	39,610
Professional Services	175,000	\$ 175,000	-	175,000	-
Miscellaneous	500	\$ 500	-	500	-
Depreciation	43,489	\$ 45,998	2,509	5,297	(38,192)
<b>Total Operating Expenses</b>	<b>\$ 7,163,203</b>	<b>\$ 8,096,760</b>	<b>\$ 933,557</b>	<b>\$ 7,401,121</b>	<b>\$ 237,919</b>
<b>Total Direct Expenses</b>	<b>\$ 11,965,349</b>	<b>\$ 12,689,908</b>	<b>\$ 724,559</b>	<b>\$ 12,276,689</b>	<b>\$ 311,340</b>
<b>Indirect Expenses</b>	<b>\$ 4,450,914</b>	<b>\$ 4,601,898</b>	<b>\$ 150,984</b>	<b>\$ 4,810,185</b>	<b>\$ 359,271</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 16,416,263</b>	<b>\$ 17,291,806</b>	<b>\$ 875,543</b>	<b>\$ 17,086,873</b>	<b>\$ 670,610</b>
<b>Change in Assets</b>	<b>\$ 351,262</b>	<b>\$ (19,730)</b>	<b>\$ (370,992)</b>	<b>\$ 1,428,467</b>	<b>\$ 1,077,205</b>
<b>Fixed Assets</b>					
Depreciation	(43,489)	(45,998)	(2,509)	(5,297)	38,192
Computer & Software CapEx	100,000	111,722	11,722	1,100,000	1,000,000
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	41,958	41,958	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 294,751	\$ 248,373	(46,378)	333,765	39,014
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ 351,262</b>	<b>\$ 356,054</b>	<b>\$ 4,792</b>	<b>\$ 1,428,467</b>	<b>\$ 1,077,205</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 16,767,525</b>	<b>\$ 17,647,860</b>	<b>\$ 880,335</b>	<b>\$ 18,515,341</b>	<b>\$ 1,747,816</b>
<b>FTEs</b>	<b>18.90</b>	<b>18.95</b>	<b>0.05</b>	<b>19.74</b>	<b>0.84</b>

## Training, Education, and Operator Certification

Training, Education and Operator Certification (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	7.38	7.05	(0.33)
Direct Expenses	\$ 2,062,086	\$ 1,922,295	\$ (139,791)
Indirect Expenses	1,737,034	1,717,923	(19,111)
Other Non-Operating Expenses	-	-	-
Inc(Dec) in Fixed Assets	113,112	117,283	4,171
TOTAL BUDGET	\$ 3,912,231	\$ 3,757,501	\$ (154,731)

### Background and Scope

NERC's Training and Education Program provides oversight and coordination of the delivery of training programs that support the ERO's statutory responsibilities. This program provides training to NERC and Regional Entity staff members. It also provides training and education to industry participants on the requirements of reliability standards and the compliance monitoring and enforcement process. Further, this program provides training to industry participants on NERC's reliability standards development process, thereby helping to support the more efficient and effective development of mandatory reliability standards. The Training and Education Program supports NERC's responsibilities to develop, adopt, and obtain approval of reliability standards and to monitor, enforce, and achieve compliance with the mandatory standards. Section 901 of the NERC Rules of Procedure addresses the Training and Education Program's activities. The responsibility for training is shared among multiple departments at NERC.<sup>35</sup>

NERC's System Operator Certification program ensures that personnel operating the BES have the skills, training, and qualifications needed to operate the system reliably. NERC maintains the required credentials for over 6,000 system operators to work in system control centers across North America. NERC's system operator certification exam is designed to test specific knowledge of job skills and reliability standards. It also prepares operators for complying with requirements of reliability standards and appropriately operating the BES during normal and emergency operations. The System Operator Certification Program is governed by the Personnel Certification Governance Committee (PCGC), an industry group of operations experts, trainers, and supervisors. Certification exams are created by the Exam Working Group (EWG), an industry group of operations subject matter experts. Under the PCGC oversight, the EWG reviews and updates job tasks and certification exams. Section 600 of the NERC Rules of Procedure addresses the Personnel Certification activities in the area of Operator Certification.

Once an operator passes the certification exam, certification is maintained by completing NERC-approved continuing education courses and activities. The Personnel Subcommittee, composed of industry training experts, provides oversight of the Continuing Education program. Section 902 of the NERC Rules of Procedure addresses the Continuing Education Program's activities in these areas.

<sup>35</sup> The Human Resources department is also engaged in training initiatives.



## Key Efforts Underway

The ERO provides education for industry and ERO Enterprise staff personnel to support their understanding of key program areas. These areas include:

1. Risk-Based Compliance Monitoring and Enforcement
2. Standards and Compliance
3. Registration and Certification
4. Event Analysis, Cause Analysis, and Lessons Learned
5. Reliability Assessment and System Analysis
6. Continuing education for system operators
7. New System Operator Certification exams for each credential: Reliability Coordinator; Transmission Operator; Balancing and Interchange Operator; and Balancing, Interchange and Transmission Operator.

## 2017 Goals and Deliverables

In response to stakeholder and Regional Entity feedback, training and education opportunities will be further expanded and focused for registered entities, NERC staff, and Regional Entities. For registered entities, this training and education will focus on objectives related to NERC reliability standards, including standards compliance and emerging cyber-related issues that could affect BES reliability. For NERC and Regional Entity staff, the training and education will focus on consistent audit and investigation techniques and standards compliance reviews, including the risk-based compliance monitoring and enforcement and other improvements in compliance and enforcement practices. NERC will continue to offer training in auditor skills to promote continued development of auditing expertise. NERC will leverage IT systems to better deliver and share common training products and information with Regional Entities and registered entities. Other training will focus on knowledge and skill development in a number of key areas, including:

- Development and implementation of clear and technically sound reliability standards
- Key lessons learned and trends from events
- Identified themes from trending and common-cause analyses
- Effective compliance cultures with practices, procedures, and controls to address reliability risks
- Effective root, apparent, and common-cause analysis methods
- Quality improvement of registered entity self-reporting and self-certification
- Entity registration processes, issues, and alternatives
- Human performance fundamentals
- Developing and incorporating a systematic approach to ongoing training

NERC will continue to provide learning opportunities through workshops hosted by the Regional Entities. NERC will also host workshops, webinars, and training courses, as well as use vendors to develop training modules and supplement internal training resources. The responsibility for the subject matter expertise for much of the training is shared among multiple departments at NERC. The Training and Education group will provide coordination and synchronization efforts for shared NERC and ERO training responsibilities in addition to advancing and improving the skills of NERC's operating staff. NERC's Human Resources department will continue to budget and manage the delivery of more traditional corporate employee

training and continuing education programs in concert with the coordination and synchronizing efforts of the Training and Education group.

As part of the System Operator Certification exam development cycle, the results of the 2015 job task analysis (JTA) is the baseline for the upcoming set of exams. The EWG will continue to analyze new items and develop a cut score for the pending 2018 exams.

Key deliverables for the System Operator Certification Program:

- Complete analysis of exam Item Bank
- Implementation of Linear On the Fly (LOFT) testing for all exams

NERC will continue to work with industry stakeholders and the exam development vendor to create certification exams that will promote reliability of the North American BPS.

The Continuing Education (CE) program will evaluate and revise the current program criteria as reflected in the program manual. The evaluation will consider the growth and maturation of industry training programs as well as ongoing research in the area of adult learning to ensure the CE program continues to foster improvement of training and promotes quality in training programs.

## **Resource Requirements**

### **Personnel**

No additional personnel are proposed for this area in 2017. The small reduction in budgeted FTE is due to a slight reduction in FTEs supporting the Operator Certification Program.

### **Contractor Expenses**

The total proposed consulting and contractor budget is approximately \$95k lower in 2017 than the 2016 budget.

Further detail in support of the proposed 2017 contractor and consulting budget to support Training, Education, and Operator Certification is set forth in Exhibit C, which includes a comparison to 2016 budgeted amounts. The primary areas of contractor and consulting support include:

- Testing services to develop, administer, proctor, score, and support system operator certification exams across North America.
- Ongoing hosting and maintenance fees for the System Operator Certification and Continuing Education (SOCCED) database.
- Improvements to the SOCCED database.
- Supplemental support to Continuing Education Review Panel industry volunteers to review and audit over 2,500 individual learning activities and provider applications received each year.<sup>36</sup>
- Audit team leader soft skills training delivered by certified NERC staff using vendor-licensed materials to support effective dialogue and communications between audit teams and registered entities.

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<sup>36</sup> Review and approval of learning activity applications results in over 400,000 hours of continuing education per year for the industry's certified system operators.

- Vendor-supported BES technical training for select ERO staff, including compliance, technical and support staff.
- Risk-based compliance training by recognized specialists for NERC and Regional Entity staff to promote continued development of compliance staff.
- Web-based training development for ERO staff and industry, including standards applications, risk assessment training, industry human performance fundamentals, and BES events lessons learned.
- An ERO Enterprise learning management system to support scheduling, computer-based training delivery and record maintenance for ERO and select Enterprise staff.

Section A — 2017 Business Plan and Budget Program Area and Department Detail

Statement of Activities and Fixed Assets Expenditures 2016 Budget & Projection, and 2017 Budget					
TRAINING, EDUCATION and OPERATOR CERTIFICATION					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 1,742,146	\$ 1,742,146	\$ 0	\$ 1,822,089	\$ 79,944
Assessment Stabilization Reserve - Penalties	55,994	55,994	\$ -	43,738	(12,256)
<b>Total NERC Funding</b>	<b>\$ 1,798,139</b>	<b>\$ 1,798,139</b>	<b>\$ 0</b>	<b>\$ 1,865,827</b>	<b>\$ 67,687</b>
Third-Party Funding	-	-	-	-	-
Testing Fees	1,867,972	1,867,972	-	1,921,900	53,928
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	183	2,096	1,913	175	(7)
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 3,666,294</b>	<b>\$ 3,668,207</b>	<b>\$ 1,913</b>	<b>\$ 3,787,902</b>	<b>\$ 121,608</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 857,257	\$ 849,104	\$ (8,153)	\$ 852,091	\$ (5,166)
Payroll Taxes	64,345	65,293	948	62,727	(1,619)
Benefits	133,991	114,786	(19,205)	139,239	5,248
Retirement Costs	94,860	97,129	2,268	97,624	2,764
<b>Total Personnel Expenses</b>	<b>\$ 1,150,454</b>	<b>\$ 1,126,312</b>	<b>\$ (24,142)</b>	<b>\$ 1,151,681</b>	<b>\$ 1,227</b>
<b>Meeting Expenses</b>					
Meetings	\$ 80,000	\$ 55,000	\$ (25,000)	\$ 55,000	\$ (25,000)
Travel	21,139	19,900	(1,239)	21,139	-
Conference Calls	36,500	36,500	-	11,133	(25,368)
<b>Total Meeting Expenses</b>	<b>\$ 137,639</b>	<b>\$ 111,400</b>	<b>\$ (26,239)</b>	<b>\$ 87,272</b>	<b>\$ (50,368)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 675,800	\$ 731,460	\$ 55,660	\$ 580,600	\$ (95,200)
Office Rent	-	-	-	-	-
Office Costs	95,773	104,935	9,161	100,323	4,550
Professional Services	-	-	-	-	-
Miscellaneous	500	500	-	500	-
Depreciation	1,919	1,919	-	1,919	-
<b>Total Operating Expenses</b>	<b>\$ 773,992</b>	<b>\$ 838,814</b>	<b>\$ 64,821</b>	<b>\$ 683,342</b>	<b>\$ (90,650)</b>
<b>Total Direct Expenses</b>	<b>\$ 2,062,086</b>	<b>\$ 2,076,525</b>	<b>\$ 14,440</b>	<b>\$ 1,922,295</b>	<b>\$ (139,791)</b>
<b>Indirect Expenses</b>	<b>\$ 1,737,034</b>	<b>\$ 1,810,570</b>	<b>\$ 73,536</b>	<b>\$ 1,717,923</b>	<b>\$ (19,111)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 3,799,119</b>	<b>\$ 3,887,096</b>	<b>\$ 87,976</b>	<b>\$ 3,640,218</b>	<b>\$ (158,901)</b>
<b>Change in Assets</b>	<b>\$ (132,825)</b>	<b>\$ (218,888)</b>	<b>\$ (86,063)</b>	<b>\$ 147,684</b>	<b>\$ 280,510</b>
<b>Fixed Assets</b>					
Depreciation	(1,919)	(3,838)	-	(1,919)	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 115,031	\$ 103,360	(11,671)	119,202	4,171
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ 113,112</b>	<b>\$ 99,522</b>	<b>\$ (11,671)</b>	<b>\$ 117,283</b>	<b>\$ 4,171</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 3,912,231</b>	<b>\$ 3,986,618</b>	<b>\$ 76,305</b>	<b>\$ 3,757,501</b>	<b>\$ (154,731)</b>
<b>FTEs</b>	<b>7.38</b>	<b>7.39</b>	<b>0.01</b>	<b>7.05</b>	<b>(0.33)</b>

## Administrative Services

	Administrative Services (in whole dollars)					
	Direct Expenses and Fixed Assets			FTEs		
	2016 Budget	2017 Budget	Increase (Decrease)	2016 Budget	2017 Budget	Increase (Decrease)
General and Administrative	\$ 9,881,311	\$ 10,205,977	\$ 324,666	17.52	16.92	(0.60)
Legal and Regulatory	3,465,966	3,292,379	(173,587)	12.22	11.28	(0.94)
Information Technology	12,156,674	12,480,846	324,171	22.13	23.27	1.14
Human Resources	1,510,177	1,608,583	98,406	2.77	2.82	0.05
Finance and Accounting	3,428,307	3,827,050	398,743	16.60	15.04	(1.56)
<b>Total Administrative Services</b>	<b>\$ 30,442,435</b>	<b>\$ 31,414,834</b>	<b>\$ 972,399</b>	<b>71.23</b>	<b>69.33</b>	<b>-1.91</b>

### Program Scope and Functional Description

NERC's Administrative Services area includes the budget for all business and administrative functions of the organization, including (1) technical committees and member forums; (2) General and Administrative, which includes Board fees and expenses, the president and chief executive officer (CEO), chief reliability officer (CRO) and support staff, communications, external affairs and governmental relations, and office rent; (3) Legal and Regulatory; (4) Information Technology; (5) Human Resources; (6) Finance and Accounting; and (7) other general administrative expenses necessary to support program area activities. These functions are necessary to the existence and functioning of the organization and support the performance of NERC's ERO statutory activities. The costs of the Administrative Services functions are allocated to the five statutory programs as indirect expenses. The resource requirements and comparative budget information for each of these functions are described below.

#### Technical Committees and Members' Forum Program

While NERC management and staff will continue to interact with and support numerous reliability-related forums (e.g., the North American Transmission Forum and Generator Forum), NERC's 2017 budget does not contain specific funding for any forum activities.

## General and Administrative

### Background and Scope

The General and Administrative area is responsible for the administration and general management of the organization. Expenses allocated in this area include office rent; personnel and related costs of the CEO, the CRO, the CEO's executive assistant, communications, external affairs and government relations staff, and costs related to the Board. No additional personnel are budgeted for 2017 beyond current staffing. The slight reduction in FTEs in the General and Administrative area is due to a lower vacancy rate used in 2017 compared to 2016.

The following table details the Board costs included in the total costs of the General and Administrative area.

Board of Trustee Expenses	Budget 2016	Projection 2016	Budget 2017	2017 v 2016 Budget	Variance %
<b>Meetings and Travel Expenses</b>					
Quarterly Board Meetings	\$ 244,000	\$ 244,000	\$ 244,000	\$ -	
Trustee Travel	150,000	150,000	150,000	-	
<b>Total Board of Trustees Meetings and Travel Expenses</b>	<b>\$ 394,000</b>	<b>\$ 394,000</b>	<b>\$ 394,000</b>	<b>\$ -</b>	
<b>Professional Services</b>					
Independent Trustee Fees	\$ 1,126,354	\$ 1,126,354	\$ 1,226,000	\$ 99,646	
Trustee Search Fees	100,000	100,000	100,000	-	
<b>Total Board of Trustee Professional Services Expenses</b>	<b>\$ 1,226,354</b>	<b>\$ 1,226,354</b>	<b>\$ 1,326,000</b>	<b>\$ 99,646</b>	<b>8.13%</b>
<b>Total Board of Trustee Expenses</b>	<b>\$ 1,620,354</b>	<b>\$ 1,620,354</b>	<b>\$ 1,720,000</b>	<b>\$ 99,646</b>	<b>6.15%</b>

## Legal and Regulatory

### Background and Scope

The Legal and Regulatory department's workload is derived from the following key NERC program areas: Compliance Analysis, Certification and Registration, Reliability Risk Management, Reliability Assessment and System Analysis, Performance Analysis, and Standards. In addition, the Legal and Regulatory department is also responsible for providing a wide range of legal support to the NERC management team regarding antitrust, corporate, commercial, insurance, contract, employment, real estate, copyright, tax, legislation, and other legal matters. The department also addresses legal and regulatory matters that arise in connection with the delegation agreements with the Regional Entities.

### Resource Requirements

Due to process improvements and increased efficiency, the number of FTEs allocated to the department was reduced in 2017 compared to 2016.

Outside law firms and consultants supporting this area are budgeted and tracked as Professional Services. The Professional Services budget for 2017 was reduced by approximately 25% compared to the 2016 budget.

## Information Technology

### Background and Scope

NERC's IT department plan includes capital and operating expenses required to support, build, configure, and enhance applications that serve registered entities, Regional Entities, and NERC staff. The plan also includes work related to ERO Enterprise data analysis, as well as ongoing NERC internal operations.

The focus of the 2017 – 2019 budget places a heavy emphasis on applications and data analytics designed to improve and enhance the efficiency and productivity of NERC and the Regional Entities, and support more consistent and streamlined interactions with registered entities. These investments will provide broad benefits across the ERO Enterprise in terms of the efficiency and effectiveness of operations and meeting our reliability goals. Additionally, by working to provide more services to the Regional Entities in terms of tools and systems, associated economies of scale will result in these initial investments providing increasing value across the ERO Enterprise in the years to come.

**The budget is broken down into four categories as follows:**

1. **ERO Enterprise New Functionality** – Items listed in this category are those items designed to add, enhance, or improve, capabilities for registered entities, Regional Entities, and NERC staff. This includes items such as Enterprise Reporting, data analytics and warehousing, the Misoperation Information Data Analysis System (MIDAS), User Management and Registration (UMR), and the Generating Availability Data System for Wind Turbine Generation (GADS Wind).
2. **ERO Enterprise Infrastructure & Support** – Items listed in this category are those infrastructure and support items required for applications used by registered entities, Regional Entities, and NERC staff. Items include The Events Analysis Management System (TEAMS), the Bulk Electric System Notification and Exception System tool (BESnet), the Standards Balloting System (SBS), the Reliability Coordinator Information System (RCIS), and numerous other applications.
3. **NERC New Functionality** – Items in this category are those items that enhance or improve the internal NERC infrastructure, such as Document Management, telephony, and audio visual.
4. **NERC Infrastructure & Support** – Items listed in this category are primarily those items required to maintain and run the internal office infrastructure, and support NERC staff operations. Items include server hardware and software licenses, network equipment, data and telecommunication circuits, and data storage, as well as office administrative applications (e.g., Microsoft Office) and user hardware such as laptops and peripherals.

A further discussion of each item is outlined below:

**ERO Enterprise New Functionality:**

As noted above, this category is primarily those applications or systems designed to improve or add capability to registered entities, Regional Entities, and NERC staff. Over the past two years, IT has been successful at deploying a number of new applications and functionality for the ERO Enterprise that have now moved into support. In 2017 and beyond, IT will continue that trend with a heavy focus on data and analytics.

- a. **Enterprise Reporting.** In 2015, IT was successful at providing Enterprise Reporting Phase 1 and 2. In the latter part of 2016, IT will bring generation performance data into the Enterprise Reporting system. In 2017 and subsequent budget planning years IT will focus on additional datasets, as well as increasing the analytical and data mining capabilities for the ERO Enterprise.
- b. **Entity Registration.** In 2016, IT began an effort to replace its existing “User Management Program” customer relationship management tool with one based on Microsoft Dynamics CRM (xRM). In 2017, that effort will be extended by integrating the compliance registration function into the xRM system, including implementation of the “common registration form.” This will result in a common registration system shared across the ERO Enterprise that provides a consistent user experience for registered entities.
- c. **Compliance Monitoring and Enforcement Process Tools.** IT will also work closely with the Regional Entities in 2017 to evaluate and implement strategic investments in tools that support the Compliance Monitoring and Enforcement Process. Items under consideration at this time include how NERC and the Regional Entities manage registered entity information (and how that information integrates with Enterprise Reporting to provide reliability risk analysis functionality), how Reliability Standards data is stored and maintained, and how best to support the various parts of the compliance and enforcement process (e.g., analysis of risk, development of implementation plans and audit schedules, actual compliance monitoring, and enforcement processing). Funding for any capital investments in new Enterprise Compliance and Monitoring

Tools will be subject to review and approval as part of the business plan and budget application to the year when such investments are proposed to be made.

- d. **Extranet Development** – NERC IT currently provides external collaboration function through the use of secure WebDAV folders and limited deployment of Microsoft SharePoint. In 2017, IT will develop a more robust implementation of SharePoint to provide better services and support for collaboration across the ERO Enterprise and with stakeholders.

**ERO Enterprise Infrastructure & Support:**

This line item primarily consists of items used by registered entities, Regional Entities, and NERC Staff. During 2015 and 2016, IT, worked closely with the Regional Entities to design and configure a number of ERO Enterprise applications, with a bias toward using Commercial-off-the-Shelf (COTS) technology whenever possible. Infrastructure and support for these COTS tools (such as SharePoint and the Dynamics xRM platform), as well as custom built applications developed in the past, require ongoing investment to maintain continuous operations. For many applications and systems, this includes the cost of maintaining development, quality assurance, and staging and production environments, which are required to ensure the security and operational integrity and stability of the multiple applications supported for the ERO Enterprise. These applications and systems are monitored, tested (including penetration and vulnerability testing), and maintained in a manner as to ensure the highest level of integrity, security, and availability to the roughly 4,000 users across North America.

In 2016, IT placed emphasis on ensuring the environment was configured in a manner consistent with enterprise best practices, ensuring the security and integrity of the environment while allowing ERO Enterprise users to obtain the information and resources required to perform various analyses. Ongoing support for applications such as TEAMS, MIDAS, SBS, the Reliability Analysis Data System (RADS), in addition to numerous legacy ERO Enterprise products, make up this portion of the IT budget.

**NERC New Functionality:**

Items included in this category are primarily those items designed to improve, enhance, or replace existing functionality for internal NERC staff and, generally speaking, are not consumed by ERO Enterprise clients.

- a. **Document Management Program and Intranet Enhancement** – During 2015 and 2016, NERC began implementation of a document management system, leveraging SharePoint 2013 as the foundational platform. The implementation of a document management program supports a number of important business requirements, including:
  - Ensuring proper classification and management of confidential information
  - Addressing a number of internal audit recommendations/mitigating corporate risk
  - Improving information access and search capabilities
  - Facilitating working group, team, and stakeholder collaboration
  - Supporting document retention policy and procedures
  - Simplifying document retrieval
  - Improving version control of documents
  - Improving workflow control (review and approval of documents)
  - Increasing efficiency and employee productivity

Two additional products were integrated as part of this effort: Gimmel Compliance Suite, an add-on to SharePoint, which enables robust records management capabilities, and Repstor Affinity, which enables offline visibility into content repositories via Microsoft Outlook. In



2016, NERC will implement document management for six program areas. In 2017, NERC will bring the remaining program areas into the document management program. The implementation of a document management program is a multi-year initiative designed to greatly reduce the manual and labor-intensive effort of managing thousands of documents by streamlining the storage, security, versioning, data classification, and archiving of NERC information.

- b. **Audio Visual** – During 2016, IT will replace audit visual (AV) equipment in NERC’s primary conference rooms with a Cisco WebEx solution designed to enhance capability (e.g. video conferencing), in addition to reducing cost of travel, when possible. In 2017, as appropriate and approved, additional conference rooms will be refreshed with AV equipment.
- c. **IT Infrastructure Services** – During 2016, IT undertook an initiative to leverage qualified vendors for sourceable work, allowing IT to place a greater emphasis on ERO Enterprise projects. Network monitoring is one example of where NERC has been successful in moving items such as monitoring to a qualified vendor. While technically not “new” capability, implementation of this new approach to network monitoring allows NERC’s internal IT resources to focus on larger initiatives designed to serve the ERO Enterprise. IT will continue to pursue this strategy in 2017 as additional work is identified that can be efficiency and cost effectively assumed by qualified vendors.
- d. **Public Facing Website Improvements** - Over the past several years, NERC has made a number of updates to its outward-facing Internet presence, during which technology improvements are made and suggestions and requests are implemented. In 2017, IT will work with the company’s communications department to begin a project to review the information architecture of the NERC.com site and make changes with the goal of providing a more streamlined user experience.

### **NERC Infrastructure & Support**

As previously noted, NERC Infrastructure & Support are those items required to maintain and support the internal infrastructure for NERC staff. Items such as file servers, network equipment, storage, Microsoft Office (Word, Excel, PowerPoint, Email, SharePoint, etc.), along with security and telecommunications are required to ensure staff have the necessary tools and technology to perform their daily operational functions. Emphasis in 2017 and in the 2018 – 2019 planning cycle will continue to be placed on optimizing the amount of effort placed on NERC infrastructure and support in order to minimize spend on internal office steady state operations, allowing a larger portion of IT resources to focus on new ERO Enterprise functionality, as well as ERO Enterprise infrastructure and support. Examples of items included in internal operations are outlined below:

- a. **Compliance Reporting and Tracking System (CRATS)** – This compliance database is used to track violations, mitigation plans, and reporting required by NERC as the certified ERO. The compliance database has additional modules, such as the Standards, Technical Feasibility Exceptions (TFEs), and Registration module, which contains a list of all registered entities. Funding requirements include ongoing maintenance and enhancements to the CRATS compliance tools.
- b. **Meeting Manager, ERO Membership, RCIS, Central Repository of Curtailment Events (CRC)** – NERC maintains a number of legacy applications. Many of the legacy applications were developed and implemented five to ten years ago and are unable to benefit from contemporary application development. Some of these applications may have to be completely rewritten, or moved to the xRM application platform, as IT was able to do with Application Broker, NERC MyAccount and UMP in 2016. Funding in 2017 is required for

ongoing maintenance and enhancements until the applications can be rewritten or moved to the xRM platform or, in some cases, potentially divested or transferred to industry support.

- c. **Quarterly Penetration and Vulnerability Testing All NERC Networks and Systems** – Expert consulting services to provide ongoing intrusion detection and vulnerability testing of the NERC public website and NERC’s network, applications, and systems, is an essential requirement of ongoing operations. NERC is subject to frequent intrusion attempts where external parties try to gain access to its systems and infrastructure. Any vulnerability identified is documented and provided to NERC IT for rapid remediation.
- d. **NERC Security Program** - NERC’s IT department performs a number of technology initiatives to ensure the security of the network and infrastructure. However, in order to continually improve security, a more holistic approach is required that implements technology improvements and constructs an overarching security program to ensure all aspects of security have been considered, including information classification, review of retention policies, and enforcement of security guidelines. During 2016, IT undertook an initiative to improve several processes and will continue to place a high emphasis on security over the coming years.

### **Robust Planning for New Capital Projects**

In connection with the 2016 business planning cycle, the company significantly improved its approach to evaluating potential capital investments in major enterprise software applications. The company has adopted an enterprise information technology investment planning methodology that ensures only projects with compelling and approved business cases are funded. The approval process uses four approval gates:

- A Business Unit Sponsor approval gate,
- A NERC VP/CTO approval gate,
- An ERO Technology Leadership Team (comprised of the NERC CEO and two Regional Entity CEOs) approval gate, and
- The full ERO-EMG (CEOs of NERC and each Regional Entities) approval gate.

This gated process provides the required rigor and discipline to ensure only high value enterprise IT investments are pursued. In addition, all Enterprise IT investments are subject to ongoing oversight by a subgroup consisting of four members of the Board’s Standards Oversight and Technology Committee. The company will continue to use this process for the 2017 – 2019 budget planning cycle.

TEAMS, the RADS, and the document management program are three examples of applications or programs for which investments were approved in 2016 using the new enterprise information technology investment planning methodology.

**TEAMS.** The TEAMS application provides integration of events data systems, while enabling a more efficient and effective method for event data collection, tracking, analysis and reporting. This enhances the ability of the ERO and stakeholders to identify and focus on significant and emerging reliability risks. This tool is used by NERC and the Regional Entities, providing a consistent experience for all ERO clients involved in the events analysis business process. The benefits provided by the TEAMS application streamline ERO Enterprise reliability data sources with an event data collection platform that is consistent with the event analysis process. Benefits include:

- **Improving Efficiency:** TEAMS helps ensure the reliability of the Bulk Power System by facilitating:

- The reporting of a BPS event
- The evaluation of BPS events
- The undertaking of appropriate levels of EA
- The generation of lessons learned
- The generation of reliability trend analysis
- **Managing Reliability Risk:** TEAMS enables the ERO Enterprise to integrate event reports with other reliability data sources and develop portfolios of risk information. This integration enables a more complete analysis into the cause of events, including transmission outages, generation trips, and load loss. With this analysis, the ERO Enterprise can better identify unplanned service interruptions and spotlight key areas for reliability improvement, with the ultimate goal of reducing the probability and reliability impact of future system events.
- **Fostering Collaboration:** Increased efficient and effective collaboration amongst NERC and the Regional Entities has resulted through the centralization and appropriately secure distribution of information across Regions (including EA results, trending analysis, and lessons learned), and the increased clarity and standardization of processes provided by the software solution.

**RADS.** The RADS provides for a more efficient method for NERC to complete seasonal and long-term reliability assessment reports. Specifically, RADS automates the importing of data, provides for ad hoc and pre-defined reporting, and provides access to historical data. In fact, a recent benchmarking exercise indicated that RADS enabled a routine data import process to be completed in 22 minutes as compared to prior manual work efforts totaling roughly 80 hours. This process improvement has allowed NERC's analysts and engineers to spend more time analyzing reliability and less time importing and managing data. Additional benefits of RADS include:

- **Management of Reliability Risk.** By allowing analysts to refocus their efforts on higher value work, the implementation of RADS is resulting in more and better analyses of future conditions and risks.
- **Improved Quality.** Part of the reason for the respected status of the ERO and its assessments conducted and published by the ERO is the high level of quality embodied within its documents. If factual errors were introduced into NERC's reliability assessments, such errors would considerably diminish the ERO's credibility. By centralizing information and reducing the number of manual interventions required to manage data, the RADS aids in ensuring that the information contained within NERC assessments is accurate and correct.
- **Increased Security.** NERC has obligations to ensure the integrity and security of assessment data. Having a central place to manage and store assessment data has reduced the number of instances of confidential proprietary data being handled and managed at NERC. As such, the risk of accidental inappropriate disclosure has been reduced.

**Document Management.** As a third example, as described previously, NERC commenced implementation of a document management program during 2015 and 2016. The evaluation of the cost-benefit of the document management program indicated tremendous value to the organization, primarily in terms of addressing the business requirements set forth above. The cost benefit analysis of this project also demonstrated that NERC's projected average cost per user is

comparable to market. In addition, assuming achievement of modest personnel efficiency gains (between 2-7 percent) from using the new system, the program will generate value in terms of increased resource availability well above anticipated costs. The project was reviewed in depth with the board of trustee's Standards Oversight and Technology Committee and Finance and Audit Committee, which, together with the Board, authorized reserve funding at their May, 2015 meetings to commence initiation of the program.

For all three of these projects, NERC's planning process and associated approval gates resulted in thorough review of both costs and benefits of the proposed technology projects prior to moving forward. As the planning process has matured, NERC has also begun to analyze potential benefits to the Regional Entities when considering the benefits from potential IT investments. In the Enterprise Reporting – GADS business case brought before the ERO Technology Leadership Team in April, NERC included estimates of productivity gain in terms of both NERC staff and the staff of the Regional Entities. NERC estimated that across the ERO Enterprise, in the first year of operation, 32 Regional Entity employees would save roughly 10 hours of time per employee and 42 NERC employees would save roughly 29 hours of time per employee, with benefits increasing in future years as users became more familiar with the system and as the system was expanded with additional data. This saved time represents additional value that those employees can provide by not having to manage data or duplicate work. Beyond this analysis, the business case considered less quantifiable benefits to both NERC and the Regional Entities in terms of supporting the ERO Enterprise Strategic Plan and reducing reliability risk.

As the planning process continues to develop and mature, NERC will continue to expand incorporation of regional staffing and budget impacts into its business case analysis, as well as identifying economies of scale, efficiency improvements, and enhancements to reliability through IT investment.

## **Resource Requirements**

### **Personnel**

The increase in Information Technology FTEs is due to the reallocation of personnel to strengthen project management oversight over NERC and ERO Enterprise software application development and implementation.

### **Contract and Consulting Resources to Support Internal Operations**

The 2017 budgeted amounts are set forth in Exhibit C, with a comparison to 2016 budgeted amounts. The increase in the 2017 budget compared to 2016 is primarily due to ongoing maintenance costs for recently added ERO Enterprise applications and costs for the document management program.

### **2017 IT Operating Expenses**

A summary of the major categories of IT Operating Expenses are set forth in the following table:

Office Costs	Budget 2016	Budget 2017	Variance
Telephone	\$ 225,000	\$ 230,000	\$ 5,000
Telephone - Answering Service	3,000	2,500	(500)
Internet	350,000	358,920	8,920
Computer Supplies and Maintenance			
Computers	25,000	25,000	-
Computer Supplies	96,100	98,100	2,000
Maintenance & Service Agreements	1,365,295	1,706,088	340,793
Software	59,000	59,000	-
Subscription and Publications	108,300	108,300	
Dues	2,500	2,500	
Express Shipping	5,000	5,000	-
<b>Total Office Costs</b>	<b>\$ 2,239,195</b>	<b>\$ 2,595,408</b>	<b>\$ 356,213</b>

### Telephone Expenses

Office telephone costs are items associated with cellular phone, mobile laptop cellular air card, Session Internet Protocol (SIP) data circuits, and conference calling expenses.

### Internet Expense

Internet expense is comprised of data circuits, and redundant capability in the event of primary service provider failure.

### Computer Supplies and Maintenance

Computers (expensed) are lower cost computers, such as desktop computers or iPads that do not meet the criteria to be considered a capital expenditure. Computer supplies are expense items required for infrastructure support. Maintenance and service agreements are required to support internal and external access to routers, switches, firewalls, intrusion protection, file servers, audiovisual equipment, storage area networks, data backup services, network and security monitoring, co-location data center services, video conferencing, digital certificates, and development and virtualization software. Service agreements related to the co-location data center, offsite backup of data, conference calling, and network and security monitoring comprise a large portion of the maintenance and service agreements budget.

### Software

Tools such as Adobe Creativity Suite, remote support tools, and various other IT support tools are included under this line item. The tools are primarily used for NERC infrastructure purposes to support and manage the application, server, and network environment.

**2017 IT Fixed Asset (Capital) Expenses**

The following table presents a summary of NERC’s IT 2017 fixed asset (capital) budget<sup>37</sup> compared to the 2016 budget:

<b>IT CAPITAL BUDGET</b>	<b>2016</b>	<b>2017</b>
ERO Application Development	\$ 1,500,000	\$ 700,000
Document Management Program	465,000	335,000
Hardware (Storage, servers, laptops)	955,000	991,000
Other Equipment	535,000	885,000
Disaster Recovery	200,000	150,000
NERC Software licenses	256,000	211,000
<b>Total IT Capital Budget</b>	<b>\$ 3,911,000</b>	<b>\$ 3,272,000</b>

As in prior years, the goal of the fixed assets program, for the 2017–2019 planning period is to provide access, visibility, and analysis of data from many different sources; this requires ongoing investments in hardware, software, and associated tools. The overarching theme is to securely gather, analyze, and maintain data across the ERO Enterprise to support ERO operations. Adding the capability to centralize and mine data—in addition to foundational elements such as the Microsoft xRM application, SharePoint 2013, and disaster recovery and enhanced security—sets the stage for vastly improved reporting and business intelligence. It also allows the capability for collaboration and sharing of information vital to the ERO’s mission.

In addition to the investments described in the preceding paragraph to support efficiency and consistency across the Enterprise, the 2017 budget also includes the cost of, network assets, software, servers, laptops, and other hardware to support daily operations.

**Human Resources****Background and Scope**

Human Resources (HR) manages all of NERC’s HR functions, including staffing, benefits administration, employee relations, performance and compensation management, and training and development. Management has implemented a robust, objective, and auditable performance management system to track corporate and individual performance against pre-established goals, objectives, and measures. Each year NERC continues to refine and improve this system.

**Leadership, Management, and Professional and Administrative Staff Training and Development**

As part of the 3-year ERO Enterprise Strategic Plan to engage and retain highly qualified talent with the leadership and technical skills to support the mission, NERC’s executives, managers, and professional and support staff participate in ongoing training and development to improve competencies critical to success and succession planning for critical roles. As such, NERC will continue to invest in learning opportunities in several areas. First, HR will continue to host and optimize an e-learning platform, SkillSoft, to provide staff resources for improving soft and technical skills. Second, HR will provide broad-based staff development training through real-world access via tours of and training on control centers, electric substations, and power generation plants. Finally, staff will have access to additional education, including but not limited to degree-oriented university education, pursuit of specialized certifications, and other in-

<sup>37</sup> NERC’s total 2017 fixed asset (capital) budget is \$4,372,000, and includes \$1.1M budgeted in E-ISAC for portal enhancements and other costs related to CRISP.

house and external training that provides essential competencies and skills development that will lead to improved organization performance.

### **Compensation Consulting**

Consultants are periodically retained to examine appropriate compensation based on current market data. This ensures that decisions affecting compensation are made in light of the current market climate and that qualified employees are attracted and retained within a defined total remuneration range. NERC also periodically retains compensation subject matter experts to perform periodic assessments of the BOT compensation model to ensure alignment with market practices.

### **Surveys**

NERC periodically retains a vendor to conduct Board of Trustees and committee effectiveness surveys to identify improvement opportunities. HR will also launch additional surveys as appropriate, based on business needs, which may include periodic internal climate surveys.

### **Succession Planning**

Minimizing disruption of knowledge, skill, and experience of key staff is critical to the company's success. HR works with senior management to identify essential roles and develop strategies to build succession and contingency plans for any loss of staff.

### **HR Products and Services Automation**

HR will continue to operate, maintain, and investigate investment in additional electronic platforms for HR support services that reduce administrative burden and improve employee access to tools and information.

## **Resource Requirements**

### **Personnel**

The slight increase in FTEs is due a lower vacancy rate in 2017 compared to 2016.

### **Contractor Expenses**

Contractor and consultant expenses are set forth in additional detail in Exhibit C. The increase over 2016 is primarily due to increased investments for additional leadership and staff training.

### **Miscellaneous Expenses**

Miscellaneous expenses include community responsibility and employee engagement, the year-end employee appreciation event, and employee rewards and recognition.

## **Finance and Accounting**

### **Background and Scope**

NERC's Finance and Accounting department manages all finance and accounting functions, including employee payroll, 401(k), 457(b), and 457(f) plans, travel and expense reporting, monthly financial reporting, sales and use tax, meeting and events planning and services, insurance, internal auditing, and facilities management. This area also holds primary responsibility for the development of the annual business plan and budget, as well as NERC's proposed ERO risk management framework. Over the past several years, NERC's Finance and Accounting department implemented additional policies, procedures, and controls governing day-to-day practices including contract and personnel procurements, meetings, conference planning and travel, expense reimbursement, and back office systems and procedures. The

department will continue to refine, improve and, where necessary, implement additional procedures and controls.

**Resource Requirements**

**Personnel**

The reduction in FTEs is due to a reallocation of resources to other departments in 2016.

**Contractor Expenses**

\$457k is budgeted for outside contractor and consulting support, representing an increase compared to the 2016 budget. These costs are primarily for outside professional support for auditors to support various risk management and internal control and audit initiatives, as well as to provide finance and accounting support.



Section A — 2017 Business Plan and Budget Program Area and Department Detail

Statement of Activities and Fixed Assets Expenditures 2016 Budget & Projection, and 2017 Budget						
ADMINISTRATIVE SERVICES						
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)	
<b>Funding</b>						
<b>ERO Funding</b>						
NERC Assessments	\$ 561,427	\$ 626,997	\$ 65,570	\$ 519,083	\$ (42,344)	
Assessment Stabilization Reserve -	-	-	-	-	-	
<b>Total NERC Funding</b>	<b>\$ 561,427</b>	<b>\$ 626,997</b>	<b>\$ 65,570</b>	<b>\$ 519,083</b>	<b>\$ (42,344)</b>	
Third-Party Funding	-	-	-	-	-	
Testing Fees	-	-	-	-	-	
Services & Software	-	-	-	-	-	
Workshops	-	-	-	-	-	
Interest	-	-	-	-	-	
Miscellaneous	-	-	-	-	-	
<b>Total Funding (A)</b>	<b>\$ 561,427</b>	<b>\$ 626,997</b>	<b>\$ 65,570</b>	<b>\$ 519,083</b>	<b>\$ (42,344)</b>	
<b>Expenses</b>						
<b>Personnel Expenses</b>						
Salaries	\$ 11,054,511	\$ 11,050,223	\$ (4,288)	\$ 11,858,590	\$ 804,078	
Payroll Taxes	662,269	656,558	(5,711)	669,299	7,030	
Benefits	1,369,805	1,348,538	(21,267)	1,333,443	(36,362)	
Retirement Costs	1,024,669	1,101,571	76,902	1,073,642	48,973	
<b>Total Personnel Expenses</b>	<b>\$ 14,111,254</b>	<b>\$ 14,156,890</b>	<b>\$ 45,636</b>	<b>\$ 14,934,974</b>	<b>\$ 823,720</b>	
<b>Meeting Expenses</b>						
Meetings	\$ 315,000	\$ 351,681	\$ 36,681	\$ 350,000	\$ 35,000	
Travel	653,945	651,240	(2,705)	653,945	-	
Conference Calls	63,300	62,110	(1,190)	19,307	(43,994)	
<b>Total Meeting Expenses</b>	<b>\$ 1,032,245</b>	<b>\$ 1,065,031</b>	<b>\$ 32,786</b>	<b>\$ 1,023,251</b>	<b>\$ (8,994)</b>	
<b>Operating Expenses</b>						
Consultants & Contracts	\$ 3,036,671	\$ 2,585,495	\$ (451,176)	\$ 3,359,787	\$ 323,116	
Office Rent	3,054,287	2,987,777	(66,510)	3,117,009	62,722	
Office Costs	2,920,678	2,713,155	(207,523)	3,275,952	355,274	
Professional Services	2,334,300	1,961,280	(373,020)	2,293,135	(41,165)	
Miscellaneous	32,000	32,000	-	32,000	-	
Depreciation	1,920,234	1,751,253	(168,981)	1,233,650	(686,584)	
<b>Total Operating Expenses</b>	<b>\$ 13,298,171</b>	<b>\$ 12,030,960</b>	<b>\$ (1,267,210)</b>	<b>\$ 13,311,534</b>	<b>\$ 13,363</b>	
<b>Total Direct Expenses</b>	<b>\$ 28,441,669</b>	<b>\$ 27,252,881</b>	<b>\$ (1,188,788)</b>	<b>\$ 29,269,759</b>	<b>\$ 828,090</b>	
<b>Indirect Expenses</b>	<b>\$ (28,551,669)</b>	<b>\$ (27,323,087)</b>	<b>\$ 1,228,582</b>	<b>\$ (29,376,484)</b>	<b>\$ (824,815)</b>	
<b>Other Non-Operating Expenses</b>	<b>\$ 110,000</b>	<b>\$ 70,206</b>	<b>\$ (39,794)</b>	<b>\$ 106,725</b>	<b>\$ (3,275)</b>	
<b>Total Expenses (B)</b>	<b>\$ -</b>	<b>\$ 0</b>	<b>\$ (0)</b>	<b>\$ -</b>	<b>\$ 0</b>	
<b>Change in Assets</b>	<b>\$ 561,427</b>	<b>\$ 626,997</b>	<b>\$ 65,570</b>	<b>\$ 519,083</b>	<b>\$ (42,344)</b>	
<b>Fixed Assets</b>						
Depreciation	(1,920,234)	(1,751,253)	168,981	(1,233,650)	686,584	
Computer & Software CapEx	2,347,000	2,749,562	402,562	1,472,000	(875,000)	
Furniture & Fixtures CapEx	-	14,611	14,611	-	-	
Equipment CapEx	1,464,000	365,000	(1,099,000)	1,800,000	336,000	
Leasehold Improvements	-	566,361	566,361	-	-	
Allocation of Fixed Assets	(1,890,766)	(1,944,281)	(53,515)	(2,038,350)	(147,584)	
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (0)</b>	<b>\$ -</b>	<b>\$ (0)</b>	
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ -</b>	<b>\$ 0</b>	<b>\$ (0)</b>	<b>\$ -</b>	<b>\$ 0</b>	
<b>FTEs</b>	<b>71.23</b>	<b>73.62</b>	<b>2.39</b>	<b>69.33</b>	<b>(1.91)</b>	

## Section B — Supplemental Financial Information

### Breakdown by Statement of Activity Sections

The following detailed schedules support the consolidated Statement of Activities. All significant variances were described by program area in the preceding pages.

**Table B-1**  
**Operating Reserve and Assessment Analysis**

Operating Reserve and Assessment Analysis						
Statutory						
	Total Reserves	Future Obligations Reserve <sup>1</sup>	Operating Contingency Reserve	Operator Certification	CRISP	Assessment Stabilization Reserve
<b>Beginning Operating Reserves Balance - 1/1/2016</b>	<b>8,346,782</b>	<b>3,431,795</b>	<b>1,213,419</b>	<b>930,568</b>	<b>500,000</b>	<b>2,271,000</b>
<b>Generation or (Use) from 2016 Operations</b>						
From 2016 budgeted operations	862,799		1,109,651	(246,852)		
From 2016 approved use of reserves	(1,117,056)	(320,218)	(796,838)			
Proceeds from financing activities (non-current portion only) <sup>2</sup>	1,256,042		1,256,042			
Debt Service <sup>3</sup>	(1,055,000)		(1,055,000)			
Other adjustments to reserves <sup>4</sup>	(464,868)	(464,868)	-			
<b>Projected Operating Reserves - 12/31/16</b>	<b>7,828,700</b>	<b>2,646,709</b>	<b>1,727,275</b>	<b>683,716</b>	<b>500,000</b>	<b>2,271,000</b>
<b>Required Working Capital and Operating Reserves - 12/31/17</b> <sup>5</sup>	<b>7,759,102</b>	2,646,709	2,227,275	714,118	500,000	1,671,000
Adjustment in funding to achieve required reserve balance	530,402	-	500,000	30,402	-	
Penalty sanctions received 7/1/2015 - 6/30/2016 (See Table B-2)	500,000					500,000
Less: Assessment Stabilization Reserve Release - Penalties	(1,100,000)					(1,100,000)
<b>Total Adjustments to Reserves</b>	<b>(69,598)</b>	-	<b>500,000</b>	<b>30,402</b>	-	<b>(600,000)</b>
<b>Assessment Reconciliation</b>						
2017 Expenses and Capital Expenditures	69,602,175					
Less: Assessment Stabilization Reserve Release - Penalties	(1,100,000)					
Adjustment in funding to achieve required reserve balance	530,402					
Less: Other Funding Sources	(9,195,347)					
Less: Proceeds from financing activities (non-current only)	(966,667)					
Plus: debt service	985,750					
<b>2017 NERC Assessment</b>	<b>59,856,314</b>					

<sup>1</sup>As further explained in the discussion of the Working Capital Reserve amount in Exhibit E, the Future Obligations Reserve offsets future, non-current liabilities. The calculation of Working Capital and Operating Reserve balances per 2015 audited financials and as projected for 2016 and 2017 is included with the Statements of Financial Position on page 91.

<sup>2</sup>Proceeds from financing amount is equal to two-thirds of the amount financed or to be financed in the year.

<sup>3</sup>Debt Service amount is equal to Annual Payments for Debt Service less Interest Expense. See Exhibit D.

<sup>4</sup>Represents transactions recorded only on the Statement of Financial Position (balance sheet) and do not impact the Statement of Activities (income statement), including recording of capitalized leases, amortization of future obligations and funding the 457f plan.

<sup>5</sup>On August 11, 2016, the NERC Board of Trustees approved the Working Capital and Operating Reserve Balance at 12/31/17.

## Table B-2 Penalties

### Penalty Sanctions

The *NERC Policy – Accounting, Financial Statement and Budgetary Treatment of Penalties Imposed and Received for Violations of Reliability Standard*, as well as Section 1107.2 of the Rules of Procedure, specify that Penalty monies received by NERC during the 12 months ended June 30 are to be used in the subsequent budget year to offset assessments. In 2015, the NERC Board approved an updated Working Capital and Operating Reserves Policy that was approved by FERC. This updated Policy allows NERC, with Board and FERC approval pursuant to Section 1107.4 of the Rules of Procedure, to place penalty funds into a new Assessment Stabilization Reserve for use in future years to offset assessments. For the 2017 budget, NERC proposes to deposit \$500,000 of penalty funds received during the 12 months ended June 30, 2016 into the Assessment Stabilization Reserve, resulting in a balance of \$2,771,000 on January 1, 2017. NERC further proposes that \$1,100,000 of those funds be used to offset assessments for the 2017 budget with the remaining \$1,671,000 held in the Assessment Stabilization Reserve for future assessment offsets.

All penalties received during the 12 month period ended June 30, 2016 are detailed below, including the amount and date received.

### Allocation Method

Penalty sanctions used to offset 2017 assessments have been allocated to the following statutory programs to reduce assessments: Reliability Standards, Compliance Assurance, Compliance Analysis and Certification, Compliance Enforcement, Reliability Assessments and System Analysis, Performance Analysis, Training and Education, Situation Awareness, Event Analysis, and E-ISAC. Penalty sanctions are allocated based on the number of FTEs in the program divided by the aggregate total FTEs in the programs receiving the allocation. In addition to the information noted below, an additional \$500,000 is expected in May 2017 related to an agreed-upon penalty settlement with WECC resulting from the September 2011 blackout.

Penalty Sanctions	Date Received	Amount Received
<b>Penalties received between 7/1/2015 and 6/30/2016</b>		
	May-16	\$ 500,000
		<u>\$ 500,000</u>
Penalties received prior to 6/30/2015, held in the assessment stabilization reserve		\$ 2,271,000
<b>Total penalties available on 1/1/2017 to offset assessments</b>		<u>\$ 2,771,000</u>
<b>Adjustments</b>		
Total penalties released to offset assessments in the 2017 Budget		(1,100,000)
<b>Total penalties held in Assessment Stabilization Reserve 12/31/2017</b>		<u>\$ 1,671,000</u>

## Table B-3 Outside Funding

Outside Funding Breakdown By Program (Excludes Penalty Sanction)	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget
<b>Reliability Standards</b>				
Workshops	\$ 105,000	\$ 105,000	\$ 105,000	\$ -
Interest Income Allocation	445	5,374	427	(18)
<b>Total</b>	<b>\$ 105,445</b>	<b>\$ 110,374</b>	<b>\$ 105,427</b>	<b>\$ (18)</b>
<b>Compliance Analysis, Registration and Certification</b>				
Interest Income Allocation	\$ 251	\$ 2,860	\$ 187	\$ (64)
<b>Total</b>	<b>\$ 251</b>	<b>\$ 2,860</b>	<b>\$ 187</b>	<b>\$ (64)</b>
<b>Compliance Assurance</b>				
Workshops	\$ -	\$ -	\$ -	\$ -
Interest Income Allocation	479	4,710	386	(93)
<b>Total</b>	<b>\$ 479</b>	<b>\$ 4,710</b>	<b>\$ 386</b>	<b>\$ (93)</b>
<b>Compliance Enforcement</b>				
Interest Income Allocation	\$ 302	\$ 3,682	\$ 327	\$ 25
<b>Total</b>	<b>\$ 302</b>	<b>\$ 3,682</b>	<b>\$ 327</b>	<b>\$ 25</b>
<b>Reliability Assessments and System Analysis</b>				
pc_GAR Software	\$ 50,000	\$ -	\$ 50,000	\$ -
Workshops	15,000	15,000	15,000	-
Interest Income Allocation	462	3,634	351	(111)
<b>Total</b>	<b>\$ 65,462</b>	<b>\$ 18,634</b>	<b>\$ 65,351</b>	<b>\$ (111)</b>
<b>Performance Analysis</b>				
Interest Income Allocation	\$ -	\$ 2,554	\$ 234	\$ 234
<b>Total</b>	<b>\$ -</b>	<b>\$ 2,554</b>	<b>\$ 234</b>	<b>\$ 234</b>
<b>Training and Education</b>				
Testing Fees and Certificate Renewals	\$ 1,267,972	\$ 1,267,972	\$ 1,321,900	\$ 53,928
CEH Fees	600,000	600,000	600,000	-
Interest Income Allocation	183	2,096	175	(7)
<b>Total</b>	<b>\$ 1,868,155</b>	<b>\$ 1,870,068</b>	<b>\$ 1,922,075</b>	<b>\$ 53,921</b>
<b>Event Analysis</b>				
Workshops	\$ 40,000	\$ 78,073	\$ 40,000	\$ -
Interest Income Allocation	274	2,918	281	7
<b>Total</b>	<b>\$ 40,274</b>	<b>\$ 80,991</b>	<b>\$ 40,281</b>	<b>\$ 7</b>
<b>Situation Awareness</b>				
Workshops	\$ -	\$ 1,128	\$ -	\$ -
Interest Income Allocation	137	1,816	140	3
<b>Total</b>	<b>\$ 137</b>	<b>\$ 2,944</b>	<b>\$ 140</b>	<b>\$ 3</b>
<b>E-ISAC</b>				
Third Party Funding (CRISP)	\$ 6,830,738	\$ 7,335,757	\$ 6,990,447	\$ 159,709
Workshops	70,000	70,000	70,000	-
Interest Income Allocation	468	6,254	491	24
<b>Total</b>	<b>\$ 6,901,206</b>	<b>\$ 7,412,011</b>	<b>\$ 7,060,938</b>	<b>\$ 159,732</b>

- Testing Fees and Certificate Renewals – The 2017 budget reflects prior year actual results and the anticipated number of tests to be taken in 2017.
- E-ISAC – The increase in third-party funding is due to the increase in NERC costs, which are funded equally by participants in CRISP and through assessments.

**Table B-4  
Personnel**

Personnel Expenses	Budget		Projection		Variance	
	2016	2016	2017	2017 Budget v 2016 Budget	Variance %	
<b>Total Salaries</b>	\$ 28,842,336	\$ 29,052,918	\$ 30,073,438	\$ 1,231,102	4.3%	
<b>Total Payroll Taxes</b>	1,871,367	1,830,724	1,847,130	(24,237)	-1.3%	
<b>Total Benefits</b>	3,579,280	3,390,190	3,643,806	64,526	1.8%	
<b>Total Retirement</b>	2,990,823	3,015,135	3,076,956	86,134	2.9%	
<b>Total Personnel Costs</b>	<u>\$ 37,283,807</u>	<u>\$ 37,288,967</u>	<u>\$ 38,641,331</u>	<u>\$ 1,357,525</u>	<u>3.6%</u>	
<b>FTEs</b>	192.47	145.02	189.88	(2.59)	-1.3%	
<b>Cost per FTE</b>						
Salaries	\$ 149,852	\$ 200,337	\$ 158,381	8,529	5.7%	
Payroll Taxes	9,723	12,624	9,728	5	0.1%	
Benefits	18,596	23,377	19,190	594	3.2%	
Retirement	15,539	20,791	16,205	666	4.3%	
<b>Total Cost per FTE</b>	<b>\$ 193,710</b>	<b>\$ 257,130</b>	<b>\$ 203,504</b>	<b>\$ 9,794</b>	<b>5.1%</b>	

- Salaries - Total Salaries expense is comprised of base salaries, incentive compensation, deferred compensation, employment agency fees and temporary office expenses. The 2017 budget for base salaries assumes a 3% increase over actual 2016 base salaries and is inclusive of market adjustments and promotions. Due to the addition of more senior staff in 2016, and the need to pay higher market-based compensation than previously budgeted to attract and retain employees, the actual average salary is higher than the 2016 budget, which causes the comparison of 2017 budget to 2016 budget to be higher than 3%. The 2017 budget for incentive compensation is based on historical actuals and is slightly higher as a percent of base salaries, 20.9% in 2017 compared to 19.5% in 2016. The 2017 budgets for deferred compensation, employment agency fees and temporary office expenses are generally consistent with 2016.
- Payroll taxes are decreasing based upon the 2016 projection and the reduction in total FTEs. While total Salaries expense is increasing, the maximum salary subject to FICA taxes limits the change in employer costs.
- Benefits are budgeted to increase based on the most recent market data as provided by NERC's insurance broker.
- There have been no changes to NERC's retirement plans. Retirement expenses are increasing at a higher rate consistent with the 3% increase in base salaries.

**Table B-5  
Meetings**

Meetings	Budget 2016	Projection 2016	Budget 2017	Variance	
				2017 Budget v 2016 Budget	Variance %
Meetings	\$ 1,096,500	\$ 1,194,500	\$ 1,071,500	\$ (25,000)	-2.28%
Travel	\$ 2,203,786	\$ 2,190,184	\$ 2,203,786	(0)	0.62%
Conference Calls	\$ 320,000	\$ 261,880	\$ 97,600	(222,400)	-62.73%
<b>Total Meetings</b>	<b>\$ 3,620,286</b>	<b>\$ 3,646,564</b>	<b>\$ 3,372,886</b>	<b>\$ (247,400)</b>	<b>-6.83%</b>

- The 2017 budget for Meetings expense in the Operator Certification Program is \$25.0k lower than the 2016 budget based upon prior year actual results.
- The 2017 budget for Conference Calls is \$222.4k, 69.5%, lower than 2016 based upon the planned execution of a contract with a new provider scheduled to occur in 2016. This reduction in Conference Calls expenses will offset an increase in maintenance costs associated with a new audio visual lease related to new equipment and associated service and maintenance agreements.

**Table B-6  
Consultants and Contracts**

**NOTE: This table has been replaced by Exhibit C, and is further discussed in the Executive Summary on page 13**

**Table B-7  
Rent**

Office Rent	Budget 2016	Projection 2016	Budget 2017	Variance	
				2017 Budget v 2016 Budget	Variance %
Office Rent	\$ 2,954,287	\$ 2,954,287	\$ 2,838,144	\$ (116,143)	-3.93%
Utilities	-	-	-	-	
Maintenance	100,000	270,000	278,866	178,866	178.87%
<b>Total Office Rent</b>	<b>\$ 3,054,287</b>	<b>\$ 3,224,287</b>	<b>\$ 3,117,009</b>	<b>\$ 62,722</b>	<b>2.05%</b>

- The decrease in Office Rent is due to the termination of the lease at NERC's former Washington, DC office.
- Maintenance costs at NERC offices increase year over year per the terms of the lease agreements. The 2016 projected expenses are significantly higher than the 2016 budget due to escalations that were not included in the budget and due to higher costs not covered by the lease agreements.

**Table B-8**  
**Office Costs**

Office Costs	Budget	Projection	Budget	Variance	Variance
	2016	2016	2017	2017 Budget v 2016 Budget	%
Telephone	\$ 548,596	\$ 410,053	\$ 539,737	\$ (8,859)	-1.61%
Telephone Answering Srv	3,000	3,355	2,500	(500)	-16.67%
Internet	375,900	369,021	383,366	7,466	1.99%
Office Supplies	173,800	177,392	194,000	20,200	11.62%
Computer Supplies and Maintenance	-	-	-	-	
Computers	25,000	26,000	25,000	-	0.00%
Computer Supplies	98,400	85,607	101,400	3,000	3.05%
Maintenance & Service Agreements	1,875,126	1,858,992	2,426,139	551,013	29.39%
Software	117,500	226,643	122,500	5,000	4.26%
Network Supplies	-	-	-	-	
Publications & Subscriptions	167,650	190,852	180,460	12,810	7.64%
Dues	48,050	63,165	49,316	1,266	2.64%
Postage	16,350	15,786	16,221	(129)	-0.79%
Express Shipping	28,200	17,405	28,216	16	0.06%
Copying	105,000	104,993	110,123	5,123	4.88%
Reports	2,000	1,362	362	(1,638)	-81.90%
Stationary/Forms	2,500	1,090	2,500	-	0.00%
Equipment Repair/Service Contracts	75,000	75,000	75,000	-	0.00%
Bank Charges	42,500	26,494	25,000	(17,500)	-41.18%
Sales & Use Taxes	5,000	500	-	(5,000)	-100.00%
Merchant Card Fees	86,000	86,575	77,500	(8,500)	-9.88%
<b>Total Office Costs</b>	<b>\$ 3,583,328</b>	<b>\$ 3,740,288</b>	<b>\$ 4,359,340</b>	<b>\$ 563,768</b>	<b>21.66%</b>

- The increase in Office Supplies is primarily related to increased needs at NERC's Washington, D.C. office.
- The increase in Maintenance and Service agreement costs is primarily due to:
  - New software audit tool in Compliance Assurance, \$100k
  - New software analytic tools used in RASA, \$37k
  - Increase in maintenance costs for new data center hardware installed in 2015 and 2016, and new network storage devices, \$200k
  - Increase in maintenance costs for new audio visual equipment planned for 2016, \$164k

**Table B-9**  
**Professional Services**

Professional Services	Budget	Projection	Budget	Variance	
	2016	2016	2017	2017 Budget v 2016 Budget	Variance %
Independent Trustee Fees	\$ 1,126,354	\$ 1,126,354	\$ 1,226,000	\$ 99,646	8.85%
Trustee Search Fee	100,000	100,000	100,000	-	0.00%
Outside Legal	690,000	590,000	515,000	(175,000)	-25.36%
Lobbying	50,000	50,000	60,000	10,000	20.00%
Accounting & Auditing Fees	154,500	154,500	159,135	4,635	3.00%
Insurance Commercial	225,000	225,000	230,000	5,000	2.22%
Outside Services	163,446	168,446	178,000	14,554	8.90%
<b>Total Services</b>	<b>\$ 2,509,300</b>	<b>\$ 2,414,300</b>	<b>\$ 2,468,135</b>	<b>\$ (41,165)</b>	<b>-1.64%</b>

- The increase in Independent Trustee Fees was approved by the Board of Trustees on August 13, 2015. The increase in fees is being implemented over a 3-year period from 2016 through 2018. Independent Trustee Fees are included in the Professional Services budget in the General and Administrative department.
- The reduction in outside legal fees, budgeted in the Legal and Regulatory department, is based on bringing more work in-house and a reduction in projected outside legal needs due to the completion of certain contract negotiations.
- The increase in Lobbying expense, budgeted in the Legal and Regulatory department, is based upon prior year actual expenses. This expense is primarily related to NERC's monitoring of regulatory and legislative issues and responding to information requests related to these activities.
- The increase in outside service costs is primarily due to various employee benefit management systems budgeted in the Human Resources department.



**Table B-10**  
**Miscellaneous**

Miscellaneous Expenses	Budget 2016	Projection 2016	Budget 2017	Variance	
				2017 Budget v 2016 Budget	Variance %
Miscellaneous Expense	\$ 6,500	\$ 6,500	\$ 6,500	\$ -	0.0%
Employee Rewards and Recognition	10,000	\$ 10,000	10,000	-	0.0%
Community Resp & Employee Engagement	10,000	10,000	5,000	(5,000)	-50.0%
Year-end Employee Recognition Event	10,000	10,000	15,500	5,500	55.0%
<b>Total Miscellaneous Expenses</b>	<b>\$ 36,500</b>	<b>\$ 36,500</b>	<b>\$ 37,000</b>	<b>\$ 500</b>	<b>1.4%</b>

The total 2017 Miscellaneous Expenses budget shows a small increase of \$500 over the 2016 budget.

This budget is intended to cover the cost of:

- Token gifts to retiring employees, condolence flowers in the event of a death in the family of an employee, and similar types of miscellaneous expenses (\$6.5k);
- Funds to support Community Responsibility and Employee Engagement Committee activities (\$5.0k);
- Departmental and company team-building activities and employee rewards and recognition expenses that are not otherwise included in personnel expenses (\$10.0k); and
- Year-end employee recognition meal expenses (\$15.50k). \$5.0k was reallocated from Community Responsibility and Employee Engagement expenses to the Year-End Employee Recognition Event to better align the budget with prior year actual results.

The budget for item (1) is spread throughout all Programs and Administrative departments. The budget for items (2) and (4) are included in the Human Resources department. The budget for item (3) was split equally between General and Administrative and Human Resources in the 2016 Budget, but is budgeted in Human Resources only in 2017.

**Table B-11**  
**Other Non-Operating Expenses**

Other Non-Operating Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Property Tax Expense	\$ 50,000	50,000	\$ 50,000	-	
Interest Expense	60,000	60,000	56,725	(3,275)	-5.46%
<b>Total Other Non-Operating Expenses</b>	<b>\$ 110,000</b>	<b>\$ 110,000</b>	<b>\$ 106,725</b>	<b>\$ (3,275)</b>	<b>-2.98%</b>

Budgeted interest expense is calculated based on expected draws on the capital financing loan. Refer to Exhibit D, page 126 for more detailed information related to debt repayment and the interest expense calculation.

**Table B-12**  
**Fixed Assets**

Fixed Assets	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Depreciation	\$ (2,641,943)	\$ (2,558,606)	\$ (1,691,457)	\$ 950,486	-35.98%
Computer & Software CapEx	2,447,000	2,362,402	2,572,000	125,000	5.11%
Furniture & Fixtures CapEx	-	-	-	-	
Equipment CapEx	1,464,000	1,545,797	1,800,000	336,000	22.95%
Leasehold Improvements	-	-	-	-	
	<b>\$ 1,269,057</b>	<b>\$ 1,349,593</b>	<b>\$ 2,680,543</b>	<b>\$ 1,411,486</b>	<b>111.22%</b>

As further explained in the Executive Summary on page 15 and in Section A in the Information Technology section on page 78 and the E-ISAC section on page 61, expenditures for fixed assets, excluding the reversal of Depreciation expense, are budgeted to be \$461.0k higher in 2017 compared to 2016. The increase in Computer & Software CapEx is primarily due to the combination of lower costs resulting from a delay in the potential replacement for the current compliance monitoring and enforcement tracking tool, originally planned for 2017, and the increase in costs related to the portal enhancement project. This delay in the compliance monitoring and enforcement tracking tool resulted in a \$800k decrease in ERO applications development from \$1.5M in 2016 to \$700k in 2017. The increase in Equipment CapEx is primarily for security devices.

**Table B-13**  
**2018-2019 Projections**

*NOTE: Refer to the Executive Summary beginning on page 20*

## Section C — Non-Statutory Activity

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NERC has no non-statutory activities.

## Section D — Supplemental Financial Statements

### NORTH AMERICAN ELECTRIC RELIABILITY COPORATION STATEMENT OF FINANCIAL POSITION

	12/31/2015 Per Audit	12/31/2016 - Projection	12/31/2017 - Projection
<b>ASSETS</b>			
Cash	40,308,955	39,464,020	39,091,525
Trade Accounts receivable, net of allowance for uncollectible accounts of \$0 and \$62,573 in 2013 and 2012	3,986,346	3,986,346	3,986,346
Prepaid expenses and other current assets	1,291,805	1,291,805	1,291,805
Security deposit	125,416	125,416	125,416
Plan Assets - 457b	744,439	744,439	744,439
Plan Assets - 457f	271,200	271,200	271,200
Property and equipment	8,301,730	9,411,545	12,669,171
<b>Total Assets</b>	<b>55,029,891</b>	<b>55,294,771</b>	<b>58,179,902</b>
<b>LIABILITIES AND NET ASSETS</b>			
Liabilities			
<b>Current Portion</b>			
Accounts payable and accrued expenses (incl, vacation accrual)	5,326,723	5,326,723	5,326,723
Accrued Incentive Comp	4,721,278	4,956,779	4,872,492
Deferred rent-current	322,016	400,434	480,457
Deferred compensation-current	-	-	-
Capital lease obligations - current	64,728	64,728	64,728
Accrued retirement liabilities	1,878,830	1,695,570	1,761,502
Debt Service - Current Portion	744,253	857,725	650,231
Deferred income	7,961,316	7,961,316	7,961,316
Deferred revenue - penalties	-	-	-
Deferred revenue - CRISP	2,508,514	2,508,514	2,508,514
Regional assessments	12,273,666	12,273,666	12,273,666
<b>Total Current Portion</b>	<b>35,801,324</b>	<b>36,045,455</b>	<b>35,899,629</b>
<b>Long-Term Portion</b>			
Deferred compensation <sup>1</sup>	1,038,350	1,038,350	1,038,350
Capital Project Financing - non-current	680,311	1,011,839	1,033,333
Deferred rent - non-current	3,412,298	3,011,864	2,531,407
CRISP Insurance Reserve	500,000	500,000	500,000
Deferred Revenue - Assessment Stabilization Reserve	-	2,271,000	2,271,000
Capital lease obligations - non-current	151,752	151,752	151,752
<b>Total Non-Current Portion</b>	<b>5,782,711</b>	<b>7,984,805</b>	<b>7,525,842</b>
<b>Total Liabilities</b>	<b>41,584,035</b>	<b>44,030,260</b>	<b>43,425,472</b>
Net Assets - unrestricted	9,735,856	10,764,511	14,254,430
Net Assets - restricted	3,710,000	500,000	500,000
<b>Total Liabilities and Net Assets</b>	<b>55,029,891</b>	<b>55,294,771</b>	<b>58,179,902</b>

<sup>1</sup>Includes 457b liability, life insurance for former executive, and retiree medical

NORTH AMERICAN ELECTRIC RELIABILITY COPORATION

Statement of Activities, Fixed Asset Expenditures and Change in Working Capital by Program 2016 Budget	Statutory Activities																	
	Statutory Total	Reliability Standards	Compliance Analysis, Registration & Certification	Compliance Assurance	Compliance Enforcement	Reliability Assessment and System Analysis	Performance Analysis	Operator Certification	Training and Continuing Education	Event Analysis	Situation Awareness	E-ISAC	General and Administrative (Includes Executive and Gov't Relations)	Legal and Regulatory	Information Technology	Human Resources	Accounting and Finance	
	Funding																	
<b>ERO Funding</b>																		
NERC Assessments	59,856,314	7,835,213	3,576,122	7,713,879	5,677,854	7,339,030	4,821,146	1,822,089	5,300,955	3,980,236	11,270,705	519,083	-	-	-	-	-	
Assessment Stabilization Reserve - Penalties	1,100,000	159,642	69,980	144,334	122,465	131,213	87,475	43,738	104,970	52,485	183,698	-	-	-	-	-	-	
<b>Total NERC Funding</b>	<b>60,956,314</b>	<b>7,994,855</b>	<b>3,646,102</b>	<b>7,858,213</b>	<b>5,800,319</b>	<b>7,470,243</b>	<b>4,908,621</b>	<b>1,865,827</b>	<b>5,405,926</b>	<b>4,032,721</b>	<b>11,454,403</b>	<b>519,083</b>	-	-	-	-	-	
Third-Party Funding (CRISP)	6,990,447										6,990,447							
Testing Fees	1,921,900							1,321,900	600,000									
Services & Software	50,000					50,000												
Workshops	230,000	105,000				15,000				40,000		70,000						
Interest	3,000	427	187	386	327	351	234	58	117	281	140	491						
Miscellaneous	-																	
<b>Total Funding (A)</b>	<b>70,151,660</b>	<b>8,100,282</b>	<b>3,646,289</b>	<b>7,858,599</b>	<b>5,800,647</b>	<b>7,535,594</b>	<b>4,908,855</b>	<b>1,321,958</b>	<b>2,465,944</b>	<b>5,446,206</b>	<b>4,032,862</b>	<b>18,515,341</b>	<b>519,083</b>	-	-	-	-	
<b>Expenses</b>																		
<b>Personnel Expenses</b>																		
Salaries	30,073,438	2,340,405	1,125,154	2,509,618	1,790,859	2,247,826	1,349,579	245,337	606,753	1,708,049	873,869	3,417,398	3,476,241	2,148,056	3,261,320	770,439	2,202,533	
Payroll Taxes	1,847,130	151,658	76,383	163,335	117,205	142,919	92,093	18,342	44,385	108,739	58,749	204,023	173,245	119,055	216,747	28,144	132,107	
Benefits	3,643,806	307,085	174,014	333,557	184,106	263,230	143,104	84,920	54,319	212,232	156,328	397,467	396,300	151,930	389,091	72,977	323,144	
Retirement Costs	3,076,956	259,407	126,651	276,273	198,694	246,609	149,018	30,026	67,599	189,397	96,159	363,482	197,650	232,244	359,376	46,242	238,131	
<b>Total Personnel Expenses</b>	<b>38,641,331</b>	<b>3,058,556</b>	<b>1,502,203</b>	<b>3,282,783</b>	<b>2,290,865</b>	<b>2,900,585</b>	<b>1,733,794</b>	<b>378,625</b>	<b>773,056</b>	<b>2,218,416</b>	<b>1,185,105</b>	<b>4,382,370</b>	<b>4,243,437</b>	<b>2,651,285</b>	<b>4,226,534</b>	<b>917,802</b>	<b>2,895,916</b>	
<b>Meeting Expenses</b>																		
Meetings	1,071,500	207,000	4,000	60,000	2,500	74,000	1,000	30,000	25,000	81,500	6,500	230,000	334,000	4,000	7,500	2,000	2,500	
Travel	2,203,786	271,988	155,146	276,243	56,736	208,338	118,172	7,389	13,751	152,487	33,005	256,488	444,515	93,231	56,508	8,728	50,963	
Conference Calls	97,600	40,565	610	6,100	366	5,270	2,965	153	10,980	4,270	305	6,710	5,856	1,952	9,608	305	1,586	
<b>Total Meeting Expenses</b>	<b>3,372,886</b>	<b>519,553</b>	<b>159,756</b>	<b>342,443</b>	<b>59,602</b>	<b>287,608</b>	<b>122,137</b>	<b>37,541</b>	<b>49,731</b>	<b>238,257</b>	<b>39,810</b>	<b>493,198</b>	<b>784,371</b>	<b>99,183</b>	<b>73,616</b>	<b>11,033</b>	<b>55,049</b>	
<b>Operating Expenses</b>																		
Consultants & Contracts	13,127,749			50,000		525,000	528,082	219,800	360,800		1,295,850	6,788,429	15,000		2,312,787	575,000	457,000	
Office Rent	3,117,009												3,117,009					
Office Costs	4,359,340	51,336	24,231	141,198	20,379	147,652	74,843	43,216	57,107	49,634	41,897	431,895	507,934	46,411	2,595,408	11,748	114,450	
Professional Services	2,468,135											175,000	1,431,000	495,000		63,000	304,135	
Miscellaneous	37,000	500	500	500	500	500	500		500	500	500	500	500	500	500	30,000	500	
Depreciation	1,691,457	231,721				125,621			1,919	85,582	7,667	5,297	438,305		795,345			
<b>Total Operating Expenses</b>	<b>24,800,690</b>	<b>283,556</b>	<b>24,731</b>	<b>191,698</b>	<b>20,879</b>	<b>798,773</b>	<b>603,426</b>	<b>263,016</b>	<b>420,326</b>	<b>135,715</b>	<b>1,345,914</b>	<b>7,401,121</b>	<b>5,509,749</b>	<b>541,911</b>	<b>5,704,041</b>	<b>679,748</b>	<b>876,085</b>	
<b>Total Direct Expenses</b>	<b>66,814,907</b>	<b>3,861,666</b>	<b>1,686,689</b>	<b>3,816,924</b>	<b>2,371,347</b>	<b>3,986,965</b>	<b>2,459,356</b>	<b>679,182</b>	<b>1,243,113</b>	<b>2,592,388</b>	<b>2,570,828</b>	<b>12,276,689</b>	<b>10,537,557</b>	<b>3,292,379</b>	<b>10,004,191</b>	<b>1,608,583</b>	<b>3,827,050</b>	
<b>Indirect Expenses</b>	<b>0</b>	<b>4,180,279</b>	<b>1,832,451</b>	<b>3,779,431</b>	<b>3,206,790</b>	<b>3,435,846</b>	<b>2,290,564</b>	<b>572,641</b>	<b>1,145,282</b>	<b>2,748,677</b>	<b>1,374,338</b>	<b>4,810,185</b>	<b>(10,644,282)</b>	<b>(3,292,379)</b>	<b>(10,004,191)</b>	<b>(1,608,583)</b>	<b>(3,827,050)</b>	
<b>Other Non-Operating Expenses</b>	<b>106,725</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>106,725</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>Total Expenses (B)</b>	<b>66,921,632</b>	<b>8,041,945</b>	<b>3,519,141</b>	<b>7,596,355</b>	<b>5,578,137</b>	<b>7,422,812</b>	<b>4,749,920</b>	<b>1,251,823</b>	<b>2,388,395</b>	<b>5,341,065</b>	<b>3,945,167</b>	<b>17,086,873</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>Change in Assets</b>	<b>3,230,028</b>	<b>58,337</b>	<b>127,149</b>	<b>262,244</b>	<b>222,510</b>	<b>112,782</b>	<b>158,936</b>	<b>70,136</b>	<b>77,549</b>	<b>105,141</b>	<b>87,695</b>	<b>1,428,467</b>	<b>519,083</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>Fixed Assets</b>																		
Depreciation	(1,691,457)	(231,721)	-	-	-	(125,621)	-	-	(1,919)	(85,582)	(7,667)	(5,297)	(438,305)	-	(795,345)	-	-	
Computer & Software CapEx	2,572,000											1,100,000			1,472,000			
Furniture & Fixtures CapEx	-																	
Equipment CapEx	1,800,000														1,800,000			
Leasehold Improvements	-																	
Allocation of Fixed Assets	0	290,058	127,149	262,244	222,510	238,403	158,936	39,734	79,468	190,723	95,361	333,765	438,305	-	(2,476,655)	-	-	
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>2,680,543</b>	<b>58,337</b>	<b>127,149</b>	<b>262,244</b>	<b>222,510</b>	<b>112,782</b>	<b>158,936</b>	<b>39,734</b>	<b>77,549</b>	<b>105,141</b>	<b>87,695</b>	<b>1,428,467</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>TOTAL BUDGET (=B + C)</b>	<b>69,602,175</b>	<b>8,100,282</b>	<b>3,646,289</b>	<b>7,858,599</b>	<b>5,800,647</b>	<b>7,535,594</b>	<b>4,908,855</b>	<b>1,291,557</b>	<b>2,465,944</b>	<b>5,446,206</b>	<b>4,032,862</b>	<b>18,515,341</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>549,485</b>	<b>(0)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(0)</b>	<b>0</b>	<b>30,402</b>	<b>-</b>	<b>-</b>	<b>(0)</b>	<b>0</b>	<b>519,083</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>FTEs</b>	<b>189.88</b>	<b>17.16</b>	<b>7.52</b>	<b>15.51</b>	<b>13.16</b>	<b>14.10</b>	<b>9.40</b>	<b>2.35</b>	<b>4.70</b>	<b>11.28</b>	<b>5.64</b>	<b>19.74</b>	<b>16.92</b>	<b>11.28</b>	<b>23.27</b>	<b>2.82</b>	<b>15.04</b>	

## Exhibit A – Common Assumptions

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### Shared Business Plan and Budget Assumptions NERC and the Regional Entities 2016–2019 Planning Period (2017 Budget Cycle)

NERC and the eight Regional Entities are committed to a common operating model<sup>38</sup> that describes the characteristics of a highly effective and efficient electric reliability organization (ERO) Enterprise. This operating model includes action items to address coordinated strategic and business planning as well as performance monitoring processes across the enterprise. These processes remain transparent, with results reported out on a quarterly basis to NERC’s Corporate Governance and Human Resources Committee and NERC Board of Trustees (Board) in support of the ERO corporate oversight function.

Recently, at its November 2015 meeting, the Board approved an updated version of the ERO Enterprise Strategic Plan with goals, objectives, and deliverables for the 2016–2019 planning period. The strategic plan lays out five goals that the ERO Enterprise will focus on over the next three years. They include (1) standards; (2) compliance, enforcement, registration, and certification; (3) risks to reliability; (4) emerging risks; and (5) coordination and collaboration. The plan also identifies a number of associated objectives and deliverables to achieve the goals of the ERO Enterprise. There are also four overarching performance metrics to assess the overall effectiveness of the ERO Enterprise in addressing risk to the Bulk Electric System (BES) and improving BES reliability in 2016. These metrics concentrate on (1) measuring progress in achieving reliability results, (2) assuring standards and compliance effectiveness, (3) improving risk mitigation, and (4) program execution.

The following set of common assumptions has been developed to guide ERO Enterprise resource projections<sup>39</sup> for the 2016–2019 period. Specifically, it supports the strategies heading into the 2016 year and establishes common assumptions, goals and objectives as the ERO Enterprise begins the 2017 Business Plan and Budget (BP&B) cycle. Additionally, it outlines how these goals and objectives set the stage for periods beyond 2017, all in support of achievement of the goals and objectives set forth in the Strategic Plan.

Similar to prior planning cycles, the specific resource needs and budgets of NERC and the Regional Entities will be publicly posted and made available on NERC’s website for review. Each Regional Entity board approves its BP&Bs after an extensive review process that includes consideration of stakeholder input. Also, the BP&Bs of NERC and each Regional Entity are approved in open session by NERC’s Finance and Audit Committee and Board of Trustees as part of the annual BP&B process. NERC’s review of the Regional Entity BP&Bs will be primarily focused on ensuring alignment of activities with the Strategic Plan and adequacy of resources to support performance of delegated functions and key efforts. A 2017 BP&B schedule has been developed to identify important meeting dates, review periods, posting dates, etc. associated with the development and completion of the NERC and Regional Entity BP&Bs.

These assumptions will continue to be refined based on comments received from stakeholders and the ongoing work conducted by NERC and Regional Entity leadership regarding specific goals, objectives, and supporting activities over the planning period.

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<sup>38</sup> [ERO Enterprise Operating Model](#)

<sup>39</sup> NERC recognizes there are often unique factors that drive differences in each entity or organization’s final determination of its resource needs and budget. Regional Entity-specific assumptions are stated in each Regional Entity’s BP&B as appropriate.

### **Legal and Operating Framework**

NERC and the Regional Entities will continue to work under the existing regulatory framework governing the establishment and enforcement of reliability standards for the BES established by applicable governmental authorities in the United States, provincial regulatory and/or governmental authorities in Canada, and portions of Mexico, as well as the authorizations contained in the Federal Energy Regulatory Commission's (FERC) Order approving NERC as the ERO.

NERC continues to enhance its oversight of the Regional Entities' performance of their delegated functions. NERC in collaboration with the Regional Entities will continue to develop goals, measures, and reports to assess and evaluate the Regional Entities' performance of their Regional Delegation Agreements (RDAs), NERC's Rules of Procedure, the Compliance Monitoring and Enforcement Program, FERC requirements, and directives that are in effect pursuant to Section 8(c) of the RDAs. NERC will continue to provide feedback and direction to the Regional Entities on performance improvements. NERC and the Regional Entities will also continue to work collaboratively to refine and revise processes and procedures to eliminate duplication, increase operational efficiencies, enhance ERO-wide consistency, and achieve measureable reliability outcomes. Regional Entities will continue to have the primary responsibility for day-to-day operations and interactions with registered entities.

### **Stakeholder Participation**

NERC and the Regional Entities develop their BP&B's based upon the assumption of continued stakeholder participation in support of key program areas, while recognizing that stakeholder resource limitations may affect specific levels of participation in any given activity. The availability and adequacy of industry resource support will be evaluated on an ongoing basis.

### **External Factors**

The performance and execution of BP&B's for each entity in the ERO Enterprise may be impacted by various external factors. These factors include, but are not limited to, the following:

- FERC Orders, other applicable governmental authority actions, directives, audits, mitigation efforts, and performance assessments;
- Environmental Protection Agency (EPA) rules that could potentially impact the reliability and/or operation of the BES;
- Other governmental agencies or departments that may issue rules, guidelines, orders, or directives that may impact the operation of the BES;
- The number and significance of changes within Balancing Authorities' and Reliability Coordinators' areas, prompting the need for associated re-certification and reliability plan assessments;
- The unanticipated rise in the rate and severity of entity violations;
- The unanticipated rise in the rate and severity of system events requiring formal investigations beyond historic volumes, and causal drivers of these events;
- New technologies and changes in resource or demand composition that require additional reliability studies and reliability risk analysis, including new techniques for conducting relevant assessments;
- Changes in applicable laws and regulations, including environmental laws and others;
- Priority risk activities identified by the Reliability Issues Steering Committee, committees of the Board, and through other stakeholder input;

- The ability of stakeholders to support the pace and scope of the various activities while implementing the results of earlier efforts.

### **Collaboration with the Trade Associations and Forums**

The activities of the North American Transmission Forum (NATF), North American Generator Forum (NAGF), and other trade forums and associations are expected to complement ERO Enterprise activities and mitigate incremental resource needs of NERC and Regional Entities in certain areas. NERC has a memorandum of understanding with the NATF and NAGF to help ensure that the common objectives of each organization are achieved in the most efficient and effective manner. Increased collaboration between the NERC and the NATF and NAGF is expected to continue.

### **Key Assumptions by Program Area<sup>40</sup>**

#### **Reliability Standards Program**

- It is expected the number of continent-wide standards development projects will remain relatively stable, except as required to address any new FERC directives to create or modify reliability standards, or industry submittals of standard authorization requests.
- Continent-wide standards projects will consist primarily of conducting enhanced periodic reviews on existing standards to improve their content and quality, respond to identified risks to reliability (including those that may be identified through the implementation of risk-based Compliance Monitoring and Enforcement), and address FERC directives that may arise. This activity will require the allocation of technical resources from several internal NERC departments (e.g., Reliability Assessment and Performance Analysis (RAPA), Reliability Risk Management (RRM), Compliance Analysis and Certification, and Compliance Assurance) and support from across the ERO Enterprise.
- During the enhanced periodic review of ERO standards, any associated regional standards will be reviewed for potential incorporation as variances or as improvements to the continent-wide requirements. Regional and NERC standards development processes may require modification to accomplish efficiently this task. Each Regional Entity will work with NERC and possibly other Regional Entities on projects where there is a regional standard/variance. Regional standards development activity will be driven by requests the Regional Entity may receive or reliability issues the Regional Entity may identify. Regional standards development activity is expected to remain low.
- In coordination with Standard Drafting Teams and consistent with current approaches, Regional Entities may support outreach during standard development, and participate in the standard development activities as may be required to address reliability and stakeholder issues that may arise within their respective regions. Additionally, following FERC approval, NERC and the Regional Entities collectively will assist the transition of standards to compliance monitoring and enforcement by providing knowledge that supports industry and auditor training, or providing information regarding the intent of the standard.
- The number of interpretations are expected to remain low. However, guidance requests associated with the implementation of Standards may increase.

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<sup>40</sup> These statements, which are generally organized by program area, are intended to help guide resource allocation decision-making in the development of the 2017 BP&Bs.



## Compliance Monitoring and Enforcement, and Organization Registration and Certification Programs

### *Compliance and Enforcement*

- The implementation of the risk-based compliance monitoring and enforcement program (CMEP) will continue to require the allocation of dedicated resources from both NERC and the Regional Entities for both compliance and enforcement. Regional Entities created a plan in 2016 to complete Inherent Risk Assessments (IRAs) for all their Reliability Coordinators, Balancing Authorities, and Transmission Operators and will require resources to complete the remaining IRAs in 2017. In addition, Regional Entities will require resources to update previously done IRAs based on identified triggers, and focus on creating compliance oversight plans that include compliance monitoring tools, the frequency of compliance monitoring, and the standards that are to be monitored as well as the depth of testing of those standards.
- NERC and the Regional Entities will continue the 2015-2016 ERO Enterprise exercises to evaluate business practices, implementation, and consistency within risk-based compliance monitoring.
- NERC and the Regional Entities will participate in ERO Enterprise consistency activities, including providing input into standards development.
- NERC and the Regional Entities are planning to support the training and education requirements and guidelines necessary to meet the criteria set forth by the *ERO Enterprise Compliance Monitoring and Enforcement Manual* and the *Competency Guide*.
- The suitability of software systems currently used for compliance, registration, analysis and tracking will continue to be evaluated from a strategic perspective, which may result in changing or replacing existing systems in the future. However, until such changes have been identified, reviewed and approved by the ERO Enterprise Technology Leadership Team and EROEMG for implementation, NERC and the Regional Entities should continue to maintain the necessary resources to support existing systems.
- Planning and operating standard violations are expected to level off or continue decreasing as most registered entities have been audited and thus have a greater understanding of compliance expectations, and the standards have matured.
- Compliance personnel will need to continue to support the implementation of cyber-security reliability standards version 5 (CIP V5):
  - NERC will lead the CIP V5 training development, coordination, and facilitation for the ERO Enterprise CIP auditors and industry outreach. ERO Enterprise CIP auditors will support these activities in collaboration with NERC to ensure appropriate knowledge and guidance is developed, understood by industry, and administered.
  - The allocation of resources in 2017 and 2018 should be responsive to continued implementation by registered entities of new versions of the CIP Standards, while recognizing that the risk-informed focus will be on monitoring “high” and “medium” impact requirements.
- Additional resource allocation may be necessary for increased Physical Security compliance monitoring activities for CIP-014.
- ERO Enterprise CMEP staff, particularly staff with visibility into risks occurring in the field, will provide feedback to the ERO Enterprise. This feedback may include information on risks seen in the field that are not addressed by a standard as well as information on where a standard is too broad. ERO Enterprise CMEP staff will participate in the development of a solution, regardless of whether the solution is a standard or other solution.

- ERO Enterprise CMEP staff will provide input for standards development teams on the risks seen in the field relating to a standard under development, as well as how a standard would be monitored.

### **Organization Registration and Certification**

- Two central reforms have been identified as a result of the completion of the risk-based registration activity in 2015:
  1. Modifications to the NERC Registry Criteria have been approved, including the elimination of three functional entities (Purchasing-Selling Entities, Interchange Authorities, and Load-Serving Entities), modifications to the threshold criteria for Distribution Providers, and alignment of five registration categories with the BES definition.
  2. The NERC-led panel, which establishes subset lists of applicable reliability standards for registered entity functions (e.g., Under-Frequency Load Shedding-only Distribution Providers), has been incorporated into the rules.

These reforms strengthen the registration process and are important milestones in NERC’s approach to managing risks to reliability. Deployment and implementation of these revisions began in 2015, with continued work in 2016 and possibly 2017.

- No further enhancements are anticipated to support the ongoing next phases of the risk-based registration activity.
- Based on the 2015 technical assessment of the Phase 2 registered functions (Transmission Operator, Transmission Owner, Generator Owner, and Generator Operator), development of subsets of standards are not necessary.
- The certification and registration programs will be assessed in 2016, which may result in modifications to the program in 2017.
- The activities associated with the implementation of the BES definition have decreased, therefore no additional resource demands are expected in the registration area.
- Planned oversight activities for 2017 will be aligned with the ERO Enterprise Operating Model and should not affect 2017 resource allocation and should have little effect on overall NERC resource requirements. NERC understands that each Regional Entity will need to evaluate its individual resource needs and allocations.

### **Reliability Assessment and Performance Analysis Program (RAPA)**

- Support and leadership to (1) the Planning Committee and (2) standing committees’ subcommittees, working groups, and task forces serving the standing committees will continue.
- NERC and the Regional Entities will continue to focus resources on high quality reliability assessments and performance analysis, including:
  - Development and implementation of expanded and enhanced enterprise-based data collection and analysis systems, and capabilities for performance analyses. This includes TADS, GADS, NERC RAS data, and misoperations data;
  - Support of the integration of RAPA information systems for assessments and associated data requirements, with focus on objective and technically sound reliability assessments supporting delivery of high quality reports (e.g., long-term, short-term, special or scenario assessments, and State of Reliability Report);

- Development of assessment and performance analysis techniques as well as resource capabilities and tools, including probabilistic and scenario evaluations, which address the reliability impacts of new technologies, changing resource or demand resource composition, and environmental related regulations or legislation;
- Providing technical resources and expertise to perform analyses as needed, including to support and identify risk priorities for standards development, compliance, and enforcement activities;
- Development of appropriately tailored analysis and overall assessment, including guidance for registered entities, of high impact, low frequency BES risks, including physical security and geomagnetic disturbance (GMD) vulnerability.
- Providing technical resources to support up to four short-term reliability assessments (6-18 month horizon replacing the current summer and winter assessments), which focus on specific reliability risk areas and geographic areas with specific reliability concerns, while also allowing for regional assessments;
- Support of the common approach developed for NERC reliability assessments to ensure consistent treatment of resource and reliability evaluations.
- NERC and the Regional Entities will advance analytical capabilities for identifying and determining reliability risks and conducting various reliability assessments by:
  - Integrating the analysis and measures of essential reliability services (ERS) into the Long-Term Reliability Assessment. The process encompasses new data collection and analysis approaches needed to address assessment objectives of identifying reliability issues due to a changing resource mix;
  - Requiring advanced powerflow and stability analysis tools and objective expert input for transmission/deliverability assessments and studies;
  - Maturing and developing interconnection-wide analysis groups to support the assessment of interconnection-wide risks, such as frequency response;
  - Providing technical resources and reliability leadership for the advancement of probabilistic analyses supporting the Long-Term Reliability Assessment;
  - Requiring advanced statistical analysis tools and objective expert input to support them for probabilistic assessments.
- NERC will support the maintenance of the BESnet application and manage processing of the Regional BES Exception Requests (ERs), including technical validation of the definition and exception requests, self-determined notification submittals, periodic reviews of network changes affecting BES determinations, as well as requests for registration and certification reviews. The Regional Entities will continue to process BES ERs per guidelines established in the NERC Rules of Procedure.<sup>41</sup>
- NERC and Regional Entities' resources (through the case building designee agreements) will support the Planning Coordinators' development of long-term sustainable interconnection-wide powerflow and dynamics model cases under reliability standards MOD-032 and MOD-033 that exhibit the accuracy and fidelity reflecting actual BES reliability performance and dynamic conditions. These models will integrate needed elements that address reliability behavior of changing resource mix and technology of both generation and loads, including:

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<sup>41</sup> [NERC Rules of Procedure](#)

- Development of a process to ensure the continued compilation and creation of annual sets of seasonal and future steady state and dynamic simulation model cases;
- Provision of technical resources to support the effective and continuous improvement of the models that incorporate recognition of reliability behavior of loads and generation associated with the changing resource mix;
- NERC and the Regional Entities will work collaboratively to enhance the ERO Enterprise’s capability for post event analysis, including:
  - Development of a process to ensure the compilation and creation of steady state and dynamic simulation model cases for use in the investigation and analysis of major power system disturbance events;
  - Development and tracking of metrics that demonstrate the accuracy of the powerflow and dynamics models to replicate actual system conditions and reliability behavior;
  - Evaluation of event disturbances using phasor measurements and other methods to assess sufficiency of data and models.
- NERC and the Regional Entities may require contractor and consultant services to maintain continued support and technical expertise associated with activities listed in the above assumptions and with supporting special assessment, scenario, or other technical research efforts. It could potentially impact both NERC and Regional Entity resource allocation:
  - If significant events occur, contractor services may be required to support wide-area system analyses and root cause evaluations.
  - Contractor services may be necessary to support special assessment analyses (e.g., EPA 111(d) evaluation or ERS), scenario analyses (e.g., polar vortex-like severe event analyses and gas-electric interdependence), and other technical research efforts (e.g., similar to geomagnetic disturbances, and FAC-003 Vegetation Management).

### **Training, Education, and Operator Certification Program**

- NERC will continue to budget for the unified learning management system (LMS) focused initially on Regional Entity audit staff, with near-term consideration for risk-based compliance monitoring and enforcement related staff. Future inclusion of other ERO functional areas is expected as potential requirements present themselves during system development. NERC will work with the Regional Entities to consolidate training resources and promote better coordination, planning, delivery and management of training and outreach efforts across the enterprise without adversely impacting Region-specific training requirements.
- The implementation of CMEP staff training and competencies are expected to influence the allocation of training resources throughout the enterprise. NERC will continue the development of compliance training modules with assistance of qualified subject matter experts from the Regional Entities and incorporation of outside expertise/services.
- An allocation of additional resources may be required to support certain training and outreach activities of the risk-based CMEP:
  - Regional Entities should allocate resources to meet the requirements for the compliance and enforcement staff that are associated with the implementation of the risk-based CMEP.
- The Regional Entities, in collaboration with NERC, are expected to help assess and determine training and outreach needs. This includes flexibility in approach between Regional Entities, and

anticipating areas of support for their staff and stakeholders for standards, compliance monitoring and enforcement, situation awareness and event analysis, and information technology. Addressing these needs will likely require additional resource allocation and budgeting considerations.

- NERC, in collaboration with Regional Entities, will develop and deliver additional CIP V5 training to support the transition. This may require consideration for additional funding of the NERC training and education budget.
- The Operating Personnel Certification program is expected to remain at a steady state with no additional resources required from the Regional Entities.
- Contractor and consultant services may be necessary to maintain the continued support and technical expertise associated with some enterprise training, outreach and education activities.

#### **Situation Awareness and Infrastructure Security (including Events Analysis)**

- NERC will continue to provide required support and leadership for the Operating Committee and the Critical Infrastructure Protection Committee, and standing committees, subcommittees, working groups, and task forces serving the standing committees. Regional Entity involvement is expected to remain at current levels with no additional resources required from the Regional Entities.
- Registered Entity participation in the ERO Event Analysis Process, which involves active participation by Regional Entity staffs, will continue at or above current levels through 2016.
- NERC will continue to budget and incur costs to operate and maintain the software application known as Situational Awareness for FERC, NERC, and Regional Entities, Version 2 (SAFNrv2) for situation awareness, and The Event Analysis Management System (TEAMS) for Events Analysis. The allocation of additional resource investments are expected to maintain the capabilities of SAFNrv2 throughout the planning period. Any such investments will be NERC funded and not result in an allocation of cost to the Regional Entities.
- Regional Entities will continue to budget for event analysis and situational awareness activities based on their respective Region's historical workload, as they did in the past. Some Regional Entities will continue to allocate resources as part of the activities accounted for under their RAPA program, and should clearly delineate where the activities' resources are budgeted.
- Regional Entities will support critical infrastructure security activities in the context of situation awareness, using those designated resources, unless specifically budgeted and managed elsewhere.

#### **Electricity Information Sharing and Analysis Center (E-ISAC)**

- NERC will continue to fund, operate and maintain the E-ISAC, with no increased cost to the Regional Entities.
- NERC will continue to fund and conduct the Grid Security Exercise program, with no increased cost to the Regional Entities. Analysis and planning activities will occur during even-numbered years and execution of the exercise will take place in odd-numbered years.
- NERC will continue to fund and conduct the Grid Security Conference as an annual event. Other than funding registration fees for individual attendees from their Regional Entity, no Regional Entity funding is anticipated.

### **Information Technology and Project Management Office (PMO)**

- NERC and the Regional Entities will work collaboratively to refine existing strategies and governance and procurement practices applicable to the development, operation, and maintenance of enterprise architecture, including software and data systems supporting both NERC and Regional Entity operations.
- NERC's BP&B will include ongoing funding support for the development, operation, and maintenance of ERO Executive Management Group (EMG)-approved enterprise applications. Enterprise application funding in any given year will be subject to the budget and funding limits set forth in NERC's approved BP&B. Regional Entities should include appropriate funding for applications and supporting systems designed to satisfy Regional business needs (if not within the mutually agreed upon scope of the ERO Enterprise applications that are funded by NERC).
- Regional Entities may be required to provide or augment business teams to help develop application business requirements and to test business functionality within the ERO applications.
- Ongoing investments will be required to develop, implement, and maintain enhancements to the NERC and Regional Entity websites, ERO applications, and ERO data repositories, which are required to improve access to information and data. NERC and the Regional Entities will separately fund any enhancements to their own websites.

### **ERO Enterprise-wide Risk Management**

- A common ERO Enterprise risk management framework commenced in 2014 to focus on identifying, assessing, prioritizing, and mitigating risks associated with the performance of both NERC and the Regional Entities. This will be a multi-year activity with the project expected to reach steady state by 2017.
- NERC's Director of Risk Management and Internal Audit is responsible for the overall development of this framework, with the approval of the ERO Regional Executives and under the oversight of NERC's Enterprise Wide Risk Management Committee. NERC and the Regional Entities will continue to devote resources to implement this framework. Activities include validating and prioritizing risks for EROEMG review and approval. The results will serve as an input into the NERC's future audit plans, which are reviewed and approved by the NERC Board of Trustees Enterprise Risk Management Committee. Regional Entities may add risk management and internal control resources as needed.

## Exhibit B – Application of NERC Section 215 Criteria

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### DISCUSSION OF HOW THE NERC MAJOR ACTIVITIES IN THE 2017 BUSINESS PLAN AND BUDGET MEET THE NERC WRITTEN CRITERIA FOR DETERMINING WHETHER A RELIABILITY ACTIVITY IS ELIGIBLE TO BE FUNDED UNDER FEDERAL POWER ACT SECTION 215

#### I. Introduction

This Exhibit discusses how the major activities in NERC’s 2017 Business Plan and Budget meet the NERC written criteria for determining whether a reliability activity is eligible to be funded under §215 of the Federal Power Act (“FPA §215”). This Exhibit is intended to satisfy Recommendation No. 38 resulting from the financial performance of NERC conducted by the Commission’s Division of Audits (“DA”) in 2012-2013 and adopted by the Commission in its November 2, 2012 order on NERC’s 2013 Business Plan and Budget.<sup>1</sup> NERC submitted the written criteria to the Commission in a compliance filing dated February 21, 2013 in Docket No. FA11-21-000.<sup>2</sup> The Commission approved the NERC written criteria, with modifications, in an order issued in that docket on April 18, 2013.<sup>3</sup> The NERC written criteria as used in this Exhibit incorporate the modifications specified in the Compliance Order.<sup>4</sup>

#### II. Reliability Standards Program 2017 Major Activities

The major activities of the Reliability Standards Program are described at pages 24-26 of the 2017 Business Plan and Budget. The Reliability Standards Program carries out the ERO’s responsibility to develop, adopt, obtain approval of, and modify as and when appropriate, mandatory Reliability Standards for the reliable planning, operation, and critical infrastructure protection of the North American BES. The major activity areas for this program include (1) providing project management and leadership to the reliability standard development process to deliver high-quality, continent-wide reliability standards, both new and modified, including standard development outreach activities, facilitation of Standard Drafting Team activities, drafting support, assisting Standard Drafting Teams in adhering to the processes in the *Standard Processes Manual*, and ensuring that the quality of documents produced are appropriate for approval by industry and the NERC Board; (2) facilitating continent-wide industry engagement in the standard development processes; and (3) conducting industry balloting on standards, disseminating information on standards and the standard development processes, and supporting regulatory filings and proceedings relating to standards. Additionally, the Reliability Standards Program provides technical advice and final quality review for Regional Entity standards development processes, presents proposed regional standards to the

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<sup>1</sup> *North American Electric Reliability Corporation, Order Accepting 2013 Business Plan and Budget of the North American Electric Reliability Corporation and Ordering Compliance Filing*, 141 FERC ¶ 61,086 (2012) (“2013 Budget Order”). Recommendation 38, as adopted in the 2013 Budget Order, is: “In its annual business plan and budget filings, [NERC should] provide an explanation as to why the proposed activities to be undertaken by each program area for the budget year are statutory, including, at a minimum: a description and the purpose of the major activities to be taken by each program area and an explanation for why the activity is a statutory activity.” *Id.* at P 16.

<sup>2</sup> *Compliance Filing of the North American Electric Reliability Corporation in Response to Paragraph 30 of November 2, 2012 Commission Order – NERC Written Criteria for Determining Whether a Reliability Activity is Eligible to be Funded Under Federal Power Act Section 215*, filed February 1, 2013 in Docket No. FA 11-21-000 (“February 1, 2013 Compliance Filing”).

<sup>3</sup> *North American Electric Reliability Corporation, Order on Compliance*, 143 FERC ¶ 61,052 (2013) (“Compliance Order”).

<sup>4</sup> For ease of reference, the complete NERC written criteria, as modified in accordance with the Compliance Order, are provided at the end of this Exhibit.

NERC Board, and prepares submissions for approval of regional standards to the applicable regulatory authorities in the U.S. and Canada.

For 2017, the major activities of the Reliability Standards Program will focus on (1) selection of standards projects to be undertaken based on the nature of the reliability issue, cost compared to risks, and whether a standard or another solution is most appropriate to address the issue; (2) addressing Commission directives and responding to Commission orders as necessary through the standards process; (3) performing enhanced periodic reviews of standards; and (4) facilitating smooth transitions to new standards through developing guidelines, webinars, and other activities to support auditor and industry training for new standards. Identification of need for new standards projects will be based on sources such as Commission directives and reliability risks identified by the Reliability Risk Management Process or the Reliability Issues Steering Committee (RISC).

The major activities of the Reliability Standards Program satisfy the following criteria:

I.A: Is the activity necessary or appropriate for Reliability Standards development projects pursuant to the NERC Rules of Procedure (ROP)?

I.B: Is the activity necessary or appropriate for providing guidance and assistance to Regional Entities in carrying out Regional Reliability Standards development activities?

I.C: Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information for Reliability Standards development, including for purposes of identifying areas in which new Reliability Standards could be developed, existing Reliability Standards could be revised, or existing Reliability Standards could be eliminated?

I.D: Is the activity necessary or appropriate for the provision of training and education concerning Reliability Standards development processes, procedures, and topics for/to (i) NERC personnel, (ii) Regional Entity personnel, (iii) industry personnel?

II.F.1: Is the activity necessary or appropriate for the provision of training, education and dissemination of information for/to (i) NERC personnel, (ii) Regional Entity personnel, and (ii) industry personnel with respect to compliance monitoring and enforcement topics and topics concerning reliability risks identified through compliance monitoring and enforcement activities, such as (1) Requirements of Reliability Standards, including how to comply and how to demonstrate compliance? This includes development of guidance and interpretation documents.

IV: Is the activity one that was required or directed by a Commission order issued pursuant to §215? (Reliability Standards development projects are often initiated in response to directives in Commission orders).

V: Is the activity one that is required or specified by, or carries out, the provisions of NERC's Rules of Procedure that have been approved by the Commission as "Electric Reliability Organization Rules" (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)? (The applicable Rules of Procedure provisions for these major activities are §300 and Appendix 3A.)

VI: Is the activity necessary or appropriate for the supervision and oversight of Regional Entities in the performance of their delegated responsibilities in accordance with FPA §215, 18



C.F.R. Part 39, the Commission-approved delegation agreement between NERC and the Regional Entity, the NERC ROP, and applicable provisions of Commission orders?

IX. Is the activity necessary or appropriate for NERC and Regional Entity committees, subcommittees and working groups engaged in activities encompassed by one or more of the other criteria?

X. Is the activity necessary or appropriate for the analysis and evaluation of activities encompassed by one or more of the other criteria for the purpose of identifying means of performing the activities more effectively and efficiently?

### **III. Compliance Monitoring and Enforcement and Organization Registration and Certification Program Area 2017 Major Activities**

The major activities of the Compliance Monitoring and Enforcement and Organization Registration and Certification Program Area are described at pages 28-30, 32-33, and 35-41 of the 2017 Business Plan and Budget. This Program Area is comprised of three operational groups: (1) Compliance Assurance (addressing compliance monitoring), (2) Reliability Assurance (addressing assurance, organization registration and certification), and (3) Compliance Enforcement.

The Compliance Assurance group works collaboratively with the Regional Entities to ensure effective implementation of risk-based compliance monitoring under the Compliance Monitoring and Enforcement Program (“CMEP”) across the entire ERO Enterprise. This group’s activities include the following major activities and functions: (1) ensuring that Regional Entities monitor registered entities for compliance according to their specific facts and circumstances, developing customized compliance oversight plans (COPs) for each registered entity based on its inherent risk assessment (IRA); (2) overseeing Regional Entities’ IRAs of registered entities; (3) oversight of the quality implementation of the risk-based compliance monitoring program; (4) development of the annual CMEP Implementation Plan; (5) oversight of use of necessary compliance-related processes, procedures, IT platforms, tools and templates; (6) development and delivery of education and training for ERO Enterprise staff; (7) conducting CIP V5 training and education programs and other outreach that support industry compliance and integration of risk assessment and internal controls; (8) conducting CIP-014-1 training and outreach activities related to effective implementation of the Physical Security Reliability Standard; (9) coordinating with the NERC Standards department for standards development to provide compliance information, statistics, and perspectives to standard drafting teams to foster development of standards that provide increased reliability benefit and clarify compliance risks, and to assist in smooth transitions for standards from development to enforceability, including by providing draft compliance monitoring guidance, information on how compliance with draft standards will be determined, and input on auditability and enforceability; (10) supporting Regional Entity and industry committees, working groups and task forces, such as the NERC Compliance and Certification Committee; (11) industry training for every Reliability Standard approved by the Commission, as well as industry-focused outreach events and webinars on risk-based CMEP activities; and (12) promoting registered entities’ development of effective compliance programs and internal controls.

The ongoing and new major activities of the Compliance Assurance group for 2017 will include: (1) continuing to mature the risk-based compliance program, including fully developing customized COPs for registered entities; (2) working with NERC Enforcement and IT and with Regional Entity staffs on improvements in the existing compliance reporting, analysis, tracking system and other compliance tools

supporting risk-based activities; (3) supporting successful implementation of CIP V5 standards and subsequent enhancements that become effective in 2017 and beyond; (4) continuing to monitor and support effective implementation and monitoring of the Physical Security Reliability Standard; (5) initiating a training program to support implementation of common audit procedures for each standard; and (6) continuing to integrate standards and compliance functions for clear stakeholder implementation, including through a common set of Reliability Standards Audit Worksheets, measures, or successors for all standards and in initiating a compliance phase-in learning period for all standards.

The Compliance Analysis, Certification and Registration group is responsible for a range of requirements and activities embodied in Section 500 and Appendices 5A and 5B of the NERC ROP, including providing technical resource support to standards development, compliance monitoring, and enforcement; ensuring that all entities impacting the BES are registered commensurate with risk; ensuring all Reliability Coordinators (“RC”), Balancing Authorities (“BA”) and Transmission Operators (“TOP”) are certified; conducting industry reliability assurance activities; and ensuring that compliance gaps identified in reportable events are assessed and addressed if appropriate. Major activities of this group include (1) registration of BES users, owners, and operators who are responsible for compliance with Commission-approved Reliability Standards; (2) evaluating and certification of the competency of RCs, BAs and TOPs; (3) conducting activities to reasonably assure the ERO that certain actions have been taken as reported in response to NERC Alerts or guidance to industry; (4) providing oversight of Regional Entity implementation of regional registration, compliance, certification, investigation, and complaint programs and processes; (5) conducting investigations to identify Possible Violations of Reliability Standards in response to complaints, BES disturbances, or other triggers, including participating on all Regional Entity-led investigations and as observers as requested on Commission-led reliability investigations and inquiries; (6) working with Regional Entity staff to confirm that qualified events and disturbances are evaluated against the relevant Reliability Standards and to ensure formal compliance monitoring occurs if indicated; and (7) addressing formal complaints that allege violations of Reliability Standards. Specific major activities of Compliance Analysis, Certification and Registration for 2017 will include continuing to work with the NERC-led panel to review registered entities for deregistration or applicability to a reduced number of Reliability Standards; and implementing registration program improvements and certification program improvements identified in 2016, including conducting training as necessary.

The Compliance Enforcement department is responsible for overseeing enforcement processes, the application of penalties or sanctions, and activities to mitigate and prevent recurrence of noncompliance with Reliability Standards. The Department works collaboratively with the Regional Entities to ensure consistent and effective implementation of the risk-based CMEP, including evaluating the consistency of disposition methods including assessment of penalties or sanctions. It also focuses on ensuring that the ERO Enterprise dedicates resources to the matters that pose the greatest risk to reliability. The Compliance Enforcement department monitors Regional Entities’ enforcement processes and provides oversight over the outcomes of such processes, to ensure due process, identify best practices and process efficiency opportunities, and promote consistency among Regional Entities’ business practices; collects and analyzes compliance enforcement data and trends to assist with identification of emerging risks and help to inform development of enforcement policy and processes; files notices of penalty (“NOP”) and other submittals associated with noncompliance discovered through Regional Entity compliance, monitoring and enforcement activities; processes and files NOPs and other submittals discovered through NERC-led investigations and audits; collaborates with other NERC departments, including Compliance Assurance, Reliability Standards and Regional Entity Coordination; and delivers training of the ERO Enterprise staff and outreach to registered entities on compliance and enforcement

topics. Compliance Enforcement also conducts outreach activities that focus on self-logging, compliance exceptions, risk elements, CIP V5, IRAs, and internal controls.

During 2017, the Compliance Enforcement department will continue to focus on the successful implementation of, as well as refining and improving, the risk-based CMEP. The major activities of Compliance Enforcement will include refining and improving risk-based CMEP processes; implementing in a transparent manner the risk-focused ERO Enterprise enforcement philosophy; expanding the feedback loop of information from Enforcement to Standards and other program areas; and working with Compliance Assurance, IT, and Regional Entity staffs regarding improvements in the existing compliance, reporting, analysis system and other compliance tools to support risk-based activities.

The major activities of the Compliance Monitoring and Enforcement and Organization Registration and Certification Program Area satisfy the following criteria:

I.A: Is the activity necessary or appropriate for Reliability Standards development projects pursuant to the NERC Rules of Procedure?

I.C: Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information for Reliability Standards development, including for purposes of identifying areas in which new Reliability Standards could be developed, existing Reliability Standards could be revised, or existing Reliability Standards could be eliminated?

II.A: Is the activity necessary or appropriate for the identification and registration of users, owners, and operators of the Bulk Power System that are required to comply with Requirements of Reliability Standards applicable to the reliability functions for which they are registered?

II.B: Is the activity necessary or appropriate for the Certification of Reliability Coordinators, Transmission Operators and Balancing Authorities as having the requisite personnel, qualifications and facilities and equipment needed to perform these reliability functions in accordance with the applicable Requirements of Reliability Standards?

II.D: Is the activity necessary or appropriate for conducting, participating in or overseeing compliance monitoring and enforcement activities pursuant to the NERC ROP and (through the Regional Entities) the Commission-approved delegation agreements?

II.E: Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information to monitor and enforce compliance with Reliability Standards, including evaluating the effectiveness of current compliance monitoring and enforcement processes, the need for new or revised compliance monitoring and enforcement processes, and the need for new or different means of training and education on compliance with Reliability Standards.

II.F: Is the activity necessary or appropriate for the provision of training, education and dissemination of information for/to (i) NERC personnel, (ii) Regional Entity personnel, and (iii) industry personnel with respect to compliance monitoring and enforcement topics and topics concerning reliability risks identified through compliance monitoring and enforcement activities, such as: (1) Requirements of Reliability Standards, including how to comply and how to demonstrate compliance? This includes development of guidance and interpretation documents.

(2) Compliance monitoring and enforcement processes, including how to conduct them, how to participate in them, and the expectations for the process? This includes development of guidance documents. (3) Disseminating, through workshops, webinars, Advisories/Recommendations/Essential Actions, and other publications, “lessons learned” information on compliance concerns and reliability risks obtained through compliance monitoring and enforcement activities, monitoring and investigation of Bulk Power System major events, off-normal occurrences and near miss events, and other Bulk Power System monitoring activities? (4) Registered Entity internal processes for compliance with Reliability Standards, such as development, implementation and maintenance of internal reliability compliance programs?

V: Is the activity one that is required or specified by, or carries out, the provisions of NERC’s Rules of Procedure that have been approved by the Commission as “Electric Reliability Organization Rules” (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)? (The applicable Rules of Procedure provisions for these major activities are §400 and 500 and Appendices 4B, 4C, 5A, 5B and 5C.)

VI: Is the activity necessary or appropriate for the supervision and oversight of Regional Entities in the performance of their delegated responsibilities in accordance with FPA §215, 18 C.F.R. Part 39, the Commission-approved delegation agreement between NERC and the Regional Entity, the NERC ROP, and applicable provisions of Commission orders?

IX: Is the activity necessary or appropriate for NERC and Regional Entity committees, subcommittees and working groups engaged in the activities encompassed by one or more of the other criteria?

X: Is the activity necessary or appropriate for the analysis and evaluation of activities encompassed by one or more of the other criteria for the purpose of identifying means of performing the activities more effectively and efficiently?

#### **IV. Reliability Assessment and System Analysis Program 2017 Major Activities**

The major activities of the Reliability Assessment and System Analysis (RASA) Program are described at pages 43-47 of the 2017 Business Plan and Budget. The RASA Program carries out the ERO’s responsibility to conduct assessments of the reliability and adequacy of the BES to provide insight and guidance about reliability risks. RASA focuses on developing a technical framework and understanding of the emerging reliability risks facing the industry. The principal activity areas of the RASA Program include: independent assessments and reports on the overall reliability and adequacy of the BES, and associated reliability risks that could impact the upcoming summer and winter seasons and the long-term (e.g. 10-year) planning horizon and other reliability issues requiring an in-depth analysis; interconnection-wide analysis for analyzing steady-state and dynamic conditions, including frequency, Essential Reliability Services, stability, and oscillatory behavior aspects; assurance oversight that electrical elements necessary for reliable operation of the BES are appropriately identified as BES elements; support for development and improvement of long-term sustainable interconnection-based power flow, dynamic and load models that exhibit the accuracy and fidelity reflecting actual BES reliability performance and dynamic conditions; advancement of industry and the ERO’s understanding of power system characteristics and behaviors by gathering larger PMU datasets of data for advanced data analytics and modeling improvements; and establishing reliability leadership and consistent, technically sound guidance and recommendations that position industry and policy-makers to enhance reliability through effective outreach and

communications.

The RASA Program works with industry leaders to create a reliability strategy that is relevant, timely, and effective at addressing the most important reliability risks, through reviewing and addressing key priority risks identified by the NERC RISC, synthesizing information identified through analysis and assessment efforts, extracting and prioritizing the associated reliability risks; sharing and integrating risk analysis insights across the ERO Enterprise; and translating that knowledge into actionable guidance and recommendations for NERC management, the Board, and entities, and government policy makers. Reliability assessments evaluate the expected reliability behavior of the BPS through extensive deterministic and probabilistic analyses to identify potential reliability risks and potential mitigation approaches. RASA monitors the ongoing and historic reliability performance of the BES through data gathered to analyze historic trends and provides reports and recommendations regarding the associated conditions that could impact reliability, security and stability of the BPS. RASA assesses and reports on the reliability, adequacy and associated risks that could impact short-term and long-term study periods, and conducts special reliability assessments and identifies recommendations and guidance actions that may be warranted to lessen identified risks or enhance overall reliability. RASA also coordinates forecast reliability data between planning areas, the Regional Entities, and government organizations. A significant ongoing effort involving RASA, Regional Entity staff, and stakeholders focuses on continued development of effective Essential Reliability Services, leading to defined Essential Reliability Services, an evaluation of initial metrics and data compilation of actual performance, and ongoing assessment.

RASA works closely with other organizations such as the Electric Power Research Institute (EPRI), Department of Energy (DOE), Institute of Electrical and Electronics Engineers (IEEE), Institute of Nuclear Power Operations (INPO), North American Transmission Forum (NATF), North American Generation Forum (NAGF), Canadian Electricity Association (CEA), Interstate Natural Gas Association of America, and Natural Gas Supply Association, on a number of energy industry reliability issues such as geomagnetic disturbances, vegetation management, variable generation integration, and interdependency of gas and electric systems.

The ongoing and new major activities of the RASA Program for 2017 include: (1) implementing advanced reliability assessment and system analysis methods to address the changing nature of the grid, including issuing reliability assessment reports, guidelines, and recommendations to address high priority evolving performance trends and address emerging risks to reliability; (2) issue special assessments on identified high-priority risks as prioritized and recommended by the RISC, including on changing resource mix and maintaining Essential Reliability Services, increased penetration of distributed energy resources, increasing dependency on generation fuel by natural gas, and inter-area and local system oscillations in all interconnections and their potential impact on interconnection reliability; (3) providing the basis for industry to meet the regulatory requirements of Reliability Standard BAL-003-1, including the Frequency Response Annual Analysis and BAL-003 filing with the Commission and the determination of Interconnection Frequency Response Obligation and Balancing Authority Frequency Reporting Obligation values; (4) supporting Reliability Standard development by providing subject matter expertise; (5) Providing support and leadership to the NERC Planning Committee and to standing committees and subcommittees, working groups, and task forces; (6) supporting major event investigations, analyses, and reporting of major findings, recommendations, and lessons learned that will improve reliability; (7) providing feedback to interconnection-wide model-building groups on improvements to system model quality and fidelity; and (8) assist in development of approaches to registration and provide input to NERC staff in support of the development of CMEP risk elements, as well as supporting and leading the BES Definition Exception process and processing Self-Determined Notifications.

The major activities of the RASA Program satisfy the following criteria:

I.A: is the activity necessary or appropriate for Reliability Standards development projects pursuant to the NERC Rules of Procedure?

I.C.1: Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information for Reliability Standards development, including for purposes of identifying areas in which new Reliability Standards could be developed, existing Reliability Standards could be revised, or existing Reliability Standards could be eliminated, such as: (1) Measuring reliability performance – past, present and future; publishing or disseminating the results of such measurements; analyzing the results of such measurements; identifying and analyzing risks to reliability of the Bulk Power System based on such measurements; and/or identifying approaches to mitigating or eliminating such risks?

II.A: Is the activity necessary or appropriate for the identification and registration of users, owners, and operators of the Bulk Power System that are required to comply with Requirements of Reliability Standards applicable to the reliability functions for which they are registered?

III.A: Is the activity necessary or appropriate for the preparation or dissemination of long-term, seasonal, and special assessments of the reliability and adequacy of the Bulk Power System?

III.B: Is the activity necessary or appropriate for measuring reliability performance – past, present and future; publishing or disseminating the results of such measurements; analyzing the results of such measurements; identifying and analyzing risks to reliability of the Bulk Power System based on such measurements; and/or identifying approaches to mitigating or eliminating such risks?

III.F: Is the activity necessary or appropriate for the development and dissemination of Advisories/Recommendations/Essential Actions regarding lessons learned and potential reliability risks to users, owners, and operators of the Bulk Power System?

IV: Is the activity one that was required or directed by a Commission order issued pursuant to §215? (FERC orders directed NERC to develop and implement a revised definition of “Bulk Electric System” and a procedure for requesting and receiving exceptions from the BES definition, and subsequently approved NERC’s proposed revised BES definition and its proposed BES exception procedure.)

V. Is the activity one that is required or specified by, or carries out, the provisions of NERC’s Rules of Procedure that have been approved by the Commission as “Electric Reliability Organization Rules” (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)? (The applicable Rules of Procedure provisions for this major activity are §801-806 and 809-810 and Appendix 5C.)

VI: Is the activity necessary or appropriate for the supervision and oversight of Regional Entities in the performance of their delegated responsibilities in accordance with FPA §215, 18 C.F.R. Part 39, the Commission-approved delegation agreement between NERC and the Regional Entity, the NERC ROP, and applicable provisions of Commission orders?

IX: Is the activity necessary or appropriate for NERC and Regional Entity committees, subcommittees and working groups engaged in activities encompassed by one or more of the other criteria?

X: Is the activity necessary or appropriate for the analysis and evaluation of activities encompassed by one or more of the other criteria for the purpose of identifying means of performing the activities more effectively and efficiently?

**V. Performance Analysis 2017 Major Activities**

The major activities of the Performance Analysis (PA) group are described at pages 49-51 of the 2017 Business Plan and Budget. The PA group provides analysis and guidance about reliability risks and areas of concern based on analysis of historic system performance, including with respect to system, equipment, entity and organizational performance that may indicate a need to develop remediation strategies, action plans, or data used to revise or retire Reliability Standards or consider new Reliability Standards. PA focuses on developing a technical framework and understanding reliability risks facing the industry.

PA collects transmission outage, generator performance, demand response, and protection and control systems misoperation data in a common format using various industry databases; this data is used to develop and report grid metrics that analyze outage frequency, duration, causes, and other factors related to transmission and generator performance and automatic power system protection and control effectiveness. Trends, findings and recommendations from PA serve as technical input to Reliability Standards and to standards project prioritization, compliance process improvements, event analyses, reliability assessment, and critical infrastructure protection efforts. In 2017, PA will add wind generator data to the data collected. The analyses and results collected and produced are reported in the annual State of Reliability Report, which provides guidance and recommendations for enhanced bulk system reliability. In 2017, the State of Reliability Report will begin to reflect post-seasonal reliability review, insights from analysis of transmission, generator, and demand response data systems, and integration of event analysis and misoperations.

PA works closely with other organizations including EPI, DOE, IEEE, INPO, NATF, NAGF, and CEA, on a number of fronts, including the Transmission Availability Data System (TADS), Generator Data Availability System (GADS), and Demand Response Availability Data System (DADS).

PA's ongoing and new major activities for 2017 will include the following: (1) Issuing the State of Reliability Report and guidelines, recommendations, and alerts as needed, including verification and validation of data and information through Regional Entities and technical committees. (2) Overseeing and evaluating reliability trends that identify reliability risks, by analyzing data contained in TADS, GADS and TADS as well as reliability metrics and protection and control systems misoperations data. (3) Supporting Reliability Standards development by providing subject matter expertise. (4) Providing support and leadership to the NERC standing committees' subcommittees, working groups, and task forces serving the standing committees. (5) Assisting in the development of approaches to registration and providing input to NERC staff in support of development of CMEP risk elements. (6) Conducting major event investigations, analyses, and reporting of major findings, recommendations, and lessons learned that will improve reliability. (7) Providing insight on emerging system protection issues, and handing off any issues with future implications to RASA.

The major activities of PA satisfy the following criteria:

I.A: is the activity necessary or appropriate for Reliability Standards development projects pursuant to the NERC Rules of Procedure?

I.C.1: Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information for Reliability Standards development, including for purposes of identifying areas in which new Reliability Standards could be developed, existing Reliability Standards could be revised, or existing Reliability Standards could be eliminated, such as: (1) Measuring reliability performance – past, present and future; publishing or disseminating the results of such measurements; analyzing the results of such measurements; identifying and analyzing risks to reliability of the Bulk Power System based on such measurements; and/or identifying approaches to mitigating or eliminating such risks? (2) Monitoring, event analysis and investigation of Bulk Power System major events, off-normal occurrences and near miss events?

II.A: Is the activity necessary or appropriate for the identification and registration of users, owners, and operators of the Bulk Power System that are required to comply with Requirements of Reliability Standards applicable to the reliability functions for which they are registered?

III.A: Is the activity necessary or appropriate for the preparation or dissemination of long-term, seasonal, and special assessments of the reliability and adequacy of the Bulk Power System?

III.B: Is the activity necessary or appropriate for measuring reliability performance – past, present and future; publishing or disseminating the results of such measurements; analyzing the results of such measurements; identifying and analyzing risks to reliability of the Bulk Power System based on such measurements; and/or identifying approaches to mitigating or eliminating such risks?

III.F: Is the activity necessary or appropriate for the development and dissemination of Advisories/Recommendations/Essential Actions regarding lessons learned and potential reliability risks to users, owners, and operators of the Bulk Power System?

V. Is the activity one that is required or specified by, or carries out, the provisions of NERC's Rules of Procedure that have been approved by the Commission as "Electric Reliability Organization Rules" (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)? (The applicable Rules of Procedure provisions for this major activity are §801-811 and Appendix 8.)

IX: Is the activity necessary or appropriate for NERC and Regional Entity committees, subcommittees and working groups engaged in activities encompassed by one or more of the other criteria?

**VI. Reliability Risk Management (Situation Awareness and Event Analysis) 2017 Major Activities**

The major activities of the Reliability Risk Management ("RRM") group, which is comprised of the Situation Awareness Department and the Event Analysis Department, are described at pages 53-55 and 57-58 of the 2017 Business Plan and Budget. The RRM group carries out the ERO's responsibility to perform assessments (including real-time and near-real-time continual awareness, detailed analysis of



significant events, and longer-term broad performance assessments) of the reliability and adequacy of the BES, including identifying potential issues of concern relating to system, equipment, entity, and human performance. RRM has six primary functions: (1) BES awareness, (2) event analysis and determination of root and contributing causes, (3) assessment of human performance challenges that affect BES reliability and identification of improvement opportunities, (4) continent-wide analysis and reporting of BES performance, (5) support of the NERC Operating Committee, and (6) support of the NERC Critical Infrastructure Protection Committee. Through awareness and continuous assessment, RRM identifies potential reliability risks to the BES, analyzes events in detail, ensures that industry is well informed of system events, emerging trends, risk analysis, and lessons learned, and provides data and analysis to inform other aspects of NERC's statutory functions.

The Situation Awareness department along, with the Regional Entities, monitors BES conditions, significant occurrences and emerging risks, and threats across the 14 Reliability Coordinator regions in North America. Situation Awareness also supports development and publication of NERC Alerts and awareness products, and facilitates information sharing among industry, Regions and government during crisis situations and major system disturbances. Situation Awareness is engaged in enhancement, replacement, streamlining or modification of several reliability-related situation awareness and monitoring tools, including SAFNRv2, operation and maintenance pending replacement of the current secure alert tool, refreshing the Reliability Coordinator Information System application, and continuing to set conditions to bring limited Synchrophasor data into NERC for wide-area situational awareness and event triage applications. The Situation Awareness Department uses the following reliability-related tools to support its activities: Resource Adequacy (ACE Frequency) Tool; Inadvertent Interchange; Frequency Monitoring and Analysis Tool; Intelligent Alarms Tool; and Genscape (PowerIQ and PowerRT tools).

The ongoing and new major activities of the Situation Awareness department for 2017 include: ensuring that the ERO is aware of all BES events above a threshold of impact; enabling the sharing of information and data to facilitate wide area situational awareness; during crisis situations, facilitating the exchange of information among industry, Regions, and U.S. and Canadian governments; keeping the industry informed of emerging reliability threats and risks to the BES, including any expected actions; conducting the annual NERC Monitoring and Situational Awareness Conference and Human Performance Conference; and administering the NERC Alerts process as specified in §810 of the Rules of Procedure to issue Advisory (Level 1) Alerts on significant and emerging reliability and security related topics, and facilitate the tracking of actions specified in Recommendation (Level 2) and Essential Action (Level 3) Alerts.

The Event Analysis department performs assessments of the reliability and adequacy of the BES to identify potential issues of concern related to system, equipment, entity, and human performance that may indicate a need to develop remediation strategies, action plans, or data used to revise Reliability Standards or consider new Reliability Standards. Event Analysis conducts analyses to determine the causes of events, promptly assures tracking of corrective actions to prevent recurrence, and provides lessons learned to the industry. Event Analysis analyzes all reportable events for sequence of events, root cause, risks to reliability, and mitigation and ensures that the industry is well-informed of system events, emerging trends, risk analysis, lessons learned, and expected actions. Event Analysis conducts in-depth analyses of approximately 150 events per year on average. Additionally, Event Analysis identifies human error risks and precursor factors that allow human error to affect BES reliability, and educates industry regarding such risks, precursors, and related mitigation methods. Event analysis also supports compliance and standards training initiatives and trending and analysis to identify emerging reliability risks to the BES. Event Analysis works in collaboration with and supports the activities of other groups involved in human

performance analysis including the NERC Operating Committee’s Event Analysis Subcommittee, the WECC Human Performance Working Group, and others. Event Analysis also collaborates with industry groups including the NATF, NAGF, and trade associations.

The ongoing and new major activities for 2017 for the Event Analysis department include: (1) Working with Regional Entities to obtain and review information from registered entities on qualifying events and disturbances in order to advance awareness of events above a threshold level; facilitating analysis of root and contributing causes, risks to reliability, wide area assessments and remediation efforts; and disseminating information regarding events in a timely manner. (2) Ensuring that all reportable events are analyzed for sequence of events, root cause, risk to reliability, and mitigation. (3) Continuing to refine risk-based methodologies to support better identification of reliability risks, including use of more sophisticated cause codes for analysis. (4) Conducting training (webinars, workshops and conference support) to inform industry and the ERO of lessons learned, root cause analysis, trends, human performance, and cold weather preparedness and recommendations. (5) Developing reliability recommendations and alerts as needed, and tracking industry accountability for critical reliability recommendations. (6) Ensuring that industry is well informed of system events, emerging trends, risk analysis, lessons learned, and expected actions. (7) Conducting major event analysis and reporting of major findings and recommendations that will improve reliability. The Event Analysis department will also support several top priority reliability risk projects being led by the PA program.

The major activities of the RRM group satisfy the following criteria:

I.C.2: Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information for Reliability Standards development, including for purposes of identifying areas in which new Reliability Standards could be developed, existing Reliability Standards could be revised, or existing Reliability Standards could be eliminated, such as: (2) Monitoring, event analysis and investigations of Bulk Power System major events, off-normal occurrences and near-miss events?

II.E.2: Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information to monitor and enforce compliance with Reliability Standards, including evaluating the effectiveness of current compliance monitoring and enforcement processes, the need for new or revised compliance monitoring and enforcement processes, and the need for new or different means of training and education on compliance with Reliability Standards, such as: (2) Monitoring, event analysis and investigation of Bulk Power System major events, off-normal occurrences, and near miss events?

II.F.3: Is the activity necessary or appropriate for the provision of training, education and dissemination of information for/to (i) NERC personnel, (ii) Regional Entity personnel, and (iii) industry personnel with respect to compliance monitoring and enforcement topics and topics concerning reliability risks identified through compliance monitoring and enforcement activities, such as: (3) Disseminating, through workshops, webinars, Advisories, Recommendations, Essential Actions, and other publications; “lessons learned” information on compliance concerns and reliability risks obtained through compliance monitoring and enforcement activities; monitoring and investigation of Bulk Power System major events, off-normal occurrences and near miss events, and other Bulk Power System monitoring activities?

II.G: Is the activity necessary or appropriate for the development and provision of tools and services that are useful for the provision of adequate reliability, because they relate specifically to compliance with existing Reliability Standards and they proactively help avert Reliability Standard violations and Bulk Power System disturbances?

III.C: Is the activity necessary or appropriate for investigating, analyzing, evaluating, and disseminating information concerning, the causes of major events and off-normal occurrences, and/or providing coordination assistance, technical expertise and other assistance to users, owners, and operators of the Bulk Power System in connection with Bulk Power System major events and off-normal occurrences, but not real-time operational control of the Bulk Power System?

III.D: Is the activity necessary or appropriate for awareness of circumstances on the Bulk Power System and to contribute to understanding risks to reliability?

III.F: Is the activity necessary or appropriate for the development and dissemination of Advisories/Recommendations/Essential Actions regarding lessons learned and potential reliability risks to users, owners, and operators of the Bulk Power System?

V: Is the activity one that is required or specified by, or carries out, the provisions of NERC's Rules of Procedure that have been approved by the Commission as "Electric Reliability Organization Rules" (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)? (The applicable Rules of Procedure provisions for these major activities are §807, 808, 810 and 1001 and Appendix 8.)

IX. Is the activity necessary or appropriate for NERC and Regional Entity committees, subcommittees and working groups engaged in activities encompassed by one or more of the other criteria?

## **VII. Electricity Information Sharing and Analysis Center 2017 Major Activities**

The major activities of the Electricity Information Sharing and Analysis Center ("E-ISAC") are described at pages 60-63 of the 2017 Business Plan and Budget. The primary function of E-ISAC is to reduce cyber and physical risk to the Electricity Subsector across North America by providing unique insights, leadership and coordination, and to be the trusted, timely, actionable resource of grid risk information and analysis to enhance electric reliability. The E-ISAC facilitates electricity sector coordination regarding physical security and cybersecurity events affecting the BES. E-ISAC analytic personnel maintain a detailed understanding of emerging vulnerabilities and threats within the broad industrial control systems community and the more focused BES community, utilizing, among other sources, intelligence reporting services. E-ISAC manages and executes NERC's responsibilities in the Cybersecurity Risk Information Sharing Program ("CRISP") and acts as the program manager for CRISP. The purpose of CRISP is to facilitate the sharing of cyber threat information and to develop situation awareness tools that enhance the electricity sector's ability to identify, prioritize, and coordinate protection of its critical infrastructure. Finally, E-ISAC also supports an annual grid security conference and a biennial Grid Security Exercise. During 2017, the E-ISAC's and CRISP's activities will include beginning development and implementation of significant improvements to the E-ISAC portal to extend its functionality and allow for easier access to filter data for the cyber and physical security communities and for automated information sharing.

The major activities of the ES-ISAC satisfy the following criteria:

I.C.1: Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information for Reliability Standards development, including for purposes of identifying areas in which new Reliability Standards could be developed, existing Reliability Standards could be revised, or existing Reliability Standards could be eliminated, such as: (1) Measuring reliability performance – past, present and future; publishing or disseminating the results of such measurements; analyzing the results of such measurements; identifying and analyzing risks to reliability of the Bulk Power System based on such measurements; and/or identifying approaches to mitigating or eliminating such risks? (2) Monitoring, event analysis and investigation of Bulk Power System major events, off-normal occurrences and near-miss events?

III.D: Is the activity necessary or appropriate for awareness of circumstances on the Bulk Power System and to contribute to understanding risks to reliability.

III.E: Is the activity necessary or appropriate for gathering, analyzing and sharing with and among industry and government participants, information regarding the physical or cyber security of the Bulk Power System.

III.F: Is the activity necessary or appropriate for the development and dissemination of Advisories/Recommendations/Essential Actions regarding lessons learned and potential reliability risks to users, owners, and operators of the Bulk Power System?

V: Is the activity one that is required or specified by, or carries out, the provisions of NERC's Rules of Procedure that have been approved by the Commission as "Electric Reliability Organization Rules" (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)? (The applicable Rules of Procedure provisions for these major activities are §810 and 1003.)

IX. Is the activity necessary or appropriate for NERC and Regional Entity committees, subcommittees and working groups engaged in activities encompassed by one or more of the other criteria?

#### **VIII. Training, Education, and Operator Certification Program 2017 Major Activities**

The major activities of the Training, Education, and Operator Certification Program are described at pages 65-67 of the 2017 Business Plan and Budget. The major activities of this program include oversight and coordination of the delivery of training programs to NERC and Regional Entity staff; as well as training and education for industry participants on the requirements of Reliability Standards, the Reliability Standards development process, and the compliance monitoring and enforcement process. The Training and Education Program supports the ERO's responsibilities to develop, adopt, and obtain approval of Reliability Standards and to monitor, enforce and achieve compliance with the mandatory standards. The Training and Education Program also supports NERC's System Operator Certification Program, which ensure that personnel operating the BES have the skills, training and qualifications needed to operate the BES reliably. This Program maintains the credentials required to work in system control centers across North America for over 6,000 system operators. The Training and Education Program prepares operators for complying with requirements of Reliability Standards and appropriately operating the BES during normal and emergency operations. Education and training activities include the following subject matter: risk-based compliance monitoring and enforcement; standards and compliance;

registration and certification; event analysis, cause analysis, and lessons learned; reliability assessment and system analysis; continuing education for system operators; and new system operator certification examinations for the Reliability Coordinator, Transmission Operator, Balancing and Interchange Operator, and Balancing, Interchange and Transmission Operator credentials.

The major activities of the Training, Education, and Operator Certification Program for 2017 include providing and expanding training and education for ERO personnel and industry in the following areas: Reliability Standards compliance, emerging cyber-related issues; auditor skills and consistent audit and investigation techniques and standards compliance reviews, including risk-based compliance monitoring and enforcement and other improvements in compliance and enforcement practices; development and implementation of clear and technically sound Reliability Standards; lessons learned and trends from events, and identified themes from trending and common cause analysis; effective root, apparent and common cause analysis methods; quality improvement of registered entity self-reporting and self-certification; entity registration processes, issues and alternatives; human performance fundamentals; and developing and incorporating a systematic approach to ongoing training. The Training, Education, and Operator Certification Program will continue to work with industry stakeholders and the System Operator Certification exam vendor to create certification exams that will promote reliability of the BPS. Further, the Continuing Education (CE) program will evaluate and revise the current program criteria as reflected in the CE program manual, taking into account the growth and maturation of industry training programs as well as ongoing research on adult learning to ensure the CE program continues to foster improvements in training and promotes quality in training programs.

The major activities of the Training, Education, and Operator Certification Program satisfy the following criteria:

I.D: Is the activity necessary or appropriate for the provision of training and education concerning Reliability Standards development processes, procedures and topics for/to (i) NERC personnel, (ii) Regional Entity personnel, and (iii) industry personnel?

II.C: Is the activity necessary or appropriate for the Certification of system operating personnel as qualified to carry out the duties and responsibilities of their positions in accordance with the Requirements of applicable Reliability Standards?

II.F: Is the activity necessary or appropriate for the provision of training, education and dissemination of information for/to (i) NERC personnel, (ii) Regional Entity personnel, and (iii) industry personnel with respect to compliance monitoring and enforcement topics and topics concerning reliability risks identified through compliance monitoring and enforcement activities, such as: (1) Requirements of Reliability Standards, including how to comply and how to demonstrate compliance? This includes development of guidance and interpretation documents. (2) Compliance monitoring and enforcement processes, including how to conduct them, how to participate in them, and the expectations for the processes? This includes development of guidance documents. (3) Disseminating, through workshops, webinars, Advisories/Recommendations/Essential Actions, and other publications, “lessons learned” information on compliance concerns and reliability risks obtained through compliance monitoring and enforcement activities, monitoring and investigation of Bulk Power System major events, off-normal occurrences and near miss events, and other Bulk Power System monitoring activities. (4) Registered Entity internal processes for compliance with Reliability Standards, such as development, implementation and maintenance of internal reliability compliance programs?

V: Is the activity one that is required or specified by, or carries out, the provisions of NERC's Rules of Procedure that have been approved by the Commission as "Electric Reliability Organization Rules" (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)? (The applicable Rules of Procedure provision for these major activities are §600 and 900.)

VI: Is the activity necessary or appropriate for the supervision and oversight of Regional Entities in the performance of their delegated responsibilities in accordance with FPA §215, 18 C.F.R. Part 39, the Commission-approved delegation agreement between NERC and the Regional Entity, the NERC ROP, and applicable provisions of Commission orders?

## **IX. Administrative Services 2017 Major Activities**

NERC's Administrative Services Departments are Technical Committees and Member Forums (for which no funding for activities is budgeted for 2017), General and Administrative, Legal and Regulatory, Information Technology ("IT"), Human Resources, and Finance and Accounting. The major activities of these departments are described at pages 70-81 of the 2017 Business Plan and Budget.

General and Administrative includes the administration and general management of the organization, the Chief Executive Officer and Chief Reliability Officer, Board of Trustees fees and expenses, communications, external affairs and government relations, and office rent.

Legal and Regulatory provides legal support to the organization, including to management, and the Reliability Standards, Compliance Analysis, Certification and Registration, Reliability Risk Management, RASA, and Performance Analysis Programs, as well as general corporate legal support in areas including antitrust, corporate, commercial, insurance, contracts, employment, real estate, copyright, tax, and other areas.

IT supports NERC's computing, Internet, database and electronic data storage and maintenance, and telecommunications and internet needs, programs, applications and infrastructure, including management of the development and implementation of new software applications and infrastructure. The capital expenditure projects managed by IT represent capital expenditures in hardware, software and associated tools to securely gather, store, analyze and maintain data across the ERO Enterprise to support the ERO's operations, as well as necessary acquisition and replacement of computers, servers and related devices. IT's 2017 activities are focused on NERC infrastructure and support; improving, enhancing, or replacing existing functionalities; ERO Enterprise infrastructure and support; and ERO Enterprise new functionalities, including the document management program.

Human Resources manages all of NERC's human resources functions, including staffing, benefits administration, employee relations, performance and compensation management, succession planning, and training and development. Human Resources also obtains compensation studies, effectiveness studies, and other compensation consulting services when needed.

Finance and Accounting manages all finance and accounting functions of NERC, including employee payroll, 401(k), 457(b) and 457(f) plans, travel and expense reporting, monthly financial reporting, sales and use tax, meetings and events planning and services, insurance, internal audit, facilities management, development of the annual business plan and budget, and the ERO risk management

framework.

The major activities of NERC's Administrative Services Departments satisfy the following criteria:

I.A: Is the activity necessary or appropriate for Reliability Standards development projects pursuant to the NERC Rules of Procedure (ROP)?

II.A: Is the activity necessary or appropriate for the identification and registration of users, owners, and operators of the Bulk Power System that are required to comply with Requirements of Reliability Standards applicable to the reliability functions for which they are registered?

II.D: Is the activity necessary or appropriate for conducting, participating in or overseeing compliance monitoring and enforcement activities pursuant to the NERC ROP and (through the Regional Entities) the Commission-approved delegation agreements?

III.C: Is the activity necessary or appropriate for investigating, analyzing, evaluating, and disseminating information concerning, the causes of major events and off-normal occurrences, and/or providing coordination assistance, technical expertise and other assistance to users, owners, and operators of the Bulk Power System in connection with Bulk Power System major events and off-normal occurrences, but not real-time operational control of the Bulk Power System?

V: Is the activity one that is required or specified by, or carries out, the provisions of NERC's Rules of Procedure that have been approved by the Commission as "Electric Reliability Organization Rules" (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)? (The applicable Rules of Procedure provision for the major activities of Finance and Accounting is §1100.)

VI: Is the activity necessary or appropriate for the supervision and oversight of Regional Entities in the performance of their delegated responsibilities in accordance with FPA §215, 18 C.F.R. Part 39, the Commission-approved delegation agreement between NERC and the Regional Entity, the NERC ROP, and the applicable provisions of Commission orders.

IX: Is the activity necessary or appropriate for NERC and Regional Entity committees, subcommittees and working groups engaged in activities encompassed by one or more of the other criteria?

XI: Is the activity a governance or administrative/overhead function, activity or service necessary or appropriate for the activities encompassed by the other criteria and, in general, necessary and appropriate to operate a functioning organization?

**NERC WRITTEN CRITERIA FOR DETERMINING  
WHETHER AN ACTIVITY IS ELIGIBLE TO BE FUNDED  
UNDER SECTION 215 OF THE FEDERAL POWER ACT**

For purposes of internal management approval of a proposed new activity or group of related activities (“major activity”), the proposed activity or major activity must be shown to fall within at least one of the criteria listed below. When sub-criteria are listed below a roman numeral numbered major criterion, the proposed activity should be a positive answer to at least one of the sub-criteria. Conversely, an activity that falls under a sub-criterion should pertain to the subject matter of the major criterion.

NERC’s annual business plan and budget will describe how each major activity falls within one or more of the criteria listed below. If the major activity is substantially the same as a major activity that was shown to fall within the criteria in a previous year’s business plan and budget, the current year’s business plan and budget can refer to the prior year business plan and budget.

A determination that an activity falls within FPA §215 does not necessarily mean that NERC will propose or undertake such activity. The determination of whether an activity falling under FPA §215 should or will be undertaken in a given budget year will be addressed in the context of the applicable business plan and budget and will include opportunities for stakeholder input.

The criteria listed below are not necessarily each distinct from the others. An activity or major activity may fall within more than one of the criteria listed below.

- I. Is the activity necessary or appropriate for the development of Reliability Standards?
  - A. Is the activity necessary or appropriate for Reliability Standards development projects pursuant to the NERC Rules of Procedure (ROP)?
  - B. Is the activity necessary or appropriate for providing guidance and assistance to Regional Entities in carrying out Regional Reliability Standards development activities?
  - C. Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information for Reliability Standards development, including for purposes of identifying areas in which new Reliability Standards could be developed, existing Reliability Standards could be revised, or existing Reliability Standards could be eliminated, such as:
    1. Measuring reliability performance – past, present and future; publishing or disseminating the results of such measurements; analyzing the results of such measurements; identifying and analyzing risks to reliability of the Bulk Power System<sup>46</sup> based on such measurements; and/or identifying approaches to mitigating or eliminating such risks?
    2. Monitoring, event analysis and investigation of Bulk Power System major events, off-normal occurrences and near miss events?
  - D. Is the activity necessary or appropriate for the provision of training and education concerning Reliability Standards development processes, procedures and topics for/to (i) NERC personnel, (ii) Regional Entity personnel, and (iii) industry personnel?
- II. Is the activity necessary or appropriate for the monitoring and enforcement of compliance with Reliability Standards?
  - A. Is the activity necessary or appropriate for the identification and registration of users, owners, and operators of the Bulk Power System that are required to comply with

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<sup>46</sup> This document uses the term “Bulk Power System” because that is the term defined and used in FPA §215. NERC recognizes that a different term, “Bulk Electric System,” is used to define the current reach of reliability standards. Reliability Standards.



Requirements of Reliability Standards applicable to the reliability functions for which they are registered?

- B. Is the activity necessary or appropriate for the Certification of Reliability Coordinators, Transmission Operators and Balancing Authorities as having the requisite personnel, qualifications and facilities and equipment needed to perform these reliability functions in accordance with the applicable Requirements of Reliability Standards?
- C. Is the activity necessary or appropriate for the Certification of system operating personnel as qualified to carry out the duties and responsibilities of their positions in accordance with the Requirements of applicable Reliability Standards?<sup>47</sup>
- D. Is the activity necessary or appropriate for conducting, participating in or overseeing compliance monitoring and enforcement activities pursuant to the NERC ROP and (through the Regional Entities) the Commission-approved delegation agreements?
- E. Is the activity necessary or appropriate for information gathering, collection and analysis activities to obtain information to monitor and enforce compliance with Reliability Standards, including evaluating the effectiveness of current compliance monitoring and enforcement processes, the need for new or revised compliance monitoring and enforcement processes, and the need for new or different means of training and education on compliance with Reliability Standards, such as:
  - 1. Measuring reliability performance – past, present and future; publishing or disseminating the results of such measurements; analyzing the results of such measurements; identifying and analyzing risks to reliability of the Bulk Power System based on such measurements; and/or identifying approaches to mitigating or eliminating such risks?
  - 2. Monitoring, event analysis and investigation of Bulk Power System major events, off-normal occurrences, and near miss events?
- F. Is the activity necessary or appropriate for the provision of training, education and dissemination of information for/to (i) NERC personnel, (ii) Regional Entity personnel, and (iii) industry personnel with respect to compliance monitoring and enforcement topics and topics concerning reliability risks identified through compliance monitoring and enforcement activities, such as:
  - 1. Requirements of Reliability Standards, including how to comply and how to demonstrate compliance? This includes development of guidance and interpretation documents.
  - 2. Compliance monitoring and enforcement processes, including how to conduct them, how to participate in them, and the expectations for the processes? This includes development of guidance documents.
  - 3. Disseminating, through workshops, webinars, Advisories, Recommendations, Essential Actions, and other publications; “lessons learned” information on compliance concerns and reliability risks obtained through compliance monitoring and enforcement activities; monitoring and investigation of Bulk Power System major events, off-normal occurrences and near miss events, and other Bulk Power System monitoring activities?

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<sup>47</sup> Although certification of system operating personnel is an activity falling within the scope of, and eligible to be funded pursuant to, FPA §215, NERC strives to fully fund the costs of this activity through fees charged to participants.

- 4. Registered Entity internal processes for compliance with Reliability Standards, such as development, implementation and maintenance of internal reliability compliance programs?
- G. Is the activity necessary or appropriate for the development and provision of tools and services that are useful for the provision of adequate reliability, because they relate specifically to compliance with existing Reliability Standards and they proactively help avert Reliability Standard violations and Bulk Power System disturbances?
- III. Is the activity necessary or appropriate for conducting and disseminating periodic assessments of the reliability of the Bulk Power System or monitoring the reliability of the Bulk Power System?
  - A. Is the activity necessary or appropriate for the preparation or dissemination of long-term, seasonal, and special assessments of the reliability and adequacy of the Bulk Power System?
  - B. Is the activity necessary or appropriate for measuring reliability performance – past, present and future; publishing or disseminating the results of such measurements; analyzing the results of such measurements; identifying and analyzing risks to reliability of the Bulk Power System based on such measurements; and/or identifying approaches to mitigating or eliminating such risks?
  - C. Is the activity necessary or appropriate for investigating, analyzing, evaluating, and disseminating information concerning, the causes of major events and off-normal occurrences, and/or providing coordination assistance, technical expertise and other assistance to users, owners, and operators of the Bulk Power System in connection with Bulk Power System major events and off-normal occurrences, but not real-time operational control of the Bulk Power System?
  - D. Is the activity necessary or appropriate for awareness of circumstances on the Bulk Power System and to contribute to understanding risks to reliability?
  - E. Is the activity necessary or appropriate for gathering, analyzing and sharing with and among industry and government participants, information regarding the physical or cyber security of the Bulk Power System?
  - F. Is the activity necessary or appropriate for the development and dissemination of Advisories/Recommendations/Essential Actions regarding lessons learned and potential reliability risks to users, owners, and operators of the Bulk Power System?
  - G. Is the activity necessary or appropriate for data collection and analysis of information regarding Bulk Power System reliability matters mandated by the Commission?
- IV. Is the activity one that was required or directed by a Commission order issued pursuant to FPA §215? Justification of an activity as a FPA §215 activity based on this category must reference the particular Commission order and directive.
- V. Is the activity one that is required or specified by, or carries out, the provisions of NERC’s Rules of Procedure that have been approved by the Commission as “Electric Reliability Organization Rules” (defined in 18 C.F.R. §39.1) pursuant to FPA §215(f)?
- VI. Is the activity necessary or appropriate for the supervision and oversight of Regional Entities in the performance of their delegated responsibilities in accordance with FPA §215, 18 C.F.R. Part 39, the Commission-approved delegation agreement between NERC and the Regional Entity, the NERC ROP, and applicable provisions of Commission orders?

- VII. Is the activity necessary or appropriate to maintain NERC’s certification as the Electric Reliability Organization? This Criterion includes conducting periodic assessments of NERC’s and the Regional Entities’ performance as the Electric Reliability Organization as required by 18 C.F.R. §39.3(c).
- VIII. Does the activity respond to or is it necessary or appropriate for audits of NERC and the Regional Entities conducted by the Commission?
- IX. Is the activity necessary or appropriate for NERC and Regional Entity committees, subcommittees and working groups engaged in activities encompassed by one or more of the other criteria?
- X. Is the activity necessary or appropriate for the analysis and evaluation of activities encompassed by one or more of the other criteria for the purpose of identifying means of performing the activities more effectively and efficiently?
- XI. Is the activity a governance or administrative/overhead function, activity or service necessary or appropriate for the activities encompassed by the other criteria and, in general, necessary and appropriate to operate a functioning organization? (Should NERC perform any non-FPA §215 activities, the costs of governance and administrative/overhead functions must be appropriately allocated.)  
NERC’s current governance and administrative/overhead functions are carried out in the following program areas:
  - A. Technical Committees and Members’ Forum Programs
  - B. General and administrative (includes, but is not limited to, executive, board of trustees, communications, government affairs, and facilities and related services).
  - C. Legal and Regulatory.
  - D. Information Technology
  - E. Human Resources
  - F. Accounting and Finance.

The following matters are excluded from the scope of FPA §215 activities. While a list of non-FPA §215 activities would be infinite, the following excluded matters are listed here because they are expressly referred to in FPA §215, the Commission’s ERO regulations and/or a Commission order issued pursuant to FPA §215:

- A. Developing or enforcing requirements to enlarge Bulk Power System facilities, or to construct new transmission capacity or generation capacity, or requirements for adequacy or safety of electric facilities or services.
- B. Activities entailing Real-time operational control of the Bulk Power System.
- C. Activities pertaining to facilities used in the local distribution of electricity.

## Exhibit C – Contractor and Consulting Costs

Program	Consultants & Contracts	2016 BUDGET	2017 BUDGET	2017 vs 2016 Budget
Compliance Assurance	Reliability Assurance Initiative	200,000	50,000	(150,000)
	<b>Compliance Assurance</b>	<b>200,000</b>	<b>50,000</b>	<b>(150,000)</b>
Event Analysis	Reliability Assurance Project Support	56,000	-	(56,000)
	<b>Event Analysis</b>	<b>56,000</b>	<b>-</b>	<b>(56,000)</b>
Compliance Investigation, Registration and Certification	Risk-based Registration Phase 2 - Consulting Support	50,000	-	(50,000)
	<b>Compliance Investigation, Registration and Certification</b>	<b>50,000</b>	<b>-</b>	<b>(50,000)</b>
Reliability Assessments and System Analysis	Reliability affects of GMD	100,000	100,000	-
	Reliability consulting support	475,000	425,000	(50,000)
	<b>Reliability Assessments and System Analysis</b>	<b>575,000</b>	<b>525,000</b>	<b>(50,000)</b>
Performance Analysis	GADS/TADS/DADS/SED	509,039	528,082	19,044
	<b>Performance Analysis</b>	<b>509,039</b>	<b>528,082</b>	<b>19,044</b>
Situation Awareness	Reliability Tools	576,300	619,150	42,850
	Secure Alerting System	141,000	96,000	(45,000)
	SAFNR - Phase II	438,200	505,700	67,500
	Communication network (NERCnet replacement)	55,975	75,000	19,025
	<b>Situation Awareness</b>	<b>1,211,475</b>	<b>1,295,850</b>	<b>84,375</b>
E-ISAC	<b>GridEx Support</b>	-	383,000	383,000
	Program-Level Capabilities	499,500	353,000	(146,500)
	Software & Services	113,285	113,285	-
	Events & Outreach	50,550	50,550	-
	CRISP	5,888,594	5,888,594	-
	<b>E-ISAC and CRISP</b>	<b>6,551,929</b>	<b>6,788,429</b>	<b>236,500</b>
System Operator Certification	System Operator Testing Expenses	59,400	62,000	2,600
	System Operator Examination Development	69,000	70,000	1,000
	Database Development	24,000	-	(24,000)
	Database Maintenance	25,200	37,800	12,600
	SOCCEC Database Improvement Project (funded from Working Capital generated from fees in excess of expenses)	150,000	50,000	(100,000)
	<b>System Operator Certification</b>	<b>327,600</b>	<b>219,800</b>	<b>(107,800)</b>
Training and Education	Continuing Education Program	133,200	145,800	12,600
	Web-based course hosting (Learning Management System)	55,000	55,000	-
	Enhanced Platform	-	-	-
	Course development and Support - External Training	125,000	125,000	-
	NERC Staff Technical Training	35,000	35,000	-
<b>Continuing Education, Training &amp; Education</b>	<b>348,200</b>	<b>360,800</b>	<b>12,600</b>	
General & Administrative	Communications support	15,000	15,000	-
	ERO Effectiveness Survey	80,000	-	(80,000)
	<b>General &amp; Administrative</b>	<b>95,000</b>	<b>15,000</b>	<b>(80,000)</b>
IT	ERO Development & Support	988,671	1,261,787	273,116
	ERO Data Analysis	100,000	200,000	100,000
	Applications Enhancements, Consulting and Help Desk Support	1,006,000	851,000	(155,000)
	<b>Information Technology</b>	<b>2,094,671</b>	<b>2,312,787</b>	<b>218,116</b>
HR	Training and Development	325,000	350,000	25,000
	Compensation Consulting	100,000	100,000	-
	Employee, industry and Board Surveys	50,000	50,000	-
	<b>HR Consulting Services</b>	<b>75,000</b>	<b>75,000</b>	<b>-</b>
	<b>Human Resources</b>	<b>550,000</b>	<b>575,000</b>	<b>25,000</b>
Finance	Internal Controls and Outside Auditor Consulting Support	200,000	300,000	100,000
	Finance and Accounting Support	97,000	157,000	60,000
	<b>Finance and Accounting</b>	<b>297,000</b>	<b>457,000</b>	<b>160,000</b>
<b>TOTAL CONSULTANTS AND CONTRACTS</b>		<b>12,865,914</b>	<b>13,127,749</b>	<b>261,835</b>

## Exhibit D – Capital Financing

The company successfully closed on its capital financing program on January 10, 2014. The interest rate is floating and equal to LIBOR plus 275 basis points, which yielded a rate of 2.91% at closing.<sup>48</sup> The total size of the non-revolving credit facility is \$7.5M, with the total authorized borrowings each year limited to the amount approved by the Board of Trustees and FERC in that year's business plan and budget for IT hardware and the costs of developing software applications. Consistent with the terms of the loan documentation and its Board and FERC-approved 2014 budget, the company made an initial draw of \$1.265M at the end of January 2014 related to 2013 expenditures. The company recorded new capital investments of approximately \$1.65M in 2013 related to the development of software applications and IT hardware,<sup>49</sup> a portion of which was financed with the proceeds from this initial draw. This borrowing is amortized over three years, commencing January 31, 2014, and can be prepaid without penalty. A balance of \$1.416M was available for draw during 2014, which was also consistent with NERC's 2014 approved budget. However, the company had sufficient funds available to pay for budgeted capital improvements without having to draw on this credit facility. A balance of \$1.9M was available for draw during 2015, consistent with NERC's 2015 approved budget. New capital investments of \$1.85M were financed with draws late in 2015 and early 2016. These new borrowings are also being amortized over three years, beginning January, 2016 and April, 2016.

The company is in discussions with the lender about renewing this facility for another three year term. The facility will continue to be used as a funding source for larger projects that primarily benefit the ERO Enterprise. The total amount of the credit facility will likely decline from the current \$7.5M level since NERC expects a decline in applicable projects (likely \$5-6M limit). NERC expects the terms and conditions of this renewed facility to be similar to those in the current agreement.

As further discussed in the Introduction and Executive Summary and in Section A, General and Administrative and set forth in the table below, NERC has a 2017 proposed capital budget of approximately \$4.4M, \$1.45M of which it is proposing to finance.

NERC CAPITAL BUDGET	2016	2017
ERO Application Development	\$ 1,500,000	\$ 700,000
E-ISAC Portal Improvement		1,000,000
Document Management Program	465,000	335,000
Hardware (Storage, servers, laptops)	955,000	991,000
Other Equipment	535,000	885,000
Disaster Recovery	200,000	150,000
NERC Software licenses	256,000	311,000
<b>Total Capital Budget</b>	<b>\$ 3,911,000</b>	<b>\$ 4,372,000</b>

The table below sets forth the projected principal and interest repayment schedule for the amounts financed to date and the additional planned \$1.45M in capital financing.<sup>50</sup> This projection assumes an average interest rate of 3.5% over the term of the financing, which is consistent with the 2014, 2015 and 2016 budgets. Management is

<sup>48</sup> The interest rate at closing was lower than projected for purposes of the 2014 budget. As detailed in the company's approved 2014 *Business Plan and Budget*, any difference between actual and budgeted interest expense for draws under the credit facility becomes an addition to the company's Unforeseen Contingency Operating Reserve balance.

<sup>49</sup> This capital investment amount is exclusive of approximately \$640k in expenses which were incurred in 2013 in the development of the Events Information Data System application and expensed rather than capitalized, as further discussed in the [company's Q1 2014 budget variance](#) report (item 2.c.i) presented to the NERC Finance and Audit Committee.

<sup>50</sup> The company plans to finance \$700k in ERO Application Development costs and \$750k of the \$1M E-ISAC Portal Development project.

recommending that 3.5% continue to be used given the potential for interest rate increases during 2016. The actual interest rate and interest rate expense will be reflected in the quarterly budget to actual variance reports the company posts on its website, reviews in open session with the NERC Finance and Audit Committee, and files with FERC. Any variations in interest expense will be captured and reported as a contribution to operating reserves, the expenditures of which are subject to the terms of the company's Working Capital and Operating Reserve Policy.

	YEAR-END OUTSTANDING DEBT BALANCE					
	2014	2015	2016	2017	2018	2019
2013 Expenditure / Closed 2014	\$ 878,472	\$ 456,806	\$ 35,139	\$ -	\$ -	
2015 Budgeted	-	-	1,234,547	617,274	-	
2016 Budgeted	-	-	1,500,000	666,667	333,333	
2017 Projected	-	-	-	1,450,000	966,667	483,333
2018 Projected	-	-	-	-	1,800,000	1,200,000
<b>Total Outstanding Balance</b>	<b>\$ 878,472</b>	<b>\$ 456,806</b>	<b>\$2,769,686</b>	<b>\$2,733,940</b>	<b>\$3,100,000</b>	<b>\$1,683,333</b>

	ANNUAL PAYMENTS FOR DEBT SERVICE					
	2014	2015	2016	2017	2018	2019
2013 Expenditure / Closed 2014	\$ 386,528	\$ 421,667	\$ 421,667	\$ 35,139	\$ -	
2015 Budgeted	-	-	617,274	617,274	617,274	
2016 Budgeted	-	-	-	333,333	333,333	333,333
2017 Projected	-	-	-	-	483,333	483,333
2018 Projected	-	-	-	-	-	600,000
Interest Expense	29,367	24,826	56,529	56,725	61,170	72,203
<b>Total Principal and Interest Costs</b>	<b>\$ 415,895</b>	<b>\$ 446,493</b>	<b>\$1,095,469</b>	<b>\$1,042,471</b>	<b>\$1,495,110</b>	<b>\$1,488,869</b>

## Exhibit E – Working Capital and Operating Reserve Amounts

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In September 2015, the Commission approved NERC’s proposed amendments to the Company’s Working Capital and Operating Reserve Policy, which had been approved by the NERC Board. A number of changes were made to the policy, including:

- Clarifying the definition of working capital to represent funding needed for cash flow purposes due to the timing of the receipt of funds and the payment of expenses.
- Creating four separate categories of operating reserves:
  1. A new subcategory of reserves entitled **Future Obligation Reserve** for funds that are being held to satisfy obligations that will be settled in a future year. Examples include leases, certain contracts, and credit agreements. These reserves were previously included within the definition of working capital, but are more accurately classified as a form of operating reserve.
  2. Continuation of a separate category of reserves for the Operator Certification Program called the **Operator Certification Reserve**.
  3. Elimination of the Known and Unforeseen Contingency categories of operating reserves and creating a single category of contingency reserves called the **Operating Contingency Reserve**.
  4. Creation of a separate category of reserves for CRISP called the **CRISP Reserve**.

### Working Capital

Based on its 2016 cash flow projection and taking into account the historic manner in which NERC’s assessments have been billed and paid, NERC does not anticipate needing access to working capital in 2017 to meet monthly cash flow needs. While individual reserve categories are increasing and decreasing based on operating needs and uses, the budget in total does not reflect additional net funding for reserves. In the unlikely event NERC experiences a temporary cash flow shortage, it has the ability to either request authorization from the Finance and Audit Committee and Board of Trustees to temporarily access operating contingency reserve funds, or draw on its \$4M line of credit, as long as NERC is in compliance with the covenants under its bank credit agreement.

### Operating Reserves

Total operating reserves are budgeted to be \$6.1M at December 31, 2017 among all four categories, or \$5.6M excluding the \$500,000 CRISP Reserve. The Future Obligation Reserve is budgeted to be \$2.6M and is primarily funds held to offset future liabilities under lease agreements for the Atlanta and Washington, DC, offices. System Operator Certification Reserves are budgeted at \$714k and the Operating Contingency Reserve is budgeted for \$2.2M. The CRISP Reserve (budgeted at \$500k) is held pursuant to the terms of the Master Services Agreement between NERC and participating utilities, which calls for a separate third-party funded reserve established to fund certain contingencies in connection with CRISP.

In addition to the foregoing reserves, the amended policy also provides for an **Assessment Stabilization Reserve**. The goal of the Assessment Stabilization Reserve is to mitigate assessment volatility and have percentage changes in annual assessments track, within a reasonable band, percentage changes in the company’s total annual budget, with the total budget reflecting prudent fiscal discipline and good stewardship of resources. Assessment stabilization funds will be used when available to help stabilize assessments and mitigate year-to-year swings in assessments. Those swings primarily result from the year-to-year variations in collections of penalty funds to be applied to offset assessments, but could also result from other factors like surplus funds available from a prior period, the need to replenish the Operating Contingency Reserve, or significant but relatively short-term operating or capital spending needs. Subject to Board and Commission approval, NERC proposes (1) to place the \$500,000 of Penalties collected in the 12 months ended June 30, 2016, into the Assessment Stabilization Reserve, resulting in a balance on January 1, 2017 of approximately \$2.7M, funded entirely by penalties, and (2) to use \$1.1M of the

balance at January 1, 2017 to offset 2017 U.S. assessments. An additional penalty is expected in May 2017 for \$500,000. This penalty results from a settlement reached through WECC related to the September 2011 blackout. NERC's proposals will result in a balance remaining in the Assessment Stabilization Reserve of \$1,671,000 at December 31, 2017 (or \$2,167,000 taking into account the \$500,000 penalty scheduled to be received in May 2017 and assuming that after June 30, 2016, no additional Penalties are received and placed into the Assessment Stabilization Reserve). This balance will be available to be used, with Board and Commission approval, to mitigate annual assessment increases in future years.

## **Exhibit F – E-ISAC Portal Improvement**

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- Cyber and physical threats do not come from machines
  - They originate in the minds of human adversaries
  - Cyberspace is just a tool for the adversary
  - So are explosives, weapons, truck bombs, bolt cutters and social engineering
- Threat actors typically don't work alone
  - Strategic “existential” threats (the ones we should worry about) are typified by large, well connected organizations
  - These groups routinely share, collaborate, and analyze situations freely, using every tool available including the Internet and technology
- Our challenge is to be better at sharing, collaborating, and analyzing than our adversaries
  - We need better tools than those they have

- ESCC Strategic Review (July 2015) called for continued improvement to the portal
  - Recommended the use of STIX/TAXII standards
  - Recommended the exploration of ways to automate information sharing and analysis
- Updated portal launched in September 2015
- GridEx III Simulation Deck portal used in November 2015 offered several new ideas about grid security visualization
- MEC's OTT working group developed a comprehensive list of portal improvement recommendations

- 2016:
  - Fix existing portal bugs and issues identified by the E-ISAC and members
  - Build incremental improvements to meet short-term recommendations
  - Conduct scoping/discovery effort for transition to platform
  - Validate requirements with membership
  - Launch new “look and feel” for existing portal
- 2017:
  - Install new hardware
  - Launch new platform
  - Build incremental improvements to meet long-term requirements
  - Ongoing membership feedback

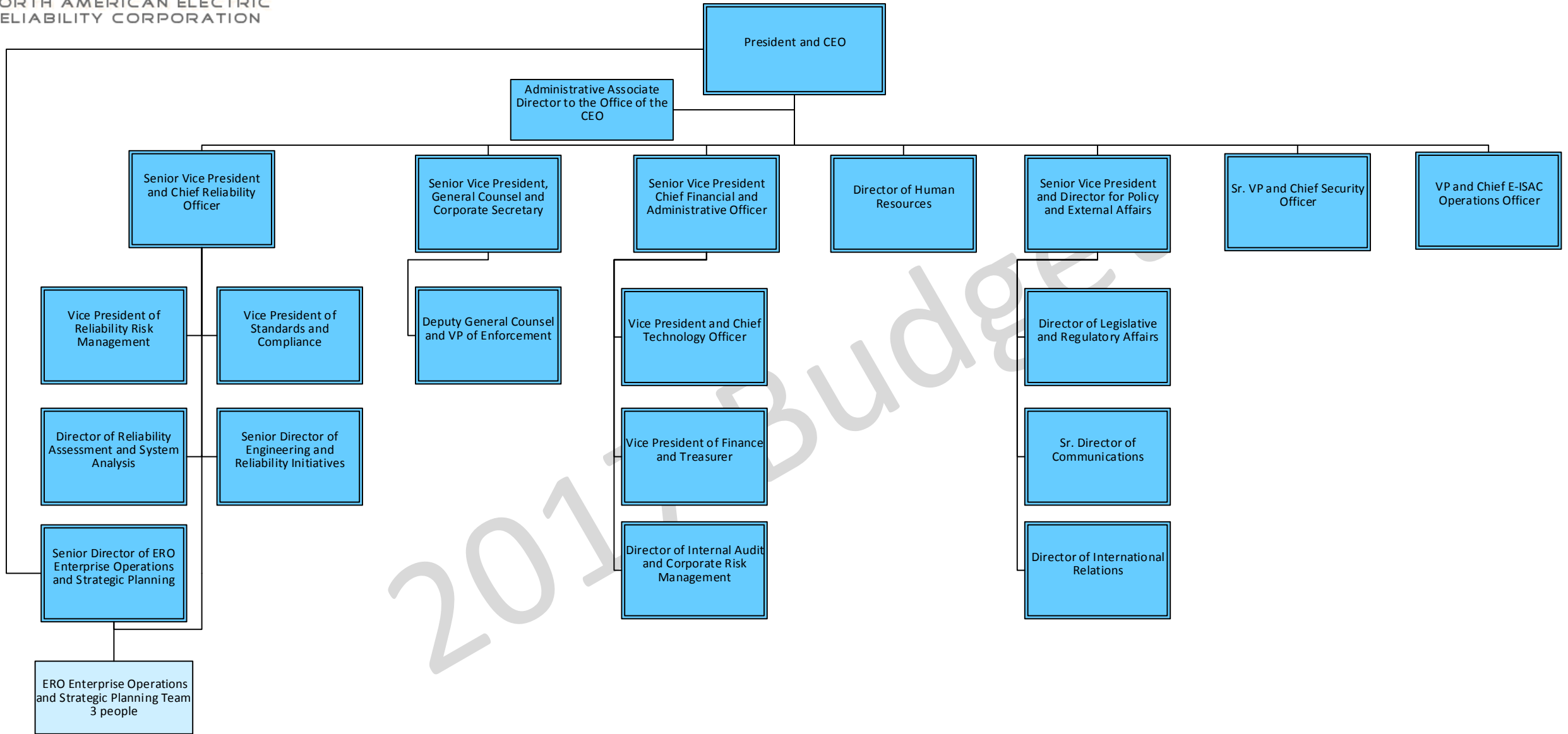
- Dramatic improvement to information sharing
  - Human to human via text, discussion, document, photo, etc. sharing
  - Machine to machine via built in STIX/TAXII compatibility
- Rapid response to emerging critical situations
  - Situational awareness of physical and cyber events
  - Coordination within and external to the Electricity Sector
- Extendable as new technologies emerge
  - Easy integration with mobile technologies
  - Designed to be modular and adaptable to future capability requirements
- Increased trust in the E-ISAC
  - Will result in increased sharing and collaboration

- Existing portal characteristics
  - Designed for a specific audience with a specific purpose
  - Static content with infrequent changes
  - No user control over look/feel of layout
  - Not designed for high levels of interaction
  - Limited search capability
- Proposed platform characteristics
  - Designed for a wide audience with different needs
  - Highly customizable by users
  - Extendable to accommodate new technologies
  - Visual and graphical orientation (vs text-based)
  - Robust search, filtering, and native language queries of datasets
  - Server-side computation and analytics

- Total proposed 2017 budget of \$1 million
- Two parallel projects
  - Near-term quick fixes and user interface improvements
  - Long-term movement to a platform with significant changes
- Project implementation managed by NERC CTO and the ERO IT PMO
- Disciplined approach used to successfully manage and implement other recent IT projects
- Ongoing MEC engagement
- Scope will be managed within approved budget

- MEC briefed at June 15, 2016 face-to-face meeting
- Bill Spence (Chairman, President and CEO, PPL Corporation, Inc. and Chair, E-ISAC Member Executive Committee) briefed EEI's Executive Committee on June 14, 2016 and provided positive feedback
- The MEC provided NERC with written comments in support of the proposed funding on or before June 30, 2016.

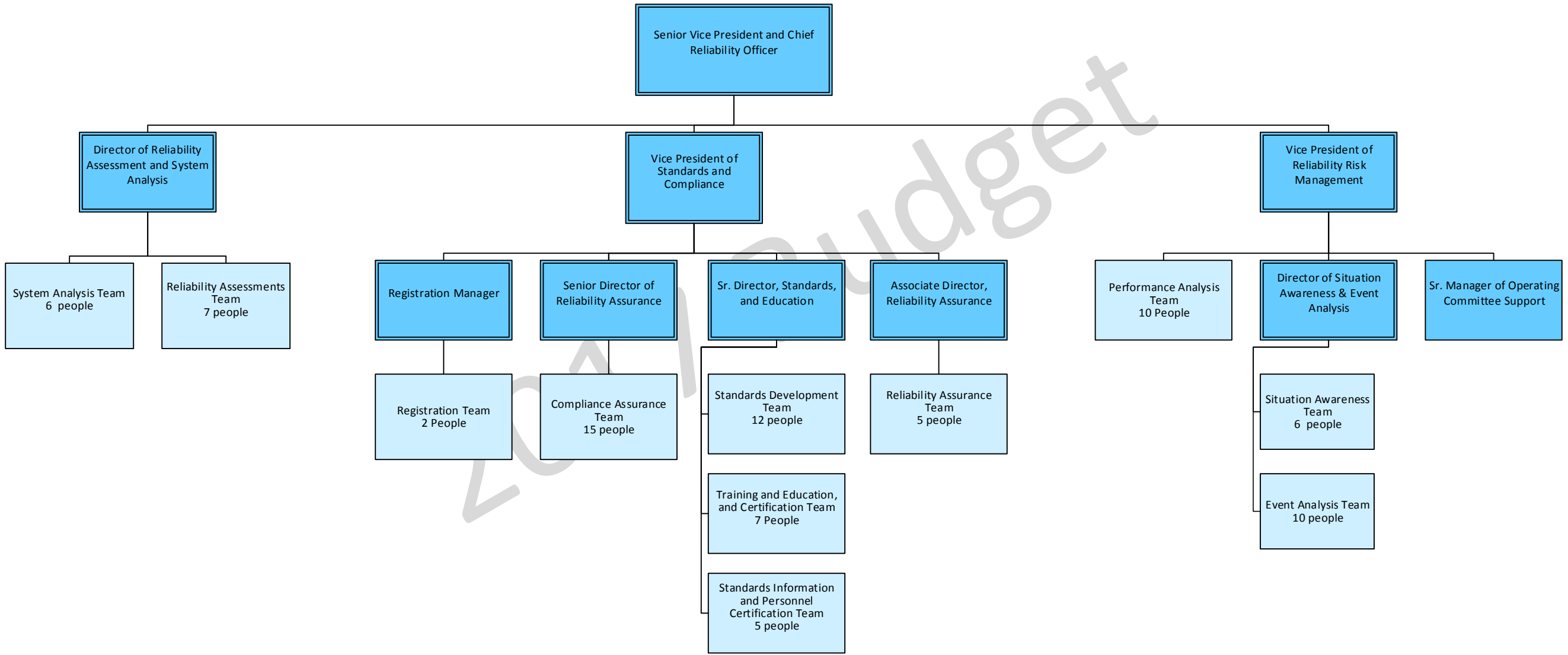
# NERC Staff Organization Chart – Budget 2017



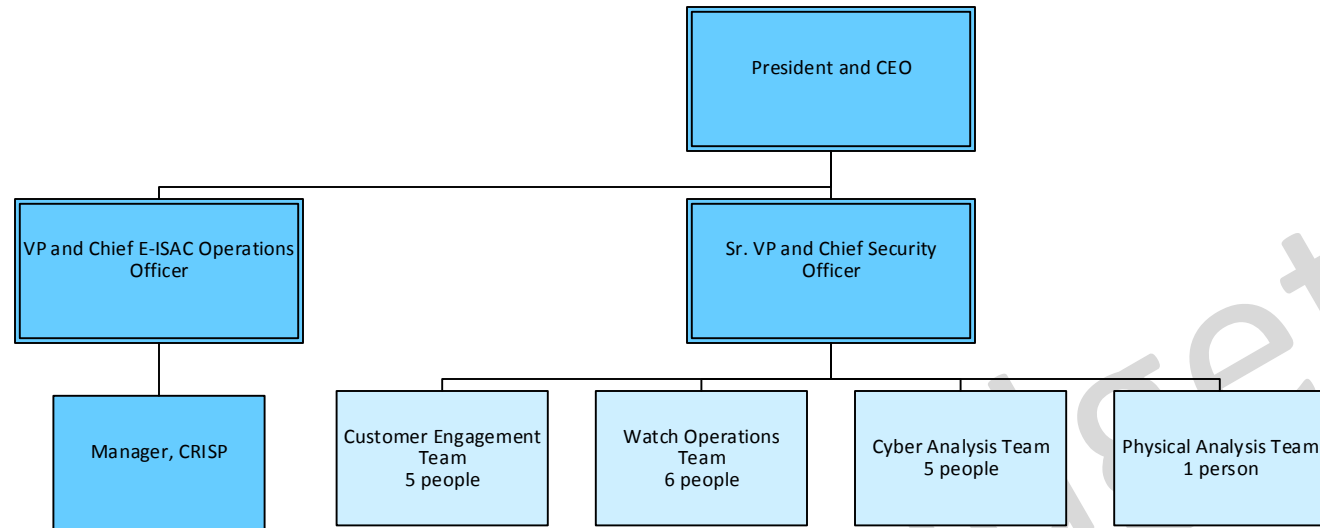
2017 Budget



# Reliability Standards, Reliability Assurance, Reliability Assessment and System Oversight, Performance Analysis, Event Analysis, Situation Awareness, Training and Education

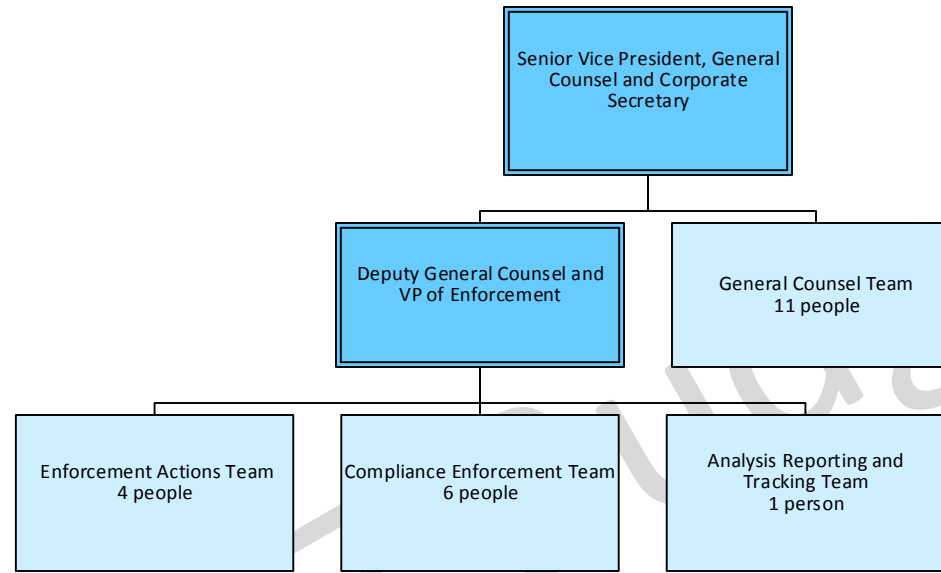


## Electricity Information Sharing and Analysis Center

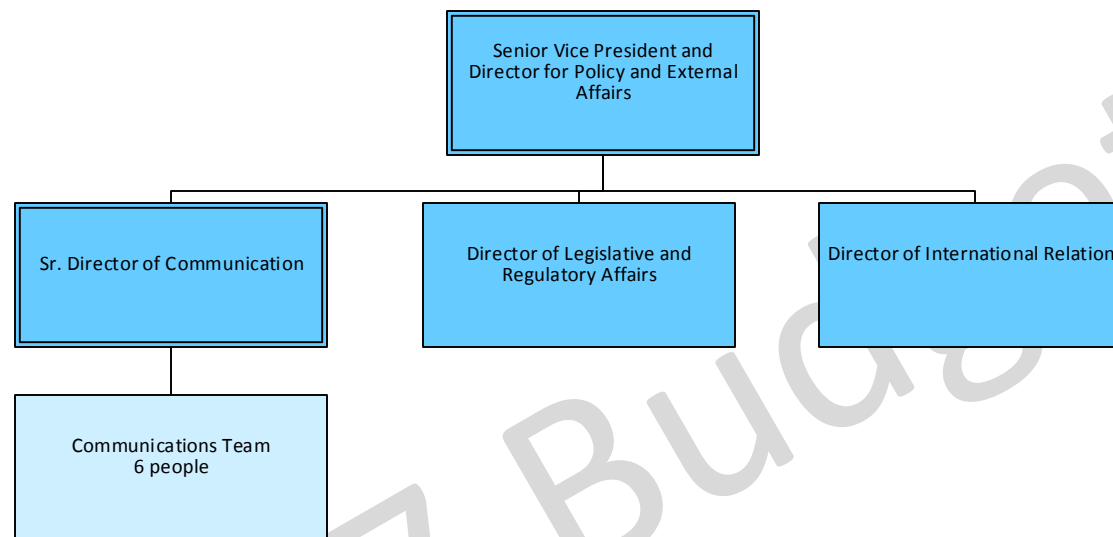


2017 Budget

## Legal and Regulatory Compliance Enforcement



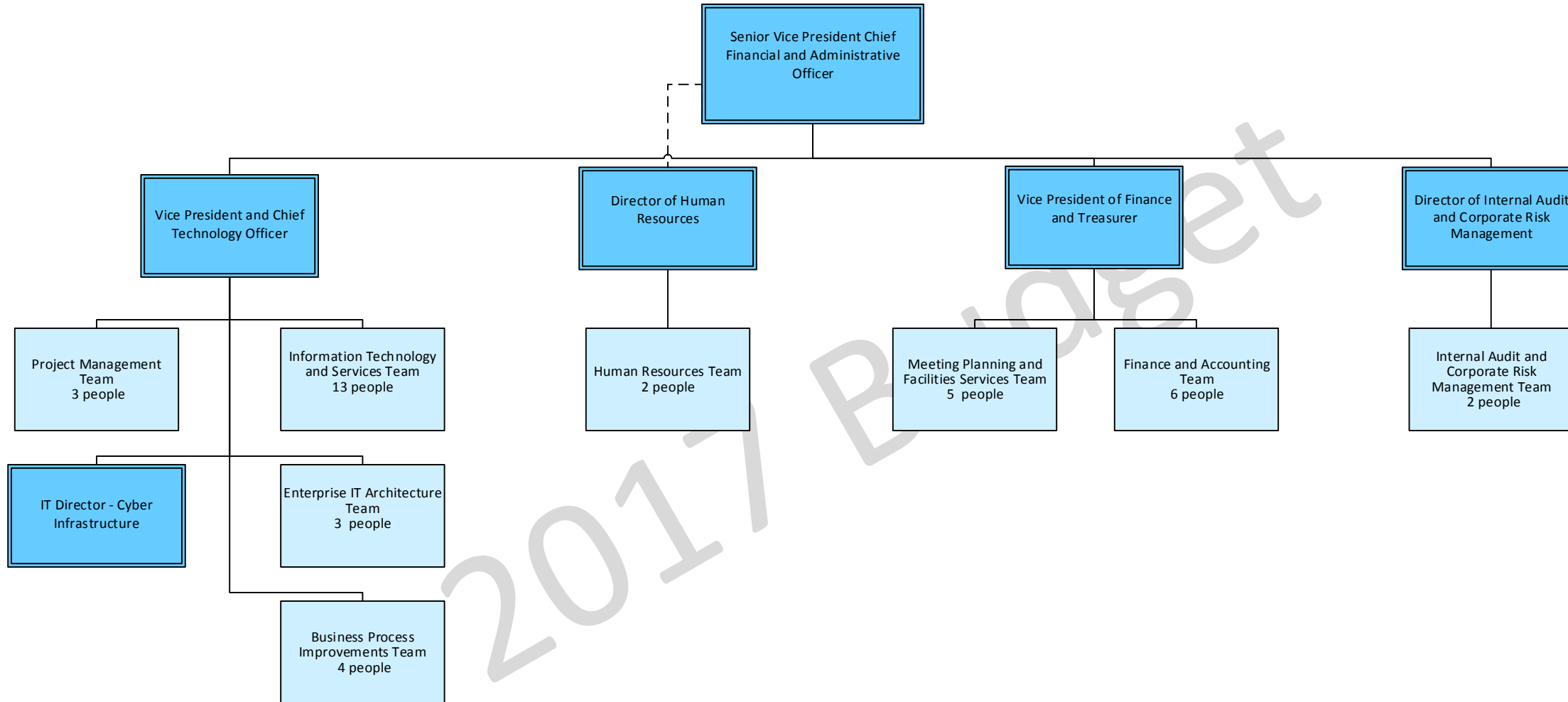
## Policy and External Affairs



2017 Budget

- Telecommuter
- Atlanta
- Washington, DC
- Unbudgeted 015

# Information Technology, Human Resources, and Accounting & Finance



















Data Year	Regional Entity	ID	Entity	Country	Total NEL (MWh)	U.S. NEL	Canada NEL	Mexico NEL	% of RE total	US Total	Canada Total	Mexico Total	% of ERO Total	US Total	Canada Total	Mexico Total	% of ERO - US Only
2015	WECC		Western Area Power Administration-Upper Great Plains Region	U.S.	414,372	414,372			0.048%	0.048%	0.000%	0.000%	0.009%	0.009%	0.000%	0.000%	0.010%
2015	WECC		Aha Macav Power Service	U.S.	16,001	16,001			0.002%	0.002%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
2015	WECC		Bureau of Reclamation (Wellfield) - c/o DSW EMMO	U.S.	10,177	10,177			0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
2015	WECC		Central Arizona Water Conservation District	U.S.	2,425,062	2,425,062			0.279%	0.279%	0.000%	0.000%	0.054%	0.054%	0.000%	0.000%	0.061%
2015	WECC		City of Mesa	U.S.	258,752	258,752			0.030%	0.030%	0.000%	0.000%	0.006%	0.006%	0.000%	0.000%	0.006%
2015	WECC		City of Needles	U.S.	29,703	29,703			0.003%	0.003%	0.000%	0.000%	0.001%	0.001%	0.000%	0.000%	0.001%
2015	WECC		Colorado River Agency-Bureau of Indian Affairs	U.S.	23,717	23,717			0.003%	0.003%	0.000%	0.000%	0.001%	0.001%	0.000%	0.000%	0.001%
2015	WECC		Electrical District #2	U.S.	194,332	194,332			0.022%	0.022%	0.000%	0.000%	0.004%	0.004%	0.000%	0.000%	0.005%
2015	WECC		Electrical District #2 - Coolidge Generating Station	U.S.	9,172	9,172			0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
2015	WECC		Silver State Energy - c/o Colorado River Commission of Nevada	U.S.	646,184	646,184			0.074%	0.074%	0.000%	0.000%	0.014%	0.014%	0.000%	0.000%	0.016%
2015	WECC		Arizona Electric Power Cooperative, Inc	U.S.	2,631,889	2,631,889			0.303%	0.303%	0.000%	0.000%	0.058%	0.058%	0.000%	0.000%	0.066%
2015	WECC		U.S. Army Yuma Proving Ground	U.S.	19,841	19,841			0.002%	0.002%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
2015	WECC		Wellton-Mohawk Irrigation & Drainage District	U.S.	7,231	7,231			0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
2015	WECC		Western Area Power Administration-Desert Southwest Region	U.S.	1,596,692	1,596,692			0.184%	0.184%	0.000%	0.000%	0.035%	0.035%	0.000%	0.000%	0.040%
<b>TOTAL WECC</b>					<b>869,883,481</b>	<b>732,956,732</b>	<b>124,208,633</b>	<b>12,718,116</b>	<b>100.000%</b>	<b>84.259%</b>	<b>14.279%</b>	<b>1.462%</b>	<b>19.268%</b>	<b>16.235%</b>	<b>2.751%</b>	<b>0.282%</b>	<b>18.399%</b>
<b>TOTAL ERO</b>					<b>4,514,633,135</b>	<b>3,983,687,261</b>	<b>518,227,758</b>	<b>12,718,116</b>	<b>800.000%</b>	<b>713.002%</b>	<b>85.536%</b>	<b>1.462%</b>	<b>100.000%</b>	<b>88.239%</b>	<b>11.479%</b>	<b>0.282%</b>	<b>100.000%</b>

<b>Summary by Regional Entity</b>					<b>Total NEL (MWh)</b>	<b>U.S. NEL</b>	<b>Canada NEL</b>	<b>Mexico NEL</b>									
2015	FRCC				234,606,069	234,606,069	-	-	100.000%	100.000%	0.000%	0.000%	5.197%	5.197%	0.000%	0.000%	5.889%
2015	MRO				283,136,065	235,938,940	47,197,125	-	100.000%	83.331%	16.669%	0.000%	6.272%	5.226%	1.045%	0.000%	5.923%
2015	NPCC				635,349,000	288,527,000	346,822,000	-	100.000%	45.412%	54.588%	0.000%	14.073%	6.391%	7.682%	0.000%	7.243%
2015	RF				892,166,717	892,166,717	-	-	100.000%	100.000%	0.000%	0.000%	19.762%	19.762%	0.000%	0.000%	22.396%
2015	SERC				1,025,559,971	1,025,559,971	-	-	100.000%	100.000%	0.000%	0.000%	22.716%	22.716%	0.000%	0.000%	25.744%
2015	SPP				225,657,039	225,657,039	-	-	100.000%	100.000%	0.000%	0.000%	4.998%	4.998%	0.000%	0.000%	5.665%
2015	TRE				348,274,793	348,274,793	-	-	100.000%	100.000%	0.000%	0.000%	7.714%	7.714%	0.000%	0.000%	8.743%
2015	WECC				869,883,481	732,956,732	124,208,633	12,718,116	100.000%	84.259%	14.279%	1.462%	19.268%	16.235%	2.751%	0.282%	18.399%
<b>Total</b>					<b>4,514,633,135</b>	<b>3,983,687,261</b>	<b>518,227,758</b>	<b>12,718,116</b>	<b>800.000%</b>	<b>713.002%</b>	<b>85.536%</b>	<b>1.462%</b>	<b>100.000%</b>	<b>88.239%</b>	<b>11.479%</b>	<b>0.282%</b>	<b>100.000%</b>



2015 NEL Calculations and Allocations to Load Serving Entities (or Designee) for the 2017 NERC and RE Assessments

Data Year	Regional Entity	ID	Entity	Country	Total ERO Assessments (NERC, RE & WIRAB Costs)				Total NERC Assessments				Total Regional Entity Assessments (Including WIRAB Assessments)			
					Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total
2015	MRO	1208	Geneseo Municipal Utilities	U.S.	3,240	3,240	-	-	873	873	-	-	2,366	2,366	-	-
2015	MRO	1209	Grand Island Utilities Department	U.S.	37,696	37,696	-	-	10,163	10,163	-	-	27,533	27,533	-	-
2015	MRO	1717	Great Lakes Utilities	U.S.	19,824	19,824	-	-	5,344	5,344	-	-	14,479	14,479	-	-
2015	MRO	1718	City of Guttenberg	U.S.	923	923	-	-	249	249	-	-	674	674	-	-
2015	MRO	1606	Harlan Municipal Utilities	U.S.	3,199	3,199	-	-	862	862	-	-	2,336	2,336	-	-
2015	MRO	1211	Hastings Utilities	U.S.	20,985	20,985	-	-	5,657	5,657	-	-	15,328	15,328	-	-
2015	MRO	1212	Heartland Consumers Power District	U.S.	43,503	43,503	-	-	11,728	11,728	-	-	31,775	31,775	-	-
2015	MRO	1213	Hutchinson Utilities Commission	U.S.	15,279	15,279	-	-	4,119	4,119	-	-	11,160	11,160	-	-
2015	MRO	1719	City of Kasota	U.S.	197	197	-	-	53	53	-	-	144	144	-	-
2015	MRO	1215	Lincoln Electric System	U.S.	161,909	161,909	-	-	43,649	43,649	-	-	118,259	118,259	-	-
2015	MRO	1218	Manitowoc Public Utilities	U.S.	27,780	27,780	-	-	7,489	7,489	-	-	20,290	20,290	-	-
2015	MRO	1223	Missouri River Energy Services	U.S.	117,821	117,821	-	-	31,764	31,764	-	-	86,057	86,057	-	-
2015	MRO	1224	MN Municipal Power Agency (MMPA)	U.S.	77,612	77,612	-	-	20,924	20,924	-	-	56,688	56,688	-	-
2015	MRO	1607	Montezuma Municipal Light & Power	U.S.	1,493	1,493	-	-	403	403	-	-	1,091	1,091	-	-
2015	MRO	1227	Municipal Energy Agency of Nebraska	U.S.	56,157	56,157	-	-	15,140	15,140	-	-	41,018	41,018	-	-
2015	MRO	1228	Muscatine Power and Water	U.S.	44,342	44,342	-	-	11,954	11,954	-	-	32,388	32,388	-	-
2015	MRO	1229	Nebraska City Utilities	U.S.	8,508	8,508	-	-	2,294	2,294	-	-	6,214	6,214	-	-
2015	MRO	1720	Resale Power Group of Iowa	U.S.	27,357	27,357	-	-	7,375	7,375	-	-	19,981	19,981	-	-
2015	MRO	1721	Rice Lake Utilities	U.S.	8,331	8,331	-	-	2,246	2,246	-	-	6,085	6,085	-	-
2015	MRO	1234	Rochester Public Utilities	U.S.	102	102	-	-	27	27	-	-	74	74	-	-
2015	MRO	1236	Southern Minnesota Municipal Power Agency	U.S.	141,001	141,001	-	-	38,013	38,013	-	-	102,988	102,988	-	-
2015	MRO	1722	City of Spooner	U.S.	1,561	1,561	-	-	421	421	-	-	1,140	1,140	-	-
2015	MRO	1723	Village of Trempealeau	U.S.	786	786	-	-	212	212	-	-	574	574	-	-
2015	MRO	1241	Willmar Municipal Utilities	U.S.	14,401	14,401	-	-	3,882	3,882	-	-	10,518	10,518	-	-
2015	MRO	1242	Wisconsin Public Power, Inc. (East and West regions)	U.S.	275,105	275,105	-	-	74,166	74,166	-	-	200,939	200,939	-	-
TOTAL MRO					14,368,560	11,934,833	2,433,728	-	3,874,215	3,217,546	656,669	-	10,494,345	8,717,286	1,777,059	-
2015	NPCC	1336	New England	U.S.	5,650,724	5,650,724	-	-	1,731,311	1,731,311	-	-	3,919,413	3,919,413	-	-
2015	NPCC	1339	New York	U.S.	7,178,672	7,178,672	-	-	2,203,390	2,203,390	-	-	4,975,283	4,975,283	-	-
2015	NPCC	1337	Ontario	Canada	3,224,119	-	3,224,119	-	1,212,884	-	1,212,884	-	2,011,235	-	2,011,235	-
2015	NPCC	1341	Quebec	Canada	4,623,724	-	4,623,724	-	1,803,289	-	1,803,289	-	2,820,435	-	2,820,435	-
2015	NPCC	1705	New Brunswick	Canada	416,490	-	416,490	-	125,585	-	125,585	-	290,905	-	290,905	-
2015	NPCC	1340	Nova Scotia	Canada	390,586	-	390,586	-	152,796	-	152,796	-	237,790	-	237,790	-
TOTAL NPCC					21,484,314	12,829,396	8,654,918	-	7,229,254	3,934,700	3,294,554	-	14,255,060	8,894,696	5,360,364	-
2015	RF	1102	Cannelton Utilities	U.S.	559	559	-	-	214	214	-	-	344	344	-	-
2015	RF	1106	City of Croswell	U.S.	1,418	1,418	-	-	544	544	-	-	874	874	-	-
2015	RF	1490	City of Lansing	U.S.	77,904	77,904	-	-	29,874	29,874	-	-	48,030	48,030	-	-
2015	RF	1120	Cloverland Electric Cooperative	U.S.	26,383	26,383	-	-	10,117	10,117	-	-	16,266	16,266	-	-
2015	RF	1122	CMS ERM Michigan LLC	U.S.	3,762	3,762	-	-	1,443	1,443	-	-	2,319	2,319	-	-
2015	RF	1124	Constellation New Energy (MECS-CONS)	U.S.	30,609	30,609	-	-	11,738	11,738	-	-	18,871	18,871	-	-
2015	RF	1123	Constellation New Energy (MECS-DET)	U.S.	35,761	35,761	-	-	13,713	13,713	-	-	22,048	22,048	-	-
2015	RF	1126	Consumers Energy Company	U.S.	1,173,273	1,173,273	-	-	449,919	449,919	-	-	723,354	723,354	-	-
2015	RF	1128	Detroit Edison Company	U.S.	1,619,675	1,619,675	-	-	621,102	621,102	-	-	998,573	998,573	-	-
2015	RF	1166	Duke Energy Indiana	U.S.	1,050,286	1,050,286	-	-	402,756	402,756	-	-	647,530	647,530	-	-
2015	RF	1135	Ferdinand Municipal Light & Water	U.S.	1,652	1,652	-	-	633	633	-	-	1,018	1,018	-	-
2015	RF	1646	FirstEnergy Solutions (MECS-CONS)	U.S.	24,826	24,826	-	-	9,520	9,520	-	-	15,306	15,306	-	-
2015	RF	1549	FirstEnergy Solutions (MECS-DET)	U.S.	56,647	56,647	-	-	21,723	21,723	-	-	34,925	34,925	-	-
2015	RF	1145	Hoosier Energy	U.S.	266,044	266,044	-	-	102,021	102,021	-	-	164,023	164,023	-	-
2015	RF	1148	Indiana Municipal Power Agency (DUKE CIN)	U.S.	110,830	110,830	-	-	42,500	42,500	-	-	68,330	68,330	-	-
2015	RF	1485	Indiana Municipal Power Agency (NIPSCO)	U.S.	15,272	15,272	-	-	5,856	5,856	-	-	9,416	9,416	-	-
2015	RF	1486	Indiana Municipal Power Agency (SIGE)	U.S.	20,866	20,866	-	-	8,002	8,002	-	-	12,864	12,864	-	-
2015	RF	1149	Indianapolis Power & Light Co.	U.S.	510,422	510,422	-	-	195,733	195,733	-	-	314,689	314,689	-	-
2015	RF	1553	Integrus Energy Services (MECS-CONS)	U.S.	36,455	36,455	-	-	13,979	13,979	-	-	22,475	22,475	-	-
2015	RF	1554	Integrus Energy Services (MECS-DET)	U.S.	37,196	37,196	-	-	14,264	14,264	-	-	22,932	22,932	-	-
2015	RF	1666	Integrus Energy Services (WEPC)	U.S.	15,931	15,931	-	-	6,109	6,109	-	-	9,822	9,822	-	-
2015	RF	1614	Just Energy (MECS-DET)	U.S.	1,585	1,585	-	-	608	608	-	-	977	977	-	-
2015	RF	1154	Michigan Public Power Agency	U.S.	120,627	120,627	-	-	46,257	46,257	-	-	74,370	74,370	-	-
2015	RF	1155	Michigan South Central Power Agency	U.S.	24,254	24,254	-	-	9,301	9,301	-	-	14,953	14,953	-	-
2015	RF	1158	MidAmerican Energy Company Retail	U.S.	1,068	1,068	-	-	410	410	-	-	659	659	-	-
2015	RF	1163	Northern Indiana Public Service Co.	U.S.	618,308	618,308	-	-	237,105	237,105	-	-	381,204	381,204	-	-
2015	RF	1164	Ontonagon County Rural Electrification Assoc.	U.S.	1,015	1,015	-	-	389	389	-	-	626	626	-	-
2015	RF	1265	PJM Interconnection, LLC	U.S.	24,268,469	24,268,469	-	-	9,306,304	9,306,304	-	-	14,962,165	14,962,165	-	-
2015	RF	1172	Noble Americas Energy Solutions (MECS-CONS)	U.S.	14,443	14,443	-	-	5,539	5,539	-	-	8,905	8,905	-	-
2015	RF	1171	Noble Americas Energy Solutions (MECS-DET)	U.S.	22,255	22,255	-	-	8,534	8,534	-	-	13,721	13,721	-	-
2015	RF	1176	Direct Energy (fka:Strategic Energy,LLC) (MECS-CONS)	U.S.	6,839	6,839	-	-	2,622	2,622	-	-	4,216	4,216	-	-
2015	RF	1174	Direct Energy (fka:Strategic Energy,LLC) (MECS-DET)	U.S.	22,145	22,145	-	-	8,492	8,492	-	-	13,653	13,653	-	-





2015 NEL Calculations and Allocations to Load Serving Entities (or Designee) for the 2017 NERC and RE Assessments

APPENDIX 2-B

Data Year	Regional Entity	ID	Entity	Country	Total ERO Assessments (NERC, RE & WIRAB Costs)				Total NERC Assessments				Total Regional Entity Assessments (Including WIRAB Assessments)			
					Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total
2015	SERC	1308	Gulf Power Company	U.S.	337,367	337,367	-	-	158,910	158,910	-	-	178,457	178,457	-	-
2015	SERC	1586	Haywood EMC	U.S.	8,934	8,934	-	-	4,208	4,208	-	-	4,726	4,726	-	-
2015	SERC	1309	Illinois Municipal Electric Agency	U.S.	55,185	55,185	-	-	25,994	25,994	-	-	29,191	29,191	-	-
2015	SERC	1480	Itta Bena, MS	U.S.	622	622	-	-	293	293	-	-	329	329	-	-
2015	SERC	1587	Jefferson Davis Electric Cooperative, Inc.	U.S.	8,353	8,353	-	-	3,935	3,935	-	-	4,419	4,419	-	-
2015	SERC	1617	Kentucky Municipal Power	U.S.	19,630	19,630	-	-	9,246	9,246	-	-	10,384	10,384	-	-
2015	SERC	1481	Kosciusko, MS	U.S.	2,196	2,196	-	-	1,035	1,035	-	-	1,162	1,162	-	-
2015	SERC	1482	Leland, MS	U.S.	979	979	-	-	461	461	-	-	518	518	-	-
2015	SERC	1313	McCormick Commission of Public Works	U.S.	605	605	-	-	285	285	-	-	320	320	-	-
2015	SERC	1314	Mississippi Power Company	U.S.	306,217	306,217	-	-	144,238	144,238	-	-	161,979	161,979	-	-
2015	SERC	1630	Mt. Carmel Public Utility	U.S.	3,121	3,121	-	-	1,470	1,470	-	-	1,651	1,651	-	-
2015	SERC	1315	Municipal Electric Authority of Georgia	U.S.	316,534	316,534	-	-	149,098	149,098	-	-	167,437	167,437	-	-
2015	SERC	1316	N. C. Electric Membership Corp.	U.S.	369,830	369,830	-	-	174,201	174,201	-	-	195,628	195,628	-	-
2015	SERC	1588	Northeast Louisiana Power Cooperative, Inc.	U.S.	8,023	8,023	-	-	3,779	3,779	-	-	4,244	4,244	-	-
2015	SERC	1574	Northern Virginia Electric Cooperative	U.S.	126,552	126,552	-	-	59,610	59,610	-	-	66,942	66,942	-	-
2015	SERC	1319	Old Dominion Electric Cooperative	U.S.	182,601	182,601	-	-	86,011	86,011	-	-	96,590	96,590	-	-
2015	SERC	1618	Osceola (Arkansas) Municipal Light and Power	U.S.	4,679	4,679	-	-	2,204	2,204	-	-	2,475	2,475	-	-
2015	SERC	1320	Owensboro (KY) Municipal Utilities	U.S.	24,233	24,233	-	-	11,414	11,414	-	-	12,818	12,818	-	-
2015	SERC	1321	Piedmont EMC in Duke and Progress Areas	U.S.	15,127	15,127	-	-	7,125	7,125	-	-	8,002	8,002	-	-
2015	SERC	1323	Piedmont Municipal Power Agency (PMPA)	U.S.	67,767	67,767	-	-	31,921	31,921	-	-	35,847	35,847	-	-
2015	SERC	1589	Pointe Coupee Electric Memb. Corp.	U.S.	7,230	7,230	-	-	3,406	3,406	-	-	3,825	3,825	-	-
2015	SERC	1266	PowerSouth Energy	U.S.	253,443	253,443	-	-	119,380	119,380	-	-	134,063	134,063	-	-
2015	SERC	1330	Prairie Power, Inc.	U.S.	44,702	44,702	-	-	21,056	21,056	-	-	23,646	23,646	-	-
2015	SERC	1324	Duke Energy Progress	U.S.	1,356,073	1,356,073	-	-	638,753	638,753	-	-	717,320	717,320	-	-
2015	SERC	1325	Rutherford EMC	U.S.	39,140	39,140	-	-	18,436	18,436	-	-	20,704	20,704	-	-
2015	SERC	1631	Sam Rayburn G&T Electric Cooperative Inc.	U.S.	53,522	53,522	-	-	25,211	25,211	-	-	28,312	28,312	-	-
2015	SERC	1326	South Carolina Electric & Gas Company	U.S.	675,683	675,683	-	-	318,268	318,268	-	-	357,415	357,415	-	-
2015	SERC	1327	South Carolina Public Service Authority	U.S.	332,270	332,270	-	-	156,509	156,509	-	-	175,760	175,760	-	-
2015	SERC	1590	South Louisiana Electric Cooperative Association	U.S.	18,468	18,468	-	-	8,699	8,699	-	-	9,769	9,769	-	-
2015	SERC	1328	South Mississippi Electric Power Association	U.S.	292,030	292,030	-	-	137,555	137,555	-	-	154,475	154,475	-	-
2015	SERC	1329	Southern Illinois Power Cooperative	U.S.	48,101	48,101	-	-	22,657	22,657	-	-	25,444	25,444	-	-
2015	SERC	1591	Southwest Louisiana Electric Membership Corporation	U.S.	75,413	75,413	-	-	35,522	35,522	-	-	39,891	39,891	-	-
2015	SERC	1619	Southwestern Electric Cooperative, Inc.	U.S.	13,173	13,173	-	-	6,205	6,205	-	-	6,968	6,968	-	-
2015	SERC	1331	Tennessee Valley Authority	U.S.	4,545,401	4,545,401	-	-	2,141,027	2,141,027	-	-	2,404,374	2,404,374	-	-
2015	SERC	1632	Tex-La Electric Cooperative of Texas, Inc	U.S.	5,660	5,660	-	-	2,666	2,666	-	-	2,994	2,994	-	-
2015	SERC	1332	Tombigbee Electric Cooperative Inc.	U.S.	3,779	3,779	-	-	1,780	1,780	-	-	1,999	1,999	-	-
2015	SERC	1594	Town of Sharpsburg, N.C.	U.S.	588	588	-	-	277	277	-	-	311	311	-	-
2015	SERC	1595	Town of Stantonsburg, N.C. JRO	U.S.	1,653	1,653	-	-	779	779	-	-	874	874	-	-
2015	SERC	1333	Town of Waynesville NC	U.S.	2,537	2,537	-	-	1,195	1,195	-	-	1,342	1,342	-	-
2015	SERC	1334	Town of Winnsboro SC	U.S.	1,831	1,831	-	-	862	862	-	-	969	969	-	-
2015	SERC	1335	Town of Winterville NC	U.S.	1,555	1,555	-	-	733	733	-	-	823	823	-	-
2015	SERC	1597	Washington-St.Tammany Electric Cooperative, Inc.	U.S.	31,321	31,321	-	-	14,753	14,753	-	-	16,568	16,568	-	-
<b>TOTAL SERC</b>					<b>29,691,789</b>	<b>29,691,789</b>	<b>-</b>	<b>-</b>	<b>13,985,766</b>	<b>13,985,766</b>	<b>-</b>	<b>-</b>	<b>15,706,023</b>	<b>15,706,023</b>	<b>-</b>	<b>-</b>
2015	SPP	1246	American Electric Power	U.S.	2,058,892	2,058,892	-	-	520,620	520,620	-	-	1,538,272	1,538,272	-	-
2015	SPP	1707	AEP-VEMCO	U.S.	37,179	37,179	-	-	9,401	9,401	-	-	27,778	27,778	-	-
2015	SPP	1435	Arkansas Electric Cooperative Corporation	U.S.	733,221	733,221	-	-	185,405	185,405	-	-	547,815	547,815	-	-
2015	SPP	1247	Board of Public Utilities (Kansas City KS)	U.S.	129,879	129,879	-	-	32,842	32,842	-	-	97,037	97,037	-	-
2015	SPP	1620	Board of Public Utilities, City of McPherson, Kansas	U.S.	48,368	48,368	-	-	12,230	12,230	-	-	36,137	36,137	-	-
2015	SPP	1647	Carthage City Water & Light	U.S.	16,200	16,200	-	-	4,096	4,096	-	-	12,104	12,104	-	-
2015	SPP	1469	Central Valley Electric Cooperative	U.S.	45,959	45,959	-	-	11,621	11,621	-	-	34,337	34,337	-	-
2015	SPP	1556	City of Bentonville	U.S.	35,997	35,997	-	-	9,102	9,102	-	-	26,894	26,894	-	-
2015	SPP	1557	City of Clarksdale, Mississippi	U.S.	8,968	8,968	-	-	2,268	2,268	-	-	6,700	6,700	-	-
2015	SPP	1558	Hope Water & Light (HWL)	U.S.	15,276	15,276	-	-	3,863	3,863	-	-	11,413	11,413	-	-
2015	SPP	1708	City of Abbeville	U.S.	8,020	8,020	-	-	2,028	2,028	-	-	5,992	5,992	-	-
2015	SPP	1559	City of Minden	U.S.	8,381	8,381	-	-	2,119	2,119	-	-	6,262	6,262	-	-
2015	SPP	1709	City of Nixa	U.S.	8,816	8,816	-	-	2,229	2,229	-	-	6,587	6,587	-	-
2015	SPP	1703	City of Chanute	U.S.	27,322	27,322	-	-	6,909	6,909	-	-	20,413	20,413	-	-
2015	SPP	1636	City of Prescott	U.S.	4,717	4,717	-	-	1,193	1,193	-	-	3,524	3,524	-	-
2015	SPP	1248	Independence Power & Light (Independence, MO)	U.S.	55,509	55,509	-	-	14,036	14,036	-	-	41,472	41,472	-	-
2015	SPP	1436	City Utilities of Springfield, MO	U.S.	169,587	169,587	-	-	42,883	42,883	-	-	126,705	126,705	-	-
2015	SPP	1249	Cleco Power LLC	U.S.	677,826	677,826	-	-	171,398	171,398	-	-	506,428	506,428	-	-
2015	SPP	1437	East Texas Electric Coop, Inc.	U.S.	22,834	22,834	-	-	5,774	5,774	-	-	17,060	17,060	-	-
2015	SPP	1250	The Empire District Electric Company	U.S.	284,841	284,841	-	-	72,026	72,026	-	-	212,815	212,815	-	-
2015	SPP	1470	Farmers' Electric Coop	U.S.	16,302	16,302	-	-	4,122	4,122	-	-	12,180	12,180	-	-
2015	SPP	1438	Golden Spread Electric Coop	U.S.	270,776	270,776	-	-	68,470	68,470	-	-	202,306	202,306	-	-
2015	SPP	1251	Grand River Dam Authority	U.S.	285,421	285,421	-	-	72,173	72,173	-	-	213,248	213,248	-	-

2015 NEL Calculations and Allocations to Load Serving Entities (or Designee) for the 2017 NERC and RE Assessments

Data Year	Regional Entity	ID	Entity	Country	Total ERO Assessments (NERC, RE & WIRAB Costs)				Total NERC Assessments				Total Regional Entity Assessments (Including WIRAB Assessments)			
					Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total
2015	SPP	1648	Jonesboro City Water & Light	U.S.	73,972	73,972	-	-	18,705	18,705	-	-	55,267	55,267	-	-
2015	SPP	1252	Kansas City Power & Light (KCPL)	U.S.	839,765	839,765	-	-	212,347	212,347	-	-	627,419	627,419	-	-
2015	SPP	1439	Kansas Electric Power Coop., Inc	U.S.	122,967	122,967	-	-	31,094	31,094	-	-	91,873	91,873	-	-
2015	SPP	1440	Kansas Municipal Energy Agency (KCPL)	U.S.	80,031	80,031	-	-	20,237	20,237	-	-	59,794	59,794	-	-
2015	SPP	1637	Kansas Power Pool	U.S.	47,841	47,841	-	-	12,097	12,097	-	-	35,744	35,744	-	-
2015	SPP	1649	Kennett Board of Public Works	U.S.	8,118	8,118	-	-	2,053	2,053	-	-	6,065	6,065	-	-
2015	SPP	1598	KCP&L GMOEC (Greater Missouri Operations Company)	U.S.	460,735	460,735	-	-	116,503	116,503	-	-	344,232	344,232	-	-
2015	SPP	1471	Lafayette Utilities System	U.S.	114,051	114,051	-	-	28,839	28,839	-	-	85,211	85,211	-	-
2015	SPP	1472	Lea County Electric Coop	U.S.	64,045	64,045	-	-	16,195	16,195	-	-	47,850	47,850	-	-
2015	SPP	1253	Louisiana Energy & Power Authority (LEPA)	U.S.	55,680	55,680	-	-	14,079	14,079	-	-	41,600	41,600	-	-
2015	SPP	1650	Malden Board of Public Works	U.S.	2,731	2,731	-	-	691	691	-	-	2,041	2,041	-	-
2015	SPP	1441	Midwest Energy Inc.	U.S.	95,985	95,985	-	-	24,271	24,271	-	-	71,714	71,714	-	-
2015	SPP	1443	Missouri Joint Municipal Electric Utility Commission	U.S.	139,639	139,639	-	-	35,310	35,310	-	-	104,330	104,330	-	-
2015	SPP	1442	Northeast Texas Electric Cooperative, Inc.	U.S.	176,865	176,865	-	-	44,723	44,723	-	-	132,142	132,142	-	-
2015	SPP	1255	Oklahoma Gas and Electric Co.	U.S.	1,505,983	1,505,983	-	-	380,810	380,810	-	-	1,125,174	1,125,174	-	-
2015	SPP	1444	Oklahoma Municipal Power Auth	U.S.	155,272	155,272	-	-	39,263	39,263	-	-	116,009	116,009	-	-
2015	SPP	1639	OzMo Ozark Missouri, West Plains MO	U.S.	10,970	10,970	-	-	2,774	2,774	-	-	8,196	8,196	-	-
2015	SPP	1651	Paragould Light, Water & Cable	U.S.	32,762	32,762	-	-	8,284	8,284	-	-	24,478	24,478	-	-
2015	SPP	1652	Piggott Municipal Light, Water & Sewer	U.S.	2,153	2,153	-	-	545	545	-	-	1,609	1,609	-	-
2015	SPP	1653	Poplar Bluff Municipal Utilities	U.S.	20,978	20,978	-	-	5,304	5,304	-	-	15,673	15,673	-	-
2015	SPP	1561	Public Service Commission of Yazoo City of Mississippi	U.S.	6,356	6,356	-	-	1,607	1,607	-	-	4,749	4,749	-	-
2015	SPP	1473	Roosevelt County Electric Coop	U.S.	9,191	9,191	-	-	2,324	2,324	-	-	6,867	6,867	-	-
2015	SPP	1654	Sikeston Board of Municipal Utilities	U.S.	28,140	28,140	-	-	7,116	7,116	-	-	21,025	21,025	-	-
2015	SPP	1257	Southwestern Public Service Co. (SPS-XCEL)	U.S.	1,131,749	1,131,749	-	-	286,179	286,179	-	-	845,570	845,570	-	-
2015	SPP	1256	Sunflower Electric Power Cooperative	U.S.	239,502	239,502	-	-	60,562	60,562	-	-	178,941	178,941	-	-
2015	SPP	1445	Tex - La Electric Cooperative of Texas	U.S.	27,112	27,112	-	-	6,856	6,856	-	-	20,257	20,257	-	-
2015	SPP	1475	Tri County Electric Coop	U.S.	20,617	20,617	-	-	5,213	5,213	-	-	15,404	15,404	-	-
2015	SPP	1260	Westar Energy, Inc.	U.S.	1,072,633	1,072,633	-	-	271,231	271,231	-	-	801,402	801,402	-	-
2015	SPP	1259	Western Farmers Electric Cooperative	U.S.	502,057	502,057	-	-	126,952	126,952	-	-	375,105	375,105	-	-
2015	SPP	1501	West Texas Municipal Power Agency	U.S.	151,694	151,694	-	-	38,358	38,358	-	-	113,336	113,336	-	-
TOTAL SPP					12,169,883	12,169,883	-	-	3,077,330	3,077,330	-	-	9,092,553	9,092,553	-	-
2015	TRE	1019	ERCOT	U.S.	14,344,749	14,344,749	-	-	4,749,493	4,749,493	-	-	9,595,256	9,595,256	-	-
TOTAL ERCOT					14,344,749	14,344,749	-	-	4,749,493	4,749,493	-	-	9,595,256	9,595,256	-	-
2015	WECC		Alberta Electric System Operator	Canada	1,535,622	-	1,535,622	-	544,658	-	544,658	-	990,964	-	990,964	-
2015	WECC		British Columbia Hydro & Power Authority	Canada	2,860,513	-	2,860,513	-	857,145	-	857,145	-	2,003,368	-	2,003,368	-
2015	WECC		Comision Federal de Electricidad	Mexico	590,532	-	-	590,532	176,951	-	-	176,951	413,581	-	-	413,581
2015	WECC		Ajo Improvement District	U.S.	539	539	-	-	165	165	-	-	375	375	-	-
2015	WECC		Arizona Public Service Company	U.S.	1,329,326	1,329,326	-	-	405,457	405,457	-	-	923,869	923,869	-	-
2015	WECC		City of Williams	U.S.	1,981	1,981	-	-	604	604	-	-	1,377	1,377	-	-
2015	WECC		Electrical Districts 3	U.S.	32,231	32,231	-	-	9,831	9,831	-	-	22,400	22,400	-	-
2015	WECC		Majority Districts	U.S.	33,618	33,618	-	-	10,254	10,254	-	-	23,364	23,364	-	-
2015	WECC		Navajo Tribal Utility Authority	U.S.	876	876	-	-	267	267	-	-	609	609	-	-
2015	WECC		Tohono O'Odham Utility Authority	U.S.	2,867	2,867	-	-	874	874	-	-	1,993	1,993	-	-
2015	WECC		Town of Wickenburg	U.S.	1,212	1,212	-	-	370	370	-	-	842	842	-	-
2015	WECC		Avista Corporation	U.S.	422,511	422,511	-	-	128,870	128,870	-	-	293,641	293,641	-	-
2015	WECC		Big Bend Electric Cooperative, Inc.	U.S.	6,897	6,897	-	-	2,104	2,104	-	-	4,793	4,793	-	-
2015	WECC		City of Cheney	U.S.	6,579	6,579	-	-	2,007	2,007	-	-	4,572	4,572	-	-
2015	WECC		City of Chewelah	U.S.	1,015	1,015	-	-	310	310	-	-	705	705	-	-
2015	WECC		City of Plummer	U.S.	1,500	1,500	-	-	458	458	-	-	1,042	1,042	-	-
2015	WECC		Clearwater Cooperative, Inc	U.S.	7,225	7,225	-	-	2,204	2,204	-	-	5,022	5,022	-	-
2015	WECC		Consolidated Irrigation District No. 19	U.S.	356	356	-	-	109	109	-	-	248	248	-	-
2015	WECC		Idaho County Light and Power Cooperative Association, Inc.	U.S.	2,551	2,551	-	-	778	778	-	-	1,773	1,773	-	-
2015	WECC		Inland Power and Light Company	U.S.	21,017	21,017	-	-	6,410	6,410	-	-	14,606	14,606	-	-
2015	WECC		Kaiser Aluminum Fabricated Products LLC	U.S.	14,038	14,038	-	-	4,282	4,282	-	-	9,756	9,756	-	-
2015	WECC		Kootenai Electric Cooperative, Inc.	U.S.	21,136	21,136	-	-	6,447	6,447	-	-	14,690	14,690	-	-
2015	WECC		Modern Electric Water Company	U.S.	10,489	10,489	-	-	3,199	3,199	-	-	7,290	7,290	-	-
2015	WECC		Northern Lights, Inc.	U.S.	1,542	1,542	-	-	470	470	-	-	1,071	1,071	-	-
2015	WECC		Pend Oreille County PUD No. 1	U.S.	37,621	37,621	-	-	11,475	11,475	-	-	26,146	26,146	-	-
2015	WECC		PUD No. 1 of Asotin County	U.S.	247	247	-	-	75	75	-	-	172	172	-	-
2015	WECC		PUD No. 2 of Grant County	U.S.	4,354	4,354	-	-	1,328	1,328	-	-	3,026	3,026	-	-
2015	WECC		U.S. BOR East Greenacres (Rathdrum)	U.S.	189	189	-	-	58	58	-	-	131	131	-	-
2015	WECC		U.S. Bor Spokane Indian Development	U.S.	164	164	-	-	50	50	-	-	114	114	-	-
2015	WECC		US Air Force Base, Fairchild	U.S.	2,172	2,172	-	-	662	662	-	-	1,509	1,509	-	-
2015	WECC		City of Redding	U.S.	35,177	35,177	-	-	10,729	10,729	-	-	24,448	24,448	-	-
2015	WECC		City of Roseville	U.S.	55,187	55,187	-	-	16,832	16,832	-	-	38,354	38,354	-	-

2015 NEL Calculations and Allocations to Load Serving Entities (or Designee) for the 2017 NERC and RE Assessments

APPENDIX 2-B

Data Year	Regional Entity	ID	Entity	Country	Total ERO Assessments (NERC, RE & WIRAB Costs)				Total NERC Assessments				Total Regional Entity Assessments (Including WIRAB Assessments)			
					Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total
2015	WECC		Modesto Irrigation District	U.S.	117,031	117,031	-	-	35,696	35,696	-	-	81,336	81,336	-	-
2015	WECC		Sacramento Municipal Utility District	U.S.	503,077	503,077	-	-	153,443	153,443	-	-	349,634	349,634	-	-
2015	WECC		Western Area Power Administration - Sierra Nevada Region	U.S.	57,456	57,456	-	-	17,525	17,525	-	-	39,932	39,932	-	-
2015	WECC		Bonneville Power Administration	U.S.	2,397,290	2,397,290	-	-	731,197	731,197	-	-	1,666,093	1,666,093	-	-
2015	WECC		California Independent System Operator	U.S.	10,292,085	10,292,085	-	-	3,139,186	3,139,186	-	-	7,152,900	7,152,900	-	-
2015	WECC		El Paso Electric Company	U.S.	377,422	377,422	-	-	115,117	115,117	-	-	262,305	262,305	-	-
2015	WECC		Bonneville Power Administration	U.S.	81,289	81,289	-	-	24,794	24,794	-	-	56,495	56,495	-	-
2015	WECC		Idaho Power Company	U.S.	683,639	683,639	-	-	208,517	208,517	-	-	475,122	475,122	-	-
2015	WECC		PacificCorp	U.S.	92	92	-	-	28	28	-	-	64	64	-	-
2015	WECC		Imperial Irrigation District	U.S.	164,553	164,553	-	-	50,190	50,190	-	-	114,363	114,363	-	-
2015	WECC		Los Angeles Department of Water and Power	U.S.	1,292,973	1,292,973	-	-	394,369	394,369	-	-	898,603	898,603	-	-
2015	WECC		City of Henderson	U.S.	1,894	1,894	-	-	578	578	-	-	1,316	1,316	-	-
2015	WECC		City of Las Vegas	U.S.	1,963	1,963	-	-	599	599	-	-	1,365	1,365	-	-
2015	WECC		City of North Las Vegas	U.S.	943	943	-	-	288	288	-	-	656	656	-	-
2015	WECC		Clark County Water Resources	U.S.	3,724	3,724	-	-	1,136	1,136	-	-	2,588	2,588	-	-
2015	WECC		Colorado River Commission of Nevada	U.S.	40,262	40,262	-	-	12,280	12,280	-	-	27,982	27,982	-	-
2015	WECC		Las Vegas Valley Water District	U.S.	4,459	4,459	-	-	1,360	1,360	-	-	3,099	3,099	-	-
2015	WECC		Nevada Power Company dba NV Energy	U.S.	1,008,632	1,008,632	-	-	307,643	307,643	-	-	700,990	700,990	-	-
2015	WECC		Overton Power District No. 5	U.S.	17,514	17,514	-	-	5,342	5,342	-	-	12,172	12,172	-	-
2015	WECC		Southern Nevada Water Authority	U.S.	5,222	5,222	-	-	1,593	1,593	-	-	3,629	3,629	-	-
2015	WECC		Bonneville Power Administration	U.S.	34,522	34,522	-	-	10,530	10,530	-	-	23,993	23,993	-	-
2015	WECC		Basin Electric Power Cooperative	U.S.	18,442	18,442	-	-	5,625	5,625	-	-	12,817	12,817	-	-
2015	WECC		NorthWestern Corp. dba NorthWestern Energy, LLC	U.S.	413,388	413,388	-	-	126,087	126,087	-	-	287,301	287,301	-	-
2015	WECC		Southern Montana Electric Generation & Transmission	U.S.	16,773	16,773	-	-	5,116	5,116	-	-	11,657	11,657	-	-
2015	WECC		Western Area Power Administration-Upper Great Plains Region	U.S.	330	330	-	-	101	101	-	-	229	229	-	-
2015	WECC		PacificCorp	U.S.	2,206,508	2,206,508	-	-	673,006	673,006	-	-	1,533,502	1,533,502	-	-
2015	WECC		PacificCorp West (PACW)	U.S.	938,861	938,861	-	-	286,362	286,362	-	-	652,499	652,499	-	-
2015	WECC		Bonneville Power Administration	U.S.	410	410	-	-	125	125	-	-	285	285	-	-
2015	WECC		Canby Public Utility Board	U.S.	6,946	6,946	-	-	2,119	2,119	-	-	4,828	4,828	-	-
2015	WECC		Columbia River PUD	U.S.	12,628	12,628	-	-	3,852	3,852	-	-	8,776	8,776	-	-
2015	WECC		Constellation New Energy	U.S.	3,375	3,375	-	-	1,029	1,029	-	-	2,345	2,345	-	-
2015	WECC		Noble Americas Energy Solutions, LLC	U.S.	73,912	73,912	-	-	22,544	22,544	-	-	51,368	51,368	-	-
2015	WECC		PacificCorp	U.S.	192	192	-	-	58	58	-	-	133	133	-	-
2015	WECC		Portland General Electric Company	U.S.	827,854	827,854	-	-	252,503	252,503	-	-	575,350	575,350	-	-
2015	WECC		Shell Energy North America	U.S.	964	964	-	-	294	294	-	-	670	670	-	-
2015	WECC		West Oregon Electric Cooperative, Inc.	U.S.	548	548	-	-	167	167	-	-	381	381	-	-
2015	WECC		Arkansas River Power Authority (ARPA)	U.S.	12,041	12,041	-	-	3,673	3,673	-	-	8,368	8,368	-	-
2015	WECC		Black Hills Colorado Electric	U.S.	91,618	91,618	-	-	27,944	27,944	-	-	63,674	63,674	-	-
2015	WECC		Burlington	U.S.	2,290	2,290	-	-	699	699	-	-	1,592	1,592	-	-
2015	WECC		Colorado Springs Utilities	U.S.	1,300	1,300	-	-	396	396	-	-	903	903	-	-
2015	WECC		Grand Valley Power	U.S.	10,752	10,752	-	-	3,280	3,280	-	-	7,473	7,473	-	-
2015	WECC		Holy Cross Energy	U.S.	51,112	51,112	-	-	15,590	15,590	-	-	35,522	35,522	-	-
2015	WECC		Intermountain Rural Electric Association	U.S.	98,808	98,808	-	-	30,138	30,138	-	-	68,671	68,671	-	-
2015	WECC		Municipal Energy Agency of Nebraska	U.S.	7,749	7,749	-	-	2,363	2,363	-	-	5,385	5,385	-	-
2015	WECC		Platte River Power Authority	U.S.	145,244	145,244	-	-	44,301	44,301	-	-	100,943	100,943	-	-
2015	WECC		Public Service Company of Colorado (Xcel)	U.S.	1,560,678	1,560,678	-	-	476,022	476,022	-	-	1,084,656	1,084,656	-	-
2015	WECC		Raton Public Service	U.S.	2,292	2,292	-	-	699	699	-	-	1,593	1,593	-	-
2015	WECC		Town of Center	U.S.	650	650	-	-	198	198	-	-	451	451	-	-
2015	WECC		Tri-State Generation & Transmission Assoc. Inc - Reliability	U.S.	113,199	113,199	-	-	34,527	34,527	-	-	78,672	78,672	-	-
2015	WECC		Western Area Power - Loveland, CO	U.S.	1,478	1,478	-	-	451	451	-	-	1,028	1,028	-	-
2015	WECC		Yampa Valley Electric Association	U.S.	24,065	24,065	-	-	7,340	7,340	-	-	16,725	16,725	-	-
2015	WECC		City of Aztec Electric Dept	U.S.	2,106	2,106	-	-	642	642	-	-	1,464	1,464	-	-
2015	WECC		City of Gallup	U.S.	10,101	10,101	-	-	3,081	3,081	-	-	7,020	7,020	-	-
2015	WECC		Jicarilla Apache Nation Power Authority	U.S.	997	997	-	-	304	304	-	-	693	693	-	-
2015	WECC		Navajo Tribal Utility Authority	U.S.	10,127	10,127	-	-	3,089	3,089	-	-	7,038	7,038	-	-
2015	WECC		Navopache Electric Cooperative, Inc.	U.S.	19,395	19,395	-	-	5,916	5,916	-	-	13,480	13,480	-	-
2015	WECC		Public Service Company of New Mexico	U.S.	424,897	424,897	-	-	129,598	129,598	-	-	295,299	295,299	-	-
2015	WECC		The Incorporated County of Los Alamos	U.S.	25,298	25,298	-	-	7,716	7,716	-	-	17,582	17,582	-	-
2015	WECC		Tri-State Generation & Transmission Association, Inc.	U.S.	140,863	140,863	-	-	42,965	42,965	-	-	97,898	97,898	-	-
2015	WECC		US Dept of Energy - Kirtland AFB	U.S.	19,132	19,132	-	-	5,835	5,835	-	-	13,296	13,296	-	-
2015	WECC		Public Utility District No. 1 of Chelan County	U.S.	170,826	170,826	-	-	52,104	52,104	-	-	118,722	118,722	-	-
2015	WECC		PUD No. 1 of Douglas County	U.S.	35,131	35,131	-	-	10,715	10,715	-	-	24,416	24,416	-	-
2015	WECC		Okanogan PUD	U.S.	29,127	29,127	-	-	8,884	8,884	-	-	20,243	20,243	-	-
2015	WECC		BPA - Douglas Pumping	U.S.	1,270	1,270	-	-	387	387	-	-	883	883	-	-
2015	WECC		BPA - Okanogan Pumping	U.S.	1,715	1,715	-	-	523	523	-	-	1,192	1,192	-	-
2015	WECC		BPA - Okanogan REA	U.S.	2,676	2,676	-	-	816	816	-	-	1,860	1,860	-	-
2015	WECC		BPA - USBR Load	U.S.	6,473	6,473	-	-	1,974	1,974	-	-	4,498	4,498	-	-

2015 NEL Calculations and Allocations to Load Serving Entities (or Designee) for the 2017 NERC and RE Assessments

Data Year	Regional Entity	ID	Country	Total ERO Assessments (NERC, RE & WIRAB Costs)				Total NERC Assessments				Total Regional Entity Assessments (Including WIRAB Assessments)			
				Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total
2015	WECC	BPA - Big Bend/Schrag Load	U.S.	2,007	2,007	-	-	612	612	-	-	1,395	1,395	-	-
2015	WECC	BPA - Kittitas Load	U.S.	345	345	-	-	105	105	-	-	240	240	-	-
2015	WECC	Douglas Palisades / PUD No. 1 of DC	U.S.	871	871	-	-	266	266	-	-	605	605	-	-
2015	WECC	PUD No. 2 of Grant County	U.S.	203,518	203,518	-	-	62,075	62,075	-	-	141,443	141,443	-	-
2015	WECC	City of Blaine	U.S.	3,460	3,460	-	-	1,055	1,055	-	-	2,404	2,404	-	-
2015	WECC	City of Sumas	U.S.	1,308	1,308	-	-	399	399	-	-	909	909	-	-
2015	WECC	Port of Seattle - Seattle-Tacoma International Airport	U.S.	6,414	6,414	-	-	1,956	1,956	-	-	4,457	4,457	-	-
2015	WECC	PUD No. 1 of Kittitas County	U.S.	721	721	-	-	220	220	-	-	501	501	-	-
2015	WECC	PUD No. 1 of Whatcom County	U.S.	293	293	-	-	89	89	-	-	204	204	-	-
2015	WECC	Puget Sound Energy, Inc.	U.S.	1,055,789	1,055,789	-	-	322,026	322,026	-	-	733,763	733,763	-	-
2015	WECC	Tanner Electric Cooperative	U.S.	4,268	4,268	-	-	1,302	1,302	-	-	2,966	2,966	-	-
2015	WECC	Salt River Project	U.S.	1,309,872	1,309,872	-	-	399,524	399,524	-	-	910,348	910,348	-	-
2015	WECC	Seattle City Light	U.S.	432,720	432,720	-	-	131,984	131,984	-	-	300,736	300,736	-	-
2015	WECC	Barrick Goldstrike Mines Inc.	U.S.	71,714	71,714	-	-	21,874	21,874	-	-	49,841	49,841	-	-
2015	WECC	City of Fallon	U.S.	4,032	4,032	-	-	1,230	1,230	-	-	2,802	2,802	-	-
2015	WECC	Harney Electric Cooperative, Inc.	U.S.	14,053	14,053	-	-	4,286	4,286	-	-	9,766	9,766	-	-
2015	WECC	Mt. Wheeler Power	U.S.	24,338	24,338	-	-	7,423	7,423	-	-	16,915	16,915	-	-
2015	WECC	Sierra Pacific Power Company dba NV Energy	U.S.	381,726	381,726	-	-	116,430	116,430	-	-	265,296	265,296	-	-
2015	WECC	Truckee Donner Public Utility District	U.S.	6,876	6,876	-	-	2,097	2,097	-	-	4,779	4,779	-	-
2015	WECC	Wells Rural Electric Cooperative	U.S.	45,102	45,102	-	-	13,757	13,757	-	-	31,346	31,346	-	-
2015	WECC	City of Tacoma DBA Tacoma Power	U.S.	215,369	215,369	-	-	65,690	65,690	-	-	149,679	149,679	-	-
2015	WECC	Tucson Electric Power Company	U.S.	666,330	666,330	-	-	203,237	203,237	-	-	463,093	463,093	-	-
2015	WECC	Merced Irrigation District	U.S.	21,222	21,222	-	-	6,473	6,473	-	-	14,749	14,749	-	-
2015	WECC	Turlock Irrigation District	U.S.	95,978	95,978	-	-	29,274	29,274	-	-	66,704	66,704	-	-
2015	WECC	Basin Electric Power Cooperative	U.S.	120,890	120,890	-	-	36,873	36,873	-	-	84,017	84,017	-	-
2015	WECC	Black Hills Power/Cheyenne Light Fuel & Power	U.S.	160,585	160,585	-	-	48,980	48,980	-	-	111,605	111,605	-	-
2015	WECC	Black Hills State University South Dakota	U.S.	868	868	-	-	265	265	-	-	603	603	-	-
2015	WECC	City of Page	U.S.	4,102	4,102	-	-	1,251	1,251	-	-	2,851	2,851	-	-
2015	WECC	Colorado Springs Utilities	U.S.	204,209	204,209	-	-	62,286	62,286	-	-	141,923	141,923	-	-
2015	WECC	Deseret Generation & Transmission Cooperative	U.S.	5,164	5,164	-	-	1,575	1,575	-	-	3,589	3,589	-	-
2015	WECC	City of Farmington	U.S.	48,010	48,010	-	-	14,644	14,644	-	-	33,367	33,367	-	-
2015	WECC	Municipal Energy Agency of Nebraska	U.S.	28,241	28,241	-	-	8,614	8,614	-	-	19,627	19,627	-	-
2015	WECC	Navajo Agricultural Products Industry (NAPI)	U.S.	124	124	-	-	38	38	-	-	86	86	-	-
2015	WECC	Nebraska Public Power Marketing	U.S.	114	114	-	-	35	35	-	-	79	79	-	-
2015	WECC	PacifiCorp	U.S.	5,008	5,008	-	-	1,528	1,528	-	-	3,481	3,481	-	-
2015	WECC	Public Service Company of Colorado (Xcel)	U.S.	3,336	3,336	-	-	1,018	1,018	-	-	2,318	2,318	-	-
2015	WECC	Town of Fredonia	U.S.	461	461	-	-	141	141	-	-	321	321	-	-
2015	WECC	Tri-State Generation & Transmission Assoc. Inc - Reliability	U.S.	336,623	336,623	-	-	102,673	102,673	-	-	233,950	233,950	-	-
2015	WECC	Western Area Power - Loveland, CO	U.S.	104,359	104,359	-	-	31,831	31,831	-	-	72,529	72,529	-	-
2015	WECC	Western Area Power Administration - CRSP	U.S.	95,629	95,629	-	-	29,168	29,168	-	-	66,461	66,461	-	-
2015	WECC	Wyoming Municipal Power Agency	U.S.	11,770	11,770	-	-	3,590	3,590	-	-	8,180	8,180	-	-
2015	WECC	Basin Electric Power Cooperative	U.S.	2,717	2,717	-	-	829	829	-	-	1,889	1,889	-	-
2015	WECC	Southern Montana Electric Generation & Transmission	U.S.	570	570	-	-	174	174	-	-	396	396	-	-
2015	WECC	Central Montana Electric Power Cooperative	U.S.	2,766	2,766	-	-	844	844	-	-	1,922	1,922	-	-
2015	WECC	Montana-Dakota Utilities Co.	U.S.	1,059	1,059	-	-	323	323	-	-	736	736	-	-
2015	WECC	NorthWestern Corp. dba NorthWestern Energy, LLC	U.S.	10,534	10,534	-	-	3,213	3,213	-	-	7,321	7,321	-	-
2015	WECC	Western Area Power Administration-Upper Great Plains Region	U.S.	18,527	18,527	-	-	5,651	5,651	-	-	12,876	12,876	-	-
2015	WECC	Aha Macav Power Service	U.S.	715	715	-	-	218	218	-	-	497	497	-	-
2015	WECC	Bureau of Reclamation (Wellfield) - c/o DSW EMMO	U.S.	455	455	-	-	139	139	-	-	316	316	-	-
2015	WECC	Central Arizona Water Conservation District	U.S.	108,426	108,426	-	-	33,071	33,071	-	-	75,355	75,355	-	-
2015	WECC	City of Mesa	U.S.	11,569	11,569	-	-	3,529	3,529	-	-	8,040	8,040	-	-
2015	WECC	City of Needles	U.S.	1,328	1,328	-	-	405	405	-	-	923	923	-	-
2015	WECC	Colorado River Agency-Bureau of Indian Affairs	U.S.	1,060	1,060	-	-	323	323	-	-	737	737	-	-
2015	WECC	Electrical District #2	U.S.	8,689	8,689	-	-	2,650	2,650	-	-	6,039	6,039	-	-
2015	WECC	Electrical District #2 - Coolidge Generating Station	U.S.	410	410	-	-	125	125	-	-	285	285	-	-
2015	WECC	Silver State Energy - c/o Colorado River Commission of Nevada	U.S.	28,891	28,891	-	-	8,812	8,812	-	-	20,079	20,079	-	-
2015	WECC	Arizona Electric Power Cooperative, Inc	U.S.	117,674	117,674	-	-	35,892	35,892	-	-	81,782	81,782	-	-
2015	WECC	U.S. Army Yuma Proving Ground	U.S.	887	887	-	-	271	271	-	-	617	617	-	-
2015	WECC	Wellton-Mohawk Irrigation & Drainage District	U.S.	323	323	-	-	99	99	-	-	225	225	-	-
2015	WECC	Western Area Power Administration-Desert Southwest Region	U.S.	71,389	71,389	-	-	21,774	21,774	-	-	49,615	49,615	-	-
TOTAL WECC				37,757,683	32,771,016	4,396,135	590,532	11,574,231	9,995,477	1,401,802	176,951	26,183,452	22,775,539	2,994,332	413,581
TOTAL ERO				170,907,780	154,832,467	15,484,781	590,532	59,856,314	54,326,337	5,353,026	176,951	111,051,466	100,506,130	10,131,755	413,581

2015 NEL Calculations and Allocations to Load Serving Entities (or Designee) for the 2017 NERC and RE Assessments

Data Year	Regional Entity	ID	Entity	Country	Total ERO Assessments (NERC, RE & WIRAB Costs)				Total NERC Assessments				Total Regional Entity Assessments (Including WIRAB Assessments)				
					Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total	
<b>Summary by Regional Entity</b>																	
2015	FRCC				9,363,266	9,363,266	-	-	3,199,370	3,199,370	-	-	6,163,896	6,163,896	-	-	
2015	MRO				14,368,560	11,934,833	2,433,728	-	3,874,215	3,217,546	656,669	-	10,494,345	8,717,286	1,777,059	-	
2015	NPCC				21,484,314	12,829,396	8,654,918	-	7,229,254	3,934,700	3,294,554	-	14,255,060	8,894,696	5,360,364	-	
2015	RF				31,727,536	31,727,536	-	-	12,166,655	12,166,655	-	-	19,560,881	19,560,881	-	-	
2015	SERC				29,691,789	29,691,789	-	-	13,985,766	13,985,766	-	-	15,706,023	15,706,023	-	-	
2015	SPP				12,169,883	12,169,883	-	-	3,077,330	3,077,330	-	-	9,092,553	9,092,553	-	-	
2015	TRE				14,344,749	14,344,749	-	-	4,749,493	4,749,493	-	-	9,595,256	9,595,256	-	-	
2015	WECC				37,757,683	32,771,016	4,396,135	590,532	11,574,231	9,995,477	1,401,802	176,951	26,183,452	22,775,539	2,994,332	413,581	
<b>Total</b>					<b>170,907,780</b>	<b>154,832,467</b>	<b>15,484,781</b>	<b>590,532</b>	<b>59,856,314</b>	<b>54,326,337</b>	<b>5,353,026</b>	<b>176,951</b>	<b>111,051,466</b>	<b>100,506,130</b>	<b>10,131,755</b>	<b>413,581</b>	









2015 NEL Calculations and Allocations to Load Serving Entities (or Designee) for the 2017 NERC and RE Assessments

Data Year	Regional Entity	ID	Entity	Country	Total NERC Assessments				NERC NEL Assessments				Penalty Sanctions		NERC Compliance Credits			
					Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total	Total	US Total	Total	US Total	Canada Total	Mexico Total
2015	SERC	1325	Rutherford EMC	U.S.	18,436	18,436	-	-	18,253	18,253	-	-	(373)	(373)	556	556	-	-
2015	SERC	1631	Sam Rayburn G&T Electric Cooperative Inc.	U.S.	25,211	25,211	-	-	24,961	24,961	-	-	(510)	(510)	761	761	-	-
2015	SERC	1326	South Carolina Electric & Gas Company	U.S.	318,268	318,268	-	-	315,111	315,111	-	-	(6,444)	(6,444)	9,601	9,601	-	-
2015	SERC	1327	South Carolina Public Service Authority	U.S.	156,509	156,509	-	-	154,957	154,957	-	-	(3,169)	(3,169)	4,721	4,721	-	-
2015	SERC	1590	South Louisiana Electric Cooperative Association	U.S.	8,699	8,699	-	-	8,613	8,613	-	-	(176)	(176)	262	262	-	-
2015	SERC	1328	South Mississippi Electric Power Association	U.S.	137,555	137,555	-	-	136,191	136,191	-	-	(2,785)	(2,785)	4,150	4,150	-	-
2015	SERC	1329	Southern Illinois Power Cooperative	U.S.	22,657	22,657	-	-	22,432	22,432	-	-	(459)	(459)	683	683	-	-
2015	SERC	1591	Southwest Louisiana Electric Membership Corporation	U.S.	35,522	35,522	-	-	35,170	35,170	-	-	(719)	(719)	1,072	1,072	-	-
2015	SERC	1619	Southwestern Electric Cooperative, Inc.	U.S.	6,205	6,205	-	-	6,143	6,143	-	-	(126)	(126)	187	187	-	-
2015	SERC	1331	Tennessee Valley Authority	U.S.	2,141,027	2,141,027	-	-	2,119,791	2,119,791	-	-	(43,352)	(43,352)	64,587	64,587	-	-
2015	SERC	1632	Tex-La Electric Cooperative of Texas, Inc	U.S.	2,666	2,666	-	-	2,640	2,640	-	-	(54)	(54)	80	80	-	-
2015	SERC	1332	Tombigbee Electric Cooperative Inc.	U.S.	1,780	1,780	-	-	1,762	1,762	-	-	(36)	(36)	54	54	-	-
2015	SERC	1594	Town of Sharpsburg, N.C.	U.S.	277	277	-	-	274	274	-	-	(6)	(6)	8	8	-	-
2015	SERC	1595	Town of Stantonsburg, N.C. JRO	U.S.	779	779	-	-	771	771	-	-	(16)	(16)	23	23	-	-
2015	SERC	1333	Town of Waynesville NC	U.S.	1,195	1,195	-	-	1,183	1,183	-	-	(24)	(24)	36	36	-	-
2015	SERC	1334	Town of Winstboro SC	U.S.	862	862	-	-	854	854	-	-	(17)	(17)	26	26	-	-
2015	SERC	1335	Town of Winterville NC	U.S.	733	733	-	-	725	725	-	-	(15)	(15)	22	22	-	-
2015	SERC	1597	Washington-St.Tammany Electric Cooperative, Inc.	U.S.	14,753	14,753	-	-	14,607	14,607	-	-	(299)	(299)	445	445	-	-
<b>TOTAL SERC</b>					<b>13,985,766</b>	<b>13,985,766</b>	<b>-</b>	<b>-</b>	<b>13,847,051</b>	<b>13,847,051</b>	<b>-</b>	<b>-</b>	<b>(283,184)</b>	<b>(283,184)</b>	<b>421,898</b>	<b>421,898</b>	<b>-</b>	<b>-</b>
2015	SPP	1246	American Electric Power	U.S.	520,620	520,620	-	-	515,457	515,457	-	-	(10,542)	(10,542)	15,705	15,705	-	-
2015	SPP	1707	AEP-VERMCO	U.S.	9,401	9,401	-	-	9,308	9,308	-	-	(190)	(190)	284	284	-	-
2015	SPP	1435	Arkansas Electric Cooperative Corporation	U.S.	185,405	185,405	-	-	183,567	183,567	-	-	(3,754)	(3,754)	5,593	5,593	-	-
2015	SPP	1247	Board of Public Utilities (Kansas City KS)	U.S.	32,842	32,842	-	-	32,516	32,516	-	-	(665)	(665)	991	991	-	-
2015	SPP	1620	Board of Public Utilities, City of McPherson, Kansas	U.S.	12,230	12,230	-	-	12,109	12,109	-	-	(248)	(248)	369	369	-	-
2015	SPP	1647	Carthage City Water & Light	U.S.	4,096	4,096	-	-	4,056	4,056	-	-	(83)	(83)	124	124	-	-
2015	SPP	1469	Central Valley Electric Cooperative	U.S.	11,621	11,621	-	-	11,506	11,506	-	-	(235)	(235)	351	351	-	-
2015	SPP	1556	City of Bentonville	U.S.	9,102	9,102	-	-	9,012	9,012	-	-	(184)	(184)	275	275	-	-
2015	SPP	1557	City of Clarkdale, Mississippi	U.S.	2,268	2,268	-	-	2,245	2,245	-	-	(46)	(46)	68	68	-	-
2015	SPP	1558	Hope Water & Light (HWL)	U.S.	3,863	3,863	-	-	3,824	3,824	-	-	(78)	(78)	117	117	-	-
2015	SPP	1708	City of Abbeville	U.S.	2,028	2,028	-	-	2,008	2,008	-	-	(41)	(41)	61	61	-	-
2015	SPP	1559	City of Minden	U.S.	2,119	2,119	-	-	2,098	2,098	-	-	(43)	(43)	64	64	-	-
2015	SPP	1709	City of Nixa	U.S.	2,229	2,229	-	-	2,207	2,207	-	-	(45)	(45)	67	67	-	-
2015	SPP	1703	City of Chanute	U.S.	6,909	6,909	-	-	6,840	6,840	-	-	(140)	(140)	208	208	-	-
2015	SPP	1636	City of Prescott	U.S.	1,193	1,193	-	-	1,181	1,181	-	-	(24)	(24)	36	36	-	-
2015	SPP	1248	Independence Power & Light (Independence, MO)	U.S.	14,036	14,036	-	-	13,897	13,897	-	-	(284)	(284)	423	423	-	-
2015	SPP	1436	City Utilities of Springfield, MO	U.S.	42,883	42,883	-	-	42,457	42,457	-	-	(868)	(868)	1,294	1,294	-	-
2015	SPP	1249	Cleco Power LLC	U.S.	171,398	171,398	-	-	169,698	169,698	-	-	(3,470)	(3,470)	5,170	5,170	-	-
2015	SPP	1437	East Texas Electric Coop, Inc.	U.S.	5,774	5,774	-	-	5,717	5,717	-	-	(117)	(117)	174	174	-	-
2015	SPP	1250	The Empire District Electric Company	U.S.	72,026	72,026	-	-	71,312	71,312	-	-	(1,458)	(1,458)	2,173	2,173	-	-
2015	SPP	1470	Farmers' Electric Coop	U.S.	4,122	4,122	-	-	4,081	4,081	-	-	(83)	(83)	124	124	-	-
2015	SPP	1438	Golden Spread Electric Coop	U.S.	68,470	68,470	-	-	67,790	67,790	-	-	(1,386)	(1,386)	2,065	2,065	-	-
2015	SPP	1251	Grand River Dam Authority	U.S.	72,173	72,173	-	-	71,457	71,457	-	-	(1,461)	(1,461)	2,177	2,177	-	-
2015	SPP	1648	Jonesboro City Water & Light	U.S.	18,705	18,705	-	-	18,519	18,519	-	-	(379)	(379)	564	564	-	-
2015	SPP	1252	Kansas City Power & Light (KCPL)	U.S.	212,347	212,347	-	-	210,241	210,241	-	-	(4,300)	(4,300)	6,406	6,406	-	-
2015	SPP	1439	Kansas Electric Power Coop., Inc	U.S.	31,094	31,094	-	-	30,785	30,785	-	-	(630)	(630)	938	938	-	-
2015	SPP	1440	Kansas Municipal Energy Agency (KCPL)	U.S.	20,237	20,237	-	-	20,036	20,036	-	-	(410)	(410)	610	610	-	-
2015	SPP	1637	Kansas Power Pool	U.S.	12,097	12,097	-	-	11,977	11,977	-	-	(245)	(245)	365	365	-	-
2015	SPP	1649	Kennett Board of Public Works	U.S.	2,053	2,053	-	-	2,032	2,032	-	-	(42)	(42)	62	62	-	-
2015	SPP	1598	KCP&L GMOC (Greater Missouri Operations Company)	U.S.	116,503	116,503	-	-	115,348	115,348	-	-	(2,359)	(2,359)	3,514	3,514	-	-
2015	SPP	1471	Lafayette Utilities System	U.S.	28,839	28,839	-	-	28,553	28,553	-	-	(584)	(584)	870	870	-	-
2015	SPP	1472	Lea County Electric Coop	U.S.	16,195	16,195	-	-	16,034	16,034	-	-	(328)	(328)	489	489	-	-
2015	SPP	1253	Louisiana Energy & Power Authority (LEPA)	U.S.	14,079	14,079	-	-	13,940	13,940	-	-	(285)	(285)	425	425	-	-
2015	SPP	1650	Malden Board of Public Works	U.S.	691	691	-	-	684	684	-	-	(14)	(14)	21	21	-	-
2015	SPP	1441	Midwest Energy Inc.	U.S.	24,271	24,271	-	-	24,030	24,030	-	-	(491)	(491)	732	732	-	-
2015	SPP	1443	Missouri Joint Municipal Electric Utility Commission	U.S.	35,310	35,310	-	-	34,960	34,960	-	-	(715)	(715)	1,065	1,065	-	-
2015	SPP	1442	Northeast Texas Electric Cooperative, Inc.	U.S.	44,723	44,723	-	-	44,279	44,279	-	-	(906)	(906)	1,349	1,349	-	-
2015	SPP	1255	Oklahoma Gas and Electric Co.	U.S.	380,810	380,810	-	-	377,033	377,033	-	-	(7,711)	(7,711)	11,488	11,488	-	-
2015	SPP	1444	Oklahoma Municipal Power Auth.	U.S.	39,263	39,263	-	-	38,873	38,873	-	-	(795)	(795)	1,184	1,184	-	-
2015	SPP	1639	OzMo Ozark Missouri, West Plains MO	U.S.	2,774	2,774	-	-	2,746	2,746	-	-	(56)	(56)	84	84	-	-
2015	SPP	1651	Paragould Light, Water & Cable	U.S.	8,284	8,284	-	-	8,202	8,202	-	-	(168)	(168)	250	250	-	-
2015	SPP	1652	Piggott Municipal Light, Water & Sewer	U.S.	545	545	-	-	539	539	-	-	(11)	(11)	16	16	-	-
2015	SPP	1653	Poplar Bluff Municipal Utilities	U.S.	5,304	5,304	-	-	5,252	5,252	-	-	(107)	(107)	160	160	-	-
2015	SPP	1561	Public Service Commission of Yazoo City of Mississippi	U.S.	1,607	1,607	-	-	1,591	1,591	-	-	(33)	(33)	48	48	-	-
2015	SPP	1473	Roosevelt County Electric Coop	U.S.	2,324	2,324	-	-	2,301	2,301	-	-	(47)	(47)	70	70	-	-
2015	SPP	1654	Sikeston Board of Municipal Utilities	U.S.	7,116	7,116	-	-	7,045	7,045	-	-	(144)	(144)	215	215	-	-
2015	SPP	1257	Southwestern Public Service Co. (SPS-XCEL)	U.S.	286,179	286,179	-	-	283,341	283,341	-	-	(5,795)	(5,795)	8,633	8,633	-	-
2015	SPP	1256	Sunflower Electric Power Cooperative	U.S.	60,562	60,562	-	-	59,961	59,961	-	-	(1,226)	(1,226)	1,827	1,827	-	-
2015	SPP	1445	Tex - La Electric Cooperative of Texas	U.S.	6,856	6,856	-	-	6,788	6,788	-	-	(139)	(139)	207	207	-	-
2015	SPP	1475	Tri County Electric Coop	U.S.	5,213	5,213	-	-	5,162	5,162	-	-	(106)	(106)				

2015 NEL Calculations and Allocations to Load Serving Entities (or Designee) for the 2017 NERC and RE Assessments

Data Year	Regional Entity	ID	Entity	Country	Total NERC Assessments				NERC NEL Assessments				Penalty Sanctions		NERC Compliance Credits			
					Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total	Total	US Total	Total	US Total	Canada Total	Mexico Total
2015	TRE	1019	ERCOT	U.S.	4,749,493	4,749,493	-	-	4,702,386	4,702,386	-	-	(96,168)	(96,168)	143,275	143,275	-	-
			TOTAL ERCOT		4,749,493	4,749,493	-	-	4,702,386	4,702,386	-	-	(96,168)	(96,168)	143,275	143,275	-	-
2015	WECC		Alberta Electric System Operator	Canada	544,658	-	544,658	-	845,257	-	845,257	-	-	-	(300,599)	-	(300,599)	-
2015	WECC		British Columbia Hydro & Power Authority	Canada	857,145	-	857,145	-	831,801	-	831,801	-	-	-	25,344	-	25,344	-
2015	WECC		Comision Federal de Electricidad	Mexico	176,951	-	-	176,951	171,719	-	-	171,719	-	-	5,232	-	-	5,232
2015	WECC		Ajo Improvement District	U.S.	165	165	-	-	163	163	-	-	(3)	(3)	5	5	-	-
2015	WECC		Arizona Public Service Company	U.S.	405,457	405,457	-	-	401,436	401,436	-	-	(8,210)	(8,210)	12,231	12,231	-	-
2015	WECC		City of Williams	U.S.	604	604	-	-	598	598	-	-	(12)	(12)	18	18	-	-
2015	WECC		Electrical Districts 3	U.S.	9,831	9,831	-	-	9,733	9,733	-	-	(199)	(199)	297	297	-	-
2015	WECC		Majority Districts	U.S.	10,254	10,254	-	-	10,152	10,152	-	-	(208)	(208)	309	309	-	-
2015	WECC		Navajo Tribal Utility Authority	U.S.	267	267	-	-	264	264	-	-	(5)	(5)	8	8	-	-
2015	WECC		Tohono O'odham Utility Authority	U.S.	874	874	-	-	866	866	-	-	(18)	(18)	26	26	-	-
2015	WECC		Town of Wickenburg	U.S.	370	370	-	-	366	366	-	-	(7)	(7)	11	11	-	-
2015	WECC		Avista Corporation	U.S.	128,870	128,870	-	-	127,592	127,592	-	-	(2,609)	(2,609)	3,888	3,888	-	-
2015	WECC		Big Bend Electric Cooperative, Inc.	U.S.	2,104	2,104	-	-	2,083	2,083	-	-	(43)	(43)	63	63	-	-
2015	WECC		City of Cheney	U.S.	2,007	2,007	-	-	1,987	1,987	-	-	(41)	(41)	61	61	-	-
2015	WECC		City of Chewelah	U.S.	310	310	-	-	306	306	-	-	(6)	(6)	9	9	-	-
2015	WECC		City of Plummer	U.S.	458	458	-	-	453	453	-	-	(9)	(9)	14	14	-	-
2015	WECC		Clearwater Cooperative, Inc	U.S.	2,204	2,204	-	-	2,182	2,182	-	-	(45)	(45)	66	66	-	-
2015	WECC		Consolidated Irrigation District No. 19	U.S.	109	109	-	-	108	108	-	-	(2)	(2)	3	3	-	-
2015	WECC		Idaho County Light and Power Cooperative Association, Inc.	U.S.	778	778	-	-	770	770	-	-	(16)	(16)	23	23	-	-
2015	WECC		Inland Power and Light Company	U.S.	6,410	6,410	-	-	6,347	6,347	-	-	(130)	(130)	193	193	-	-
2015	WECC		Kaiser Aluminum Fabricated Products LLC	U.S.	4,282	4,282	-	-	4,239	4,239	-	-	(87)	(87)	129	129	-	-
2015	WECC		Kootenai Electric Cooperative, Inc.	U.S.	6,447	6,447	-	-	6,383	6,383	-	-	(131)	(131)	194	194	-	-
2015	WECC		Modern Electric Water Company	U.S.	3,199	3,199	-	-	3,168	3,168	-	-	(65)	(65)	97	97	-	-
2015	WECC		Northern Lights, Inc.	U.S.	470	470	-	-	466	466	-	-	(10)	(10)	14	14	-	-
2015	WECC		Pend Oreille County PUD No. 1	U.S.	11,475	11,475	-	-	11,361	11,361	-	-	(232)	(232)	346	346	-	-
2015	WECC		PUD No. 1 of Asotin County	U.S.	75	75	-	-	75	75	-	-	(2)	(2)	2	2	-	-
2015	WECC		PUD No. 2 of Grant County	U.S.	1,328	1,328	-	-	1,315	1,315	-	-	(27)	(27)	40	40	-	-
2015	WECC		U.S. BOR East Greenacres (Rathdrum)	U.S.	58	58	-	-	57	57	-	-	(1)	(1)	2	2	-	-
2015	WECC		U.S. Bor Spokane Indian Development	U.S.	50	50	-	-	49	49	-	-	(1)	(1)	2	2	-	-
2015	WECC		US Air Force Base, Fairchild	U.S.	662	662	-	-	656	656	-	-	(13)	(13)	20	20	-	-
2015	WECC		City of Redding	U.S.	10,729	10,729	-	-	10,623	10,623	-	-	(217)	(217)	324	324	-	-
2015	WECC		City of Roseville	U.S.	16,832	16,832	-	-	16,665	16,665	-	-	(341)	(341)	508	508	-	-
2015	WECC		Modesto Irrigation District	U.S.	35,696	35,696	-	-	35,342	35,342	-	-	(723)	(723)	1,077	1,077	-	-
2015	WECC		Sacramento Municipal Utility District	U.S.	153,443	153,443	-	-	151,922	151,922	-	-	(3,107)	(3,107)	4,629	4,629	-	-
2015	WECC		Western Area Power Administration - Sierra Nevada Region	U.S.	17,525	17,525	-	-	17,351	17,351	-	-	(355)	(355)	529	529	-	-
2015	WECC		Bonneville Power Administration	U.S.	731,197	731,197	-	-	723,944	723,944	-	-	(14,805)	(14,805)	22,057	22,057	-	-
2015	WECC		California Independent System Operator	U.S.	3,139,186	3,139,186	-	-	3,108,050	3,108,050	-	-	(63,562)	(63,562)	94,698	94,698	-	-
2015	WECC		El Paso Electric Company	U.S.	115,117	115,117	-	-	113,976	113,976	-	-	(2,331)	(2,331)	3,473	3,473	-	-
2015	WECC		Bonneville Power Administration	U.S.	24,794	24,794	-	-	24,548	24,548	-	-	(502)	(502)	748	748	-	-
2015	WECC		Idaho Power Company	U.S.	208,517	208,517	-	-	206,448	206,448	-	-	(4,222)	(4,222)	6,290	6,290	-	-
2015	WECC		PacifiCorp	U.S.	28	28	-	-	28	28	-	-	(1)	(1)	1	1	-	-
2015	WECC		Imperial Irrigation District	U.S.	50,190	50,190	-	-	49,693	49,693	-	-	(1,016)	(1,016)	1,514	1,514	-	-
2015	WECC		Los Angeles Department of Water and Power	U.S.	394,369	394,369	-	-	390,458	390,458	-	-	(7,985)	(7,985)	11,897	11,897	-	-
2015	WECC		City of Henderson	U.S.	578	578	-	-	572	572	-	-	(12)	(12)	17	17	-	-
2015	WECC		City of Las Vegas	U.S.	599	599	-	-	593	593	-	-	(12)	(12)	18	18	-	-
2015	WECC		City of North Las Vegas	U.S.	288	288	-	-	285	285	-	-	(6)	(6)	9	9	-	-
2015	WECC		Clark County Water Resources	U.S.	1,136	1,136	-	-	1,125	1,125	-	-	(23)	(23)	34	34	-	-
2015	WECC		Colorado River Commission of Nevada	U.S.	12,280	12,280	-	-	12,159	12,159	-	-	(249)	(249)	370	370	-	-
2015	WECC		Las Vegas Valley Water District	U.S.	1,360	1,360	-	-	1,346	1,346	-	-	(28)	(28)	41	41	-	-
2015	WECC		Nevada Power Company dba NV Energy	U.S.	307,643	307,643	-	-	304,591	304,591	-	-	(6,229)	(6,229)	9,280	9,280	-	-
2015	WECC		Overton Power District No. 5	U.S.	5,342	5,342	-	-	5,289	5,289	-	-	(108)	(108)	161	161	-	-
2015	WECC		Southern Nevada Water Authority	U.S.	1,593	1,593	-	-	1,577	1,577	-	-	(32)	(32)	48	48	-	-
2015	WECC		Bonneville Power Administration	U.S.	10,530	10,530	-	-	10,425	10,425	-	-	(213)	(213)	318	318	-	-
2015	WECC		Basin Electric Power Cooperative	U.S.	5,625	5,625	-	-	5,569	5,569	-	-	(114)	(114)	170	170	-	-
2015	WECC		NorthWestern Corp. dba NorthWestern Energy, LLC	U.S.	126,087	126,087	-	-	124,837	124,837	-	-	(2,553)	(2,553)	3,804	3,804	-	-
2015	WECC		Southern Montana Electric Generation & Transmission	U.S.	5,116	5,116	-	-	5,065	5,065	-	-	(104)	(104)	154	154	-	-
2015	WECC		Western Area Power Administration-Upper Great Plains Region	U.S.	101	101	-	-	100	100	-	-	(2)	(2)	3	3	-	-
2015	WECC		PacifiCorp	U.S.	673,006	673,006	-	-	666,331	666,331	-	-	(13,627)	(13,627)	20,302	20,302	-	-
2015	WECC		PacifiCorp West (PACW)	U.S.	286,362	286,362	-	-	283,521	283,521	-	-	(5,798)	(5,798)	8,638	8,638	-	-
2015	WECC		Bonneville Power Administration	U.S.	125	125	-	-	124	124	-	-	(3)	(3)	4	4	-	-
2015	WECC		Canby Public Utility Board	U.S.	2,119	2,119	-	-	2,098	2,098	-	-	(43)	(43)	64	64	-	-
2015	WECC		Columbia River PUD	U.S.	3,852	3,852	-	-	3,813	3,813	-	-	(78)	(78)	116	116	-	-
2015	WECC		Constellation New Energy	U.S.	1,029	1,029	-	-	1,019	1,019	-	-	(21)	(21)	31	31	-	-
2015	WECC		Noble Americas Energy Solutions, LLC	U.S.	22,544	22,544	-	-	22,320	22,320	-	-	(456)	(456)	680	680	-	-
2015	WECC		PacifiCorp	U.S.	58	58	-	-	58	58	-	-	(1)	(1)	2	2	-	-
2015	WECC		Portland General Electric Company	U.S.	252,503	252,503	-	-	249,999	249,999	-	-	(5,113)	(5,113)	7,617	7,617	-	-
2015	WECC		Shell Energy North America	U.S.	294	294	-	-	291	291	-	-	(6)	(6)	9	9	-	-
2015	WECC		West Oregon Electric Cooperative, Inc.	U.S.	167	167	-	-	166	166	-	-	(3)	(3)	5	5	-	-
2015	WECC		Arkansas River Power Authority (ARPA)	U.S.	3,673	3,673	-	-	3,636	3,636	-	-	(74)	(74)	111	111	-	-
2015	WECC		Black Hills Colorado Electric	U.S.	27,944	27,944	-	-	27,667	27,667	-	-	(566)	(566)	843	843	-	-
2015	WECC		Burlington	U.S.	699	699	-	-	692	692	-	-	(14)	(14)				

2015 NEL Calculations and Allocations to Load Serving Entities (or Designee) for the 2017 NERC and RE Assessments

Data Year	Regional Entity	ID	Entity	Country	Total NERC Assessments				NERC NEL Assessments				Penalty Sanctions		NERC Compliance Credits			
					Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total	Total	US Total	Total	US Total	Canada Total	Mexico Total
2015	WECC		Grand Valley Power	U.S.	3,280	3,280	-	-	3,247	3,247	-	-	(66)	(66)	99	99	-	-
2015	WECC		Holy Cross Energy	U.S.	15,590	15,590	-	-	15,435	15,435	-	-	(316)	(316)	470	470	-	-
2015	WECC		Intermountain Rural Electric Association	U.S.	30,138	30,138	-	-	29,839	29,839	-	-	(610)	(610)	909	909	-	-
2015	WECC		Municipal Energy Agency of Nebraska	U.S.	2,363	2,363	-	-	2,340	2,340	-	-	(48)	(48)	71	71	-	-
2015	WECC		Platte River Power Authority	U.S.	44,301	44,301	-	-	43,861	43,861	-	-	(897)	(897)	1,336	1,336	-	-
2015	WECC		Public Service Company of Colorado (Xcel)	U.S.	476,022	476,022	-	-	471,301	471,301	-	-	(9,638)	(9,638)	14,360	14,360	-	-
2015	WECC		Raton Public Service	U.S.	699	699	-	-	692	692	-	-	(14)	(14)	21	21	-	-
2015	WECC		Town of Center	U.S.	198	198	-	-	196	196	-	-	(4)	(4)	6	6	-	-
2015	WECC		Tri-State Generation & Transmission Assoc. Inc - Reliability	U.S.	34,527	34,527	-	-	34,184	34,184	-	-	(699)	(699)	1,042	1,042	-	-
2015	WECC		Western Area Power - Loveland, CO	U.S.	451	451	-	-	446	446	-	-	(9)	(9)	14	14	-	-
2015	WECC		Yampa Valley Electric Association	U.S.	7,340	7,340	-	-	7,267	7,267	-	-	(149)	(149)	221	221	-	-
2015	WECC		City of Aztec Electric Dept	U.S.	642	642	-	-	636	636	-	-	(13)	(13)	19	19	-	-
2015	WECC		City of Gallup	U.S.	3,081	3,081	-	-	3,050	3,050	-	-	(62)	(62)	93	93	-	-
2015	WECC		Jicarilla Apache Nation Power Authority	U.S.	304	304	-	-	301	301	-	-	(6)	(6)	9	9	-	-
2015	WECC		Navajo Tribal Utility Authority	U.S.	3,089	3,089	-	-	3,058	3,058	-	-	(63)	(63)	93	93	-	-
2015	WECC		Navapache Electric Cooperative, Inc.	U.S.	5,916	5,916	-	-	5,857	5,857	-	-	(120)	(120)	178	178	-	-
2015	WECC		Public Service Company of New Mexico	U.S.	129,598	129,598	-	-	128,312	128,312	-	-	(2,624)	(2,624)	3,909	3,909	-	-
2015	WECC		The Incorporated County of Los Alamos	U.S.	7,716	7,716	-	-	7,640	7,640	-	-	(156)	(156)	233	233	-	-
2015	WECC		Tri-State Generation & Transmission Association, Inc.	U.S.	42,965	42,965	-	-	42,538	42,538	-	-	(870)	(870)	1,296	1,296	-	-
2015	WECC		US Dept of Energy - Kirtland AFB	U.S.	5,835	5,835	-	-	5,777	5,777	-	-	(118)	(118)	176	176	-	-
2015	WECC		Public Utility District No. 1 of Chelan County	U.S.	52,104	52,104	-	-	51,587	51,587	-	-	(1,055)	(1,055)	1,572	1,572	-	-
2015	WECC		PUD No. 1 of Douglas County	U.S.	10,715	10,715	-	-	10,609	10,609	-	-	(217)	(217)	323	323	-	-
2015	WECC		Okanogan PUD	U.S.	8,884	8,884	-	-	8,796	8,796	-	-	(180)	(180)	268	268	-	-
2015	WECC		BPA - Douglas Pumping	U.S.	387	387	-	-	384	384	-	-	(8)	(8)	12	12	-	-
2015	WECC		BPA - Okanogan Pumping	U.S.	523	523	-	-	518	518	-	-	(11)	(11)	16	16	-	-
2015	WECC		BPA - Okanogan REA	U.S.	816	816	-	-	808	808	-	-	(17)	(17)	25	25	-	-
2015	WECC		BPA - USBR Load	U.S.	1,974	1,974	-	-	1,955	1,955	-	-	(40)	(40)	60	60	-	-
2015	WECC		BPA - Big Bend/Schrag Load	U.S.	612	612	-	-	606	606	-	-	(12)	(12)	18	18	-	-
2015	WECC		BPA - Kittitas Load	U.S.	105	105	-	-	104	104	-	-	(2)	(2)	3	3	-	-
2015	WECC		Douglas Palisades / PUD No. 1 of DC	U.S.	266	266	-	-	263	263	-	-	(5)	(5)	8	8	-	-
2015	WECC		PUD No. 2 of Grant County	U.S.	62,075	62,075	-	-	61,459	61,459	-	-	(1,257)	(1,257)	1,873	1,873	-	-
2015	WECC		City of Blaine	U.S.	1,055	1,055	-	-	1,045	1,045	-	-	(21)	(21)	32	32	-	-
2015	WECC		City of Sumas	U.S.	399	399	-	-	395	395	-	-	(8)	(8)	12	12	-	-
2015	WECC		Port of Seattle - Seattle-Tacoma International Airport	U.S.	1,956	1,956	-	-	1,937	1,937	-	-	(40)	(40)	59	59	-	-
2015	WECC		PUD No. 1 of Kittitas County	U.S.	220	220	-	-	218	218	-	-	(4)	(4)	7	7	-	-
2015	WECC		PUD No. 1 of Whatcom County	U.S.	89	89	-	-	88	88	-	-	(2)	(2)	3	3	-	-
2015	WECC		Puget Sound Energy, Inc.	U.S.	322,026	322,026	-	-	318,832	318,832	-	-	(6,520)	(6,520)	9,714	9,714	-	-
2015	WECC		Tanner Electric Cooperative	U.S.	1,302	1,302	-	-	1,289	1,289	-	-	(26)	(26)	39	39	-	-
2015	WECC		Salt River Project	U.S.	399,524	399,524	-	-	395,561	395,561	-	-	(8,090)	(8,090)	12,052	12,052	-	-
2015	WECC		Seattle City Light	U.S.	131,984	131,984	-	-	130,675	130,675	-	-	(2,672)	(2,672)	3,981	3,981	-	-
2015	WECC		Barrick Goldstrike Mines Inc.	U.S.	21,874	21,874	-	-	21,657	21,657	-	-	(443)	(443)	660	660	-	-
2015	WECC		City of Fallon	U.S.	1,230	1,230	-	-	1,218	1,218	-	-	(25)	(25)	37	37	-	-
2015	WECC		Harney Electric Cooperative, Inc.	U.S.	4,286	4,286	-	-	4,244	4,244	-	-	(87)	(87)	129	129	-	-
2015	WECC		Mt. Wheeler Power	U.S.	7,423	7,423	-	-	7,350	7,350	-	-	(150)	(150)	224	224	-	-
2015	WECC		Sierra Pacific Power Company dba NV Energy	U.S.	116,430	116,430	-	-	115,275	115,275	-	-	(2,357)	(2,357)	3,512	3,512	-	-
2015	WECC		Truckee Donner Public Utility District	U.S.	2,097	2,097	-	-	2,077	2,077	-	-	(42)	(42)	63	63	-	-
2015	WECC		Wells Rural Electric Cooperative	U.S.	13,757	13,757	-	-	13,620	13,620	-	-	(279)	(279)	415	415	-	-
2015	WECC		City of Tacoma DBA Tacoma Power	U.S.	65,690	65,690	-	-	65,038	65,038	-	-	(1,330)	(1,330)	1,982	1,982	-	-
2015	WECC		Tucson Electric Power Company	U.S.	203,237	203,237	-	-	201,221	201,221	-	-	(4,115)	(4,115)	6,131	6,131	-	-
2015	WECC		Merced Irrigation District	U.S.	6,473	6,473	-	-	6,409	6,409	-	-	(131)	(131)	195	195	-	-
2015	WECC		Turlock Irrigation District	U.S.	29,274	29,274	-	-	28,984	28,984	-	-	(593)	(593)	883	883	-	-
2015	WECC		Basin Electric Power Cooperative	U.S.	36,873	36,873	-	-	36,507	36,507	-	-	(747)	(747)	1,112	1,112	-	-
2015	WECC		Black Hills Power/Cheyenne Light Fuel & Power	U.S.	48,980	48,980	-	-	48,494	48,494	-	-	(992)	(992)	1,478	1,478	-	-
2015	WECC		Black Hills State University South Dakota	U.S.	265	265	-	-	262	262	-	-	(5)	(5)	8	8	-	-
2015	WECC		City of Page	U.S.	1,251	1,251	-	-	1,239	1,239	-	-	(25)	(25)	38	38	-	-
2015	WECC		Colorado Springs Utilities	U.S.	62,286	62,286	-	-	61,668	61,668	-	-	(1,261)	(1,261)	1,879	1,879	-	-
2015	WECC		Deseret Generation & Transmission Cooperative	U.S.	1,575	1,575	-	-	1,559	1,559	-	-	(32)	(32)	48	48	-	-
2015	WECC		City of Farmington	U.S.	14,644	14,644	-	-	14,498	14,498	-	-	(297)	(297)	442	442	-	-
2015	WECC		Municipal Energy Agency of Nebraska	U.S.	8,614	8,614	-	-	8,528	8,528	-	-	(174)	(174)	260	260	-	-
2015	WECC		Navajo Agricultural Products Industry (NAPI)	U.S.	38	38	-	-	38	38	-	-	(1)	(1)	1	1	-	-
2015	WECC		Nebraska Public Power Marketing	U.S.	35	35	-	-	34	34	-	-	(1)	(1)	1	1	-	-
2015	WECC		PacifiCorp	U.S.	1,528	1,528	-	-	1,512	1,512	-	-	(31)	(31)	46	46	-	-
2015	WECC		Public Service Company of Colorado (Xcel)	U.S.	1,018	1,018	-	-	1,007	1,007	-	-	(21)	(21)	31	31	-	-
2015	WECC		Town of Fredonia	U.S.	141	141	-	-	139	139	-	-	(3)	(3)	4	4	-	-
2015	WECC		Tri-State Generation & Transmission Assoc. Inc - Reliability	U.S.	102,673	102,673	-	-	101,655	101,655	-	-	(2,079)	(2,079)	3,097	3,097	-	-
2015	WECC		Western Area Power - Loveland, CO	U.S.	31,831	31,831	-	-	31,515	31,515	-	-	(645)	(645)	960	960	-	-
2015	WECC		Western Area Power Administration - CRSP	U.S.	29,168	29,168	-	-	28,878	28,878	-	-	(591)	(591)	880	880	-	-
2015	WECC		Wyoming Municipal Power Agency	U.S.	3,590	3,590	-	-	3,554	3,554	-	-	(73)	(73)	108	108	-	-
2015	WECC		Basin Electric Power Cooperative	U.S.	829	829	-	-	821	821	-	-	(17)	(17)	25	25	-	-
2015	WECC		Southern Montana Electric Generation & Transmission	U.S.	174	174	-	-	172	172	-	-	(4)	(4)	5	5	-	-
2015	WECC		Central Montana Electric Power Cooperative	U.S.	844	844	-	-	835	835	-	-	(17)	(17)	25	25	-	-
2015	WECC		Montana-Dakota Utilities Co.	U.S.	323	323	-	-	320	320	-	-	(7)	(7)	10	10	-	-
2015	WECC		NorthWestern Corp. dba NorthWestern Energy, LLC	U.S.	3,213	3,213	-	-	3,181	3,181	-	-	(65)	(65)	97	97	-	-
2015	WECC		Western Area Power Administration-Upper Great Plains Region	U.S.	5,651	5,651	-	-	5,595	5,595	-	-	(114)	(114)	170	170	-	-
2015	WECC		Aha Macav Power Service	U.S.	218	218	-	-	216	216	-	-	(4)	(4)	7	7	-	-

2015 NEL Calculations and Allocations to Load Serving Entities (or Designee) for the 2017 NERC and RE Assessments

Data Year	Regional Entity	ID	Entity	Country	Total NERC Assessments				NERC NEL Assessments				Penalty Sanctions		NERC Compliance Credits			
					Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total	Total	US Total	Total	US Total	Canada Total	Mexico Total
2015	WECC		Bureau of Reclamation (Wellfield) - c/o DSW EMMO	U.S.	139	139	-	-	137	137	-	-	(3)	(3)	4	4	-	-
2015	WECC		Central Arizona Water Conservation District	U.S.	33,071	33,071	-	-	32,743	32,743	-	-	(670)	(670)	998	998	-	-
2015	WECC		City of Mesa	U.S.	3,529	3,529	-	-	3,494	3,494	-	-	(71)	(71)	106	106	-	-
2015	WECC		City of Needles	U.S.	405	405	-	-	401	401	-	-	(8)	(8)	12	12	-	-
2015	WECC		Colorado River Agency-Bureau of Indian Affairs	U.S.	323	323	-	-	320	320	-	-	(7)	(7)	10	10	-	-
2015	WECC		Electrical District #2	U.S.	2,650	2,650	-	-	2,624	2,624	-	-	(54)	(54)	80	80	-	-
2015	WECC		Electrical District #2 - Coolidge Generating Station	U.S.	125	125	-	-	124	124	-	-	(3)	(3)	4	4	-	-
2015	WECC		Silver State Energy - c/o Colorado River Commission of Nevada	U.S.	8,812	8,812	-	-	8,725	8,725	-	-	(178)	(178)	266	266	-	-
2015	WECC		Arizona Electric Power Cooperative, Inc	U.S.	35,892	35,892	-	-	35,536	35,536	-	-	(727)	(727)	1,083	1,083	-	-
2015	WECC		U.S. Army Yuma Proving Ground	U.S.	271	271	-	-	268	268	-	-	(5)	(5)	8	8	-	-
2015	WECC		Wellton-Mohawk Irrigation & Drainage District	U.S.	99	99	-	-	98	98	-	-	(2)	(2)	3	3	-	-
2015	WECC		Western Area Power Administration-Desert Southwest Region	U.S.	21,774	21,774	-	-	21,558	21,558	-	-	(441)	(441)	657	657	-	-
<b>TOTAL WECC</b>					<b>11,574,231</b>	<b>9,995,477</b>	<b>1,401,802</b>	<b>176,951</b>	<b>11,745,116</b>	<b>9,896,339</b>	<b>1,677,058</b>	<b>171,719</b>	<b>(202,388)</b>	<b>(202,388)</b>	<b>31,503</b>	<b>301,526</b>	<b>(275,255)</b>	<b>5,232</b>
<b>TOTAL ERO</b>					<b>59,856,314</b>	<b>54,326,337</b>	<b>5,353,026</b>	<b>176,951</b>	<b>60,956,314</b>	<b>53,787,514</b>	<b>6,997,081</b>	<b>171,719</b>	<b>(1,100,000)</b>	<b>(1,100,000)</b>	<b>0</b>	<b>1,638,823</b>	<b>(1,644,055)</b>	<b>5,232</b>
<b>Summary by Regional Entity</b>																		
2015	FRCC				3,199,370	3,199,370	-	-	3,167,637	3,167,637	-	-	(64,781)	(64,781)	96,513	96,513	-	-
2015	MRO				3,874,215	3,217,546	656,669	-	3,822,887	3,185,634	637,253	-	(65,149)	(65,149)	116,478	97,061	19,416	-
2015	NPCC				7,229,254	3,934,700	3,294,554	-	8,578,445	3,895,675	4,682,770	-	(79,670)	(79,670)	(1,269,521)	118,695	(1,388,216)	-
2015	RF				12,166,655	12,166,655	-	-	12,045,983	12,045,983	-	-	(246,351)	(246,351)	367,023	367,023	-	-
2015	SERC				13,985,766	13,985,766	-	-	13,847,051	13,847,051	-	-	(283,184)	(283,184)	421,898	421,898	-	-
2015	SPP				3,077,330	3,077,330	-	-	3,046,808	3,046,808	-	-	(62,310)	(62,310)	92,832	92,832	-	-
2015	TRE				4,749,493	4,749,493	-	-	4,702,386	4,702,386	-	-	(96,168)	(96,168)	143,275	143,275	-	-
2015	WECC				11,574,231	9,995,477	1,401,802	176,951	11,745,116	9,896,339	1,677,058	171,719	(202,388)	(202,388)	31,503	301,526	(275,255)	5,232
<b>Total</b>					<b>59,856,314</b>	<b>54,326,337</b>	<b>5,353,026</b>	<b>176,951</b>	<b>60,956,314</b>	<b>53,787,514</b>	<b>6,997,081</b>	<b>171,719</b>	<b>(1,100,000)</b>	<b>(1,100,000)</b>	<b>0</b>	<b>1,638,823</b>	<b>(1,644,055)</b>	<b>5,232</b>





2015 NEL Calculations and Allocations to Load Serving Entities (or Designee) for the 2017 NERC and RE Assessments

Data Year	Regional Entity	ID	Entity	Country	Total Regional Entity Assessments (Including WIRAB Assessments)				Regional Entity NEL Assessments				Penalty Sanctions - US Only		NPCC CORC Program			WECC Compliance Assessments (ex.AESO)				WIRAB Assessments			
					Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total	Total	US Total	Total	US Total	Canada Total	Total	US Total	Canada Total	Mexico Total	Total	US Total	Canada Total	Mexico Total
2015	SERC	1298	East Mississippi Electric Power Association	U.S.	6,713	6,713	-	-	6,796	6,796	-	-	(83)	(83)											
2015	SERC	1669	Electricities of North Carolina Inc	U.S.	180,838	180,838	-	-	183,083	183,083	-	-	(2,245)	(2,245)											
2015	SERC	1300	EnergyUnited EMC	U.S.	37,527	37,527	-	-	37,993	37,993	-	-	(466)	(466)											
2015	SERC	1301	Entergy	U.S.	1,799,787	1,799,787	-	-	1,822,132	1,822,132	-	-	(22,345)	(22,345)											
2015	SERC	1302	Fayetteville (NC) Public Works Commission	U.S.	33,080	33,080	-	-	33,491	33,491	-	-	(411)	(411)											
2015	SERC	1303	Florida Public Utilities (FL Panhandle Load)	U.S.	4,817	4,817	-	-	4,877	4,877	-	-	(60)	(60)											
2015	SERC	1304	French Broad EMC	U.S.	7,914	7,914	-	-	8,012	8,012	-	-	(98)	(98)											
2015	SERC	1305	Georgia Power Company	U.S.	1,327,048	1,327,048	-	-	1,343,524	1,343,524	-	-	(16,476)	(16,476)											
2015	SERC	1306	Georgia System Optns Corporation	U.S.	602,084	602,084	-	-	609,559	609,559	-	-	(7,475)	(7,475)											
2015	SERC	1479	Greenwood (MS) Utilities Commission	U.S.	4,450	4,450	-	-	4,506	4,506	-	-	(55)	(55)											
2015	SERC	1307	Greenwood (SC) Commissioners of Public Works	U.S.	5,055	5,055	-	-	5,118	5,118	-	-	(63)	(63)											
2015	SERC	1308	Gulf Power Company	U.S.	178,457	178,457	-	-	180,672	180,672	-	-	(2,216)	(2,216)											
2015	SERC	1586	Haywood EMC	U.S.	4,726	4,726	-	-	4,784	4,784	-	-	(59)	(59)											
2015	SERC	1309	Illinois Municipal Electric Agency	U.S.	29,191	29,191	-	-	29,554	29,554	-	-	(362)	(362)											
2015	SERC	1480	Itta Bena, MS	U.S.	329	329	-	-	333	333	-	-	(4)	(4)											
2015	SERC	1587	Jefferson Davis Electric Cooperative, Inc.	U.S.	4,419	4,419	-	-	4,473	4,473	-	-	(55)	(55)											
2015	SERC	1617	Kentucky Municipal Power	U.S.	10,384	10,384	-	-	10,513	10,513	-	-	(129)	(129)											
2015	SERC	1481	Kosciusko, MS	U.S.	1,162	1,162	-	-	1,176	1,176	-	-	(14)	(14)											
2015	SERC	1482	Leland, MS	U.S.	518	518	-	-	525	525	-	-	(6)	(6)											
2015	SERC	1313	McCormick Commission of Public Works	U.S.	320	320	-	-	324	324	-	-	(4)	(4)											
2015	SERC	1314	Mississippi Power Company	U.S.	161,979	161,979	-	-	163,990	163,990	-	-	(2,011)	(2,011)											
2015	SERC	1630	Mt. Carmel Public Utility	U.S.	1,651	1,651	-	-	1,672	1,672	-	-	(21)	(21)											
2015	SERC	1315	Municipal Electric Authority of Georgia	U.S.	167,417	167,417	-	-	169,415	169,415	-	-	(2,079)	(2,079)											
2015	SERC	1316	N.C. Electric Membership Corp.	U.S.	195,628	195,628	-	-	198,057	198,057	-	-	(2,429)	(2,429)											
2015	SERC	1588	Northeast Louisiana Power Cooperative, Inc.	U.S.	4,244	4,244	-	-	4,297	4,297	-	-	(53)	(53)											
2015	SERC	1574	Northern Virginia Electric Cooperative	U.S.	66,942	66,942	-	-	67,773	67,773	-	-	(831)	(831)											
2015	SERC	1319	Old Dominion Electric Cooperative	U.S.	96,590	96,590	-	-	97,790	97,790	-	-	(1,199)	(1,199)											
2015	SERC	1618	Osceola (Arkansas) Municipal Light and Power	U.S.	2,475	2,475	-	-	2,506	2,506	-	-	(31)	(31)											
2015	SERC	1320	Owensboro (KY) Municipal Utilities	U.S.	12,818	12,818	-	-	12,977	12,977	-	-	(159)	(159)											
2015	SERC	1321	Piedmont EMC in Duke and Progress Areas	U.S.	8,002	8,002	-	-	8,101	8,101	-	-	(99)	(99)											
2015	SERC	1323	Piedmont Municipal Power Agency (PMPA)	U.S.	35,847	35,847	-	-	36,292	36,292	-	-	(445)	(445)											
2015	SERC	1589	Pointe Coupee Electric Memb. Corp.	U.S.	3,825	3,825	-	-	3,872	3,872	-	-	(47)	(47)											
2015	SERC	1266	PowerSouth Energy	U.S.	134,063	134,063	-	-	135,728	135,728	-	-	(1,664)	(1,664)											
2015	SERC	1330	Prairie Power, Inc.	U.S.	23,646	23,646	-	-	23,940	23,940	-	-	(294)	(294)											
2015	SERC	1324	Duke Energy Progress	U.S.	717,320	717,320	-	-	726,226	726,226	-	-	(8,906)	(8,906)											
2015	SERC	1325	Rutherford EMC	U.S.	20,704	20,704	-	-	20,961	20,961	-	-	(257)	(257)											
2015	SERC	1631	Sam Rayburn G&T Electric Cooperative Inc.	U.S.	28,312	28,312	-	-	28,663	28,663	-	-	(352)	(352)											
2015	SERC	1326	South Carolina Electric & Gas Company	U.S.	357,415	357,415	-	-	361,853	361,853	-	-	(4,438)	(4,438)											
2015	SERC	1327	South Carolina Public Service Authority	U.S.	175,760	175,760	-	-	177,942	177,942	-	-	(2,182)	(2,182)											
2015	SERC	1590	South Louisiana Electric Cooperative Association	U.S.	9,769	9,769	-	-	9,891	9,891	-	-	(121)	(121)											
2015	SERC	1328	South Mississippi Electric Power Association	U.S.	154,475	154,475	-	-	156,393	156,393	-	-	(1,918)	(1,918)											
2015	SERC	1329	Southern Illinois Power Cooperative	U.S.	25,444	25,444	-	-	25,760	25,760	-	-	(316)	(316)											
2015	SERC	1591	Southwest Louisiana Electric Membership Corporation	U.S.	39,891	39,891	-	-	40,386	40,386	-	-	(495)	(495)											
2015	SERC	1619	Southwestern Electric Cooperative, Inc.	U.S.	6,968	6,968	-	-	7,055	7,055	-	-	(87)	(87)											
2015	SERC	1331	Tennessee Valley Authority	U.S.	2,404,374	2,404,374	-	-	2,434,226	2,434,226	-	-	(29,852)	(29,852)											
2015	SERC	1632	Tex-La Electric Cooperative of Texas, Inc	U.S.	2,994	2,994	-	-	3,031	3,031	-	-	(37)	(37)											
2015	SERC	1332	Tomlinbee Electric Cooperative Inc.	U.S.	1,999	1,999	-	-	2,024	2,024	-	-	(25)	(25)											
2015	SERC	1594	Town of Sharpsburg, N.C.	U.S.	311	311	-	-	315	315	-	-	(4)	(4)											
2015	SERC	1595	Town of Stantonsburg, N.C. JRO	U.S.	874	874	-	-	885	885	-	-	(11)	(11)											
2015	SERC	1333	Town of Waynesville NC	U.S.	1,342	1,342	-	-	1,359	1,359	-	-	(17)	(17)											
2015	SERC	1334	Town of Winnsboro SC	U.S.	969	969	-	-	981	981	-	-	(12)	(12)											
2015	SERC	1335	Town of Winterville NC	U.S.	823	823	-	-	833	833	-	-	(10)	(10)											
2015	SERC	1597	Washington-St Tammany Electric Cooperative, Inc.	U.S.	16,568	16,568	-	-	16,774	16,774	-	-	(206)	(206)											
<b>TOTAL SERC</b>					<b>15,706,023</b>	<b>15,706,023</b>	<b>-</b>	<b>-</b>	<b>15,901,023</b>	<b>15,901,023</b>	<b>-</b>	<b>-</b>	<b>(195,000)</b>	<b>(195,000)</b>											
2015	SPP	1246	American Electric Power	U.S.	1,538,272	1,538,272	-	-	1,600,826	1,600,826	-	-	(62,554)	(62,554)											
2015	SPP	1707	AEP-VEPCO	U.S.	27,778	27,778	-	-	28,907	28,907	-	-	(1,130)	(1,130)											
2015	SPP	1435	Arkansas Electric Cooperative Corporation	U.S.	547,815	547,815	-	-	570,092	570,092	-	-	(22,277)	(22,277)											
2015	SPP	1247	Board of Public Utilities (Kansas City KS)	U.S.	97,037	97,037	-	-	100,983	100,983	-	-	(3,946)	(3,946)											
2015	SPP	1620	Board of Public Utilities, City of McPherson, Kansas	U.S.	36,137	36,137	-	-	37,607	37,607	-	-	(1,470)	(1,470)											
2015	SPP	1647	Carthage City Water & Light	U.S.	12,104	12,104	-	-	12,596	12,596	-	-	(492)	(492)											
2015	SPP	1469	Central Valley Electric Cooperative	U.S.	34,337	34,337	-	-	35,734	35,734	-	-	(1,396)	(1,396)											
2015	SPP	1556	City of Bentonville	U.S.	26,894	26,894	-	-	27,988	27,988	-	-	(1,094)	(1,094)											
2015	SPP	1557	City of Clarkdale, Mississippi	U.S.	6,700																				







**DOCKET NO. RR16-\_\_-000**

**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**2017 BUSINESS PLAN AND BUDGET FILING**

**ATTACHMENT 3**

**FLORIDA RELIABILITY COORDINATING COUNCIL**

**PROPOSED 2017 BUSINESS PLAN AND BUDGET**



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**Approved**

**2017 Business Plan and Budget**

**Florida Reliability Coordinating Council, Inc.**

**Approved: 6-30-16**

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## Introduction

<b>TOTAL RESOURCES</b> (in whole dollars)				
	<b>2017 Budget</b>	<b>U.S.</b>	<b>Canada</b>	<b>Mexico</b>
Statutory FTEs	29.99			
Non-statutory FTEs	20.43			
<b>Total FTEs</b>	50.42			
Statutory Expenses	\$ 7,132,585			
Non-Statutory Expenses	\$ 10,103,890			
<b>Total Expenses</b>	\$ 17,236,475			
Statutory Inc(Dec) in Fixed Assets	\$ 45,269			
Non-Statutory Inc(Dec) in Fixed Assets	\$ 94,695			
<b>Total Inc(Dec) in Fixed Assets</b>	\$ 139,964			
Statutory Working Capital Requirement*	<b>(826,959)</b>			
Non-Statutory Working Capital Requirement**	<b>306,736</b>			
<b>Total Working Capital Requirement</b>	<b>(520,222)</b>			
Total Statutory Funding Requirement	\$ 6,350,896			
Total Non-Statutory Funding Requirement	\$ 10,505,321			
<b>Total Funding Requirement</b>	\$ 16,856,217			
<b>Statutory Funding Assessments</b>	\$ 6,163,896	\$ 6,163,896		
<b>Non-Statutory Fees</b>	\$ 10,301,621	\$ 10,301,621		
NEL	234,606	234,606		
NEL%				

\*Refer to Table B-1 on page 40 in Section B.

\*\*Refer to the Reserve Analysis on page 58 in Section C.

## Organizational Overview

The Florida Reliability Coordinating Council (FRCC) is a Florida not-for-profit corporation that was formed in 1996 and is one of the eight regions of the North American Electric Reliability Corporation (NERC). The FRCC's mission is to promote and assure the reliability of the bulk power system in Peninsular Florida. The FRCC's Web site is [www.frcc.com](http://www.frcc.com). The FRCC Region is comprised of all of Florida east of the Apalachicola River. Florida's unique geography and its highly integrated transmission system coupled with its single interface boundary to the rest of the Eastern Interconnection required the development of a reliability focus in the FRCC Region. Membership in the FRCC's Regional Entity Division is open to any entity, without cost, that has a material interest in the reliability of the BES in the FRCC Region. Currently there are 51 Registered Entities within the FRCC Region. The FRCC is governed by a balanced stakeholder Board of Directors, and accomplishes its activities through qualified professional staff and standing committees which also have balanced stakeholder governance.

The FRCC provides the statutory functions and services for the FRCC Region through its Regional Entity Division. Non-statutory services for the FRCC Region are provided through its Member Services Division. This divisional structure is an efficient and effective means of clearly separating statutory and non-statutory activities and related funding for each. The FRCC Bylaws, creating this divisional structure, were first approved by the Federal Energy Regulatory Commission (“FERC”) on March 21, 2008.

The FRCC Regional Entity Division works to enhance the reliability of the BES in the FRCC Region pursuant to the approved Regional Delegation Agreement (RDA) with NERC, as the Electric Reliability Organization (“ERO”), under the authority of the FERC. The functions performed by the FRCC Regional Entity Division include regional reliability standards development, compliance monitoring and enforcement of reliability standards, reliability assessment and performance analysis, event analysis and reliability improvement, training and education, situation awareness and infrastructure security. The Regional Entity division of the FRCC has one standing committee, the FRCC Regional Entity Committee and Compliance Forum (RECCF). This committee provides input to the FRCC in support of the delegated activities and functions. The RECCF actively participates in the development of the Regional Entity Business Plan and Budget by reviewing and providing comments on assumptions, goals and verbiage to the FRCC staff and to the Board of Directors.

The Member Services division of the FRCC provides, coordinates and administers a variety of services relating to the reliable planning and operation of the BES within the FRCC Region. These services are carried out by the FRCC Planning Committee (PC) and the FRCC Operating Committee (OC) and their various subcommittees, task forces and working groups, as well as FRCC Staff.

The FRCC PC and OC actively participate in the development and approval of their committee’s budget. The budget reflects the activity of each committee’s responsibilities, such as reliability coordination, resource adequacy, stability studies, transmission studies, operations tools, telecommunication tools and infrastructure.

Each year, the total FRCC budget is presented to the FRCC Board of Directors early in the second quarter for informational purposes prior to final approval in June. This process gives all FRCC members advanced indication of the funding level, both statutory and non-statutory, which will be required for the coming fiscal year (January 1 – December 31). This allows for timely inclusion of each member’s funding responsibility in their individual budgeting process. The final budget is presented for approval to the FRCC Board of Directors in June of each year and is then submitted to NERC for approval by the NERC Board of Trustees and then by FERC.

## **Membership and Governance**

The FRCC's members (in both divisions) include investor-owned utilities, cooperative utilities, municipal utilities, power marketers, independent power producers and others. Membership is currently 32 FRCC members in the Regional Entity Division and 24 FRCC members in the Member Services Division including affiliate and adjunct members.

The FRCC has six (6) membership sectors which include the following:

- Non-Investor Owned Utility Wholesale
- Load Serving Entity

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- Generating Load Serving Entity
  - Investor Owned Utility
  - Suppliers
  - General

The activities of FRCC are governed by its Board of Directors. The Board is comprised of senior level executives from members of FRCC.

As part of its responsibilities, NERC, as the ERO, delegates its authority to Regional Entities to perform certain functions through delegation agreements. On November 4, 2015, FERC approved revised delegation agreements between NERC and the eight (8) Regional Entities that became effective January 1, 2016 and will expire at the end of 2020. These delegation agreements describe the responsibility and authority delegated to the Regional Entities. NERC and the Regional Entities worked collaboratively to revise the delegation agreements which were presented to the NERC Board of Trustees for approval mid-2015 and were approved by FERC and became effective January 1, 2016. The funding for Regional Entities is approved separately with each Regional Entity submitting its own business plan and budget for consideration by NERC and FERC.

## Statutory Functional Scope

The FRCC carries out its delegated functions as outlined and detailed in the delegation agreement. NERC and the Regional Entities will continue to work under the existing regulatory framework governing the establishment and enforcement of reliability standards for the Bulk Power System (BPS). The delegated functions as defined by the NERC Rules of Procedures include:

- Reliability Standards Development (“RSD”) - Section 300
- Compliance Monitoring and Enforcement (“CMEP”) - Section 400
- Organization Registration and Certification - Section 500 (This program budget has been combined with the Compliance Monitoring and Enforcement function budget.)
- Reliability Assessment and Performance Analysis (“RA”) - Section 800 (including necessary data gathering activities and Events Analysis)
- Training, Education and Operator Certification (“TE”) - Section 900
- Situation Awareness and Infrastructure Security (“SA”) - Section 1000

## 2017 Key Assumptions

The NERC and Regional Entity business plans and budgets reflect a set of shared assumptions (see Exhibit A of the 2017 NERC Business Plan and Budget) developed jointly by NERC and the Regional Entities as part of the annual business plan and budget process. The significant assumptions underlying FRCC’s 2017 business plan include:

- NERC continues to enhance its oversight of the Regional Entities’ performance of their delegated functions. NERC in collaboration with the Regional Entities will continue to develop goals, measures, and reports to assess and evaluate the Regional Entities’

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performance of their Regional Delegation Agreements (RDAs), NERC's Rules of Procedure, the Compliance Monitoring and Enforcement Program, FERC requirements, and directives that are in effect pursuant to Section 8(c) of the RDAs. NERC will continue to provide feedback and direction to the Regional Entities on performance improvements.

- NERC and the Regional Entities will continue to work to refine and revise procedures and processes to eliminate duplication, increase operational efficiencies, to enhance ERO-wide consistency and to achieve measurable reliability outcomes, consistent with their respective roles and responsibilities. NERC expects that the Regional Entities will continue to have the primary responsibility for day-to-day operations and interactions with registered entities.
- Cost pressures may affect some stakeholder resources available to participate in NERC and Regional Entity activities. However, this business plan and budget is based on the assumption of continued stakeholder participation in support of key program areas such as event analysis, reliability assessments and standards development. NERC and the Regional Entities will evaluate stakeholder participation on an ongoing basis to determine the availability and adequacy of industry resources to support these undertakings.
- The number of continent-wide standards development projects will remain stable, except as required to address any new FERC directives to create or modify Reliability Standards, or industry submittals of standard authorization requests. Continent-wide standards projects will consist primarily of conducting enhanced periodic reviews to improve the content and quality of standards and responding to identified risks to reliability. Regional standards will be incorporated into continent-wide standards as variances, as appropriate, through scheduled enhanced periodic reviews. Regional and NERC standards development processes may be modified to accomplish this task. Each Regional Entity will work with NERC and possibly other Regional Entities on projects where there is a regional standard/variance.
- The effective date for compliance with the CIP Version 5 standards will be July 1, 2016 for High and Medium impact assets and July 1, 2017 for Low impact assets. The transition between V3 to V5 is a mission critical activity in 2016 and 2017. The Regional Entities must continue to support the ongoing CIP V5 transition plans and should anticipate an expansion in the number of Registered Entities that require guidance through 2017. For most CIP activities, the resource demands are expected to increase throughout the planning period.
- The implementation of the risk-based CMEP will require the allocation of dedicated resources from both NERC and the Regional Entities for both compliance and enforcement. Regional Entities should anticipate at least the same level of participation in implementing the risk-based CMEP as they did in 2015 and possibly more as they operationally implement its components and drive consistency in 2016 and beyond. NERC and the Regional Entities are expected to utilize consistent compliance monitoring practices and focus on higher reliability risks to increase efficiency and mitigate overall compliance costs for registered entities.
- NERC will manage the BES exception process execution, technical validation of the definition and exception requests, self-determined notification submittals, periodic reviews of network changes affecting BES determinations, as well as requests for



registration and certification reviews. The Regional Entities will continue to provide support per guidelines established in the NERC Rules of Procedure

- NERC and Regional Entities' resources will continue to support the development of long-term sustainable interconnection-based model cases that exhibit the accuracy and fidelity reflecting actual BES reliability performance and dynamic conditions. These models will integrate needed elements that address reliability behavior of changing resource mix and technology of both generation and loads.
- NERC and the Regional Entities will continue to focus resources on high quality reliability assessments and performance analysis that include the development and implementation of expanded and enhanced enterprise based data collection and analysis systems, and capabilities for performance analyses. NERC and the Regional Entities will advance analytical capabilities for identifying and determining reliability risks that include conducting various reliability assessments and integrate essential reliability services (ERS) analysis and measures into the Long-Term Reliability Assessment.
- The Regional Entities, in collaboration with NERC, are expected to help assess and determine training needs. This includes flexibility in approach between Regional Entities, and anticipating areas of support for their staffs and stakeholders for standards, compliance monitoring and enforcement, situation awareness and event analysis, and information technology. Addressing these needs will likely require additional resource allocation and budgeting considerations.
- NERC will continue to budget and incur costs to operate and maintain the software application known as Situational Awareness for FERC, NERC, and Regional Entities, Version 2 (SAFNRv2) for situation awareness, and The Event Analysis Management System (TEAMS) for Events Analysis. Additional resource investments are expected to be required to maintain the capabilities of SAFNRv2 throughout the planning period. Any such investments will be NERC funded and not result in an allocation of cost to the Regional Entities.
- Development and implementation of expanded and enhanced enterprise-based data collection and analysis systems, and capabilities for performance analyses. This includes TADS, GADS, NERC RAS data, mis-operations data, and GADS – Wind
- NERC and the Regional Entities will collaboratively work to refine existing strategies and governance and procurement practices applicable to the development, operation, and maintenance of enterprise architecture, including software and data systems supporting both NERC and Regional Entity operations. The FRCC will also continue to fund applications and systems to satisfy our regional business needs.
- A common ERO Enterprise risk management framework commenced in 2014 to focus on identifying, assessing, prioritizing, and mitigating risks associated with the performance of both NERC and the Regional Entities. NERC and the Regional Entities will continue to devote resources to implement this framework. Activities include validating and prioritizing risks for EROEMG review and approval. The results will serve as an input into the NERC's future audit plans, which are reviewed and approved by the NERC Board of Trustees Enterprise Risk Management Committee. Regional Entities may add risk management and internal control resources as needed.

- Improved disaster recovery mechanisms and improved IT security procedures will increase capital and operating costs at the Regional Entities.

## 2017 Goals and Key Deliverables (Regional Entity Division)

- Support NERC's goals that will continue to improve the quality and content of Reliability Standards, including support for enhanced periodic reviews focused on conducting measured, in-depth reviews to further improve content and quality of the Reliability Standards. Support ERO activities necessary to incorporate Regional Standards into continent-wide standards as variances as standards are reviewed through the enhanced periodic review process.
- Continue to encourage stakeholder awareness and participation in the NERC standards development process through educational outreach efforts and participation in Standard Drafting Teams, the NERC Standards Committee and related subcommittees. Following FERC approval, assist the transition of standards to compliance monitoring and enforcement by providing knowledge that supports industry and auditor training, or providing information regarding the intent of the standard.
- Support and continue the implementation of Risk-based Compliance Monitoring and Enforcement, including implementing plans to complete Inherent Risk Assessments (IRAs), implementing refinements to Internal Controls Evaluations (ICEs) and assuring that Compliance Oversight Plans (COPs) are addressing appropriate risks for all Registered Entities in the FRCC Region.
- Continue the implementation of the BES Exception Process and related activities. Support the process execution, technical validation of the definition and exception requests, self-determined notification submittals and periodic reviews of network changes affecting BES determinations, as well as requests for registration and certification review.
- In collaboration with NERC and the other Regional Entities, support the ongoing CIP V5 transition plans, related training and outreach.
- Continue collaboration with NERC and the other Regional Entities to improve consistency, quality, and timeliness of compliance monitoring and enforcement practices that focus on higher risks to the reliability of the BES. Continue to be a strong enforcement authority that is independent, without conflict of interest, objective and fair, using enforcement discretion when warranted and imposing penalties and sanctions that are commensurate with risk.
- Support an ERO culture of reliability excellence. Work with NERC and the other Regional Entities to facilitate a learning environment throughout the industry. Work to improve event causal analysis, communication of lessons learned, tracking of recommendations, and implementation of best practices. Work with NERC and the other Regional Entities to support the sharing of BES event reports through secure means.
- Support NERC to strengthen data collection and validation processes by designing, creating, testing and implementing data checking systems to accommodate the increasing amount of data NERC collects for its long-term, seasonal, operational, scenarios and special reliability assessments along with the databases supporting reliability performance assessments.

- Support the ERO efforts to expand the assessment and performance analysis capabilities in Reliability Assessments to achieve measureable improvements in the BES reliability. Risks will be identified and prioritized based on reliability impacts, cost/practicality assessments, projected resources, and emerging issues.
- Support ERO activities to identify key reliability risks and appropriate risk control projects designed to enhance reliability or mitigate risks. Work with NERC and the other Regional Entities and the industry to effectively address security vulnerabilities and threats. During crisis situations, support ERO sharing of information among industry, Regions, and government.

## 2017 Overview of Cost Impacts

The FRCC's proposed 2017 Regional Entity budgeted expenses and net fixed assets (see page 12) is \$7,177,854 which is a \$83,673 or 1% decrease over the 2016 budget. The major drivers of the decrease are the net effect of:

- Salaries are based on the assumption of a 3% merit increase pool plus promotions and adjustments and a 13% vacancy factor based on historical attrition.
- The addition of one CIP auditor.
- Changing the charges for Eastern Interconnection Model development from Regional Entity to Member Services consistent with NERC's expectations for work related to MOD-032.

## 2017 Key Deliverables by Program

In 2017, FRCC will achieve the following key deliverables:

- **Reliability Standards Development** — Continue support of the ERO Enterprise in its efforts to further improve the quality and content of Reliability Standards, including using feedback loops as part of enhanced periodic reviews that are focused on conducting measured, in-depth reviews using the enhanced periodic review template. Support ERO activities necessary to incorporate Regional Standards into continent-wide standards as variances as standards are reviewed through the enhanced periodic review process. Support outreach during standard development and assist in the transition of standards to compliance monitoring and enforcement.
- **Compliance Monitoring and Enforcement** — Continue implementation of the risk-based compliance monitoring and enforcement program, including the completion of Inherent Risk Assessment, Internal Control Evaluations and the development of Compliance Oversight Plans using consistent practices that are focused on higher reliability risks. Ensure timely and thorough mitigation of all violations of mandatory reliability standards with the most focus on those violations that create serious risk to the Bulk Electric System. Promote a strong culture of compliance excellence, reliability improvement, and risk-based methods among all Registered Entities in the FRCC Region.
- **Event Analysis** — Continue to support improved reliability through reporting and categorizing of system events and security incidents. Consistently analyze events for sequence, cause, system performance, remediation, and improvement opportunities. Continue to identify potential reliability risks and gaps in standards, compliance

effectiveness, registration and risk controls effectiveness. Work to ensure that the industry is well informed of large system events, emerging trends, risk analysis, lessons learned. Provide timely written lessons learned and recommendations from events (or occurrences) and provide to industry through various sharing methods (i.e. website posting and briefings at committee meetings).

- **Critical Infrastructure Protection and Cyber Security** — Facilitate, educate and support Registered Entities in complying with CIP reliability standards and responding to cyber security alerts. Continue to support the ongoing transition from CIP V3 to V5 including provision of necessary training to FRCC staff, and providing education and outreach to stakeholders to ensure their understanding of the technical aspects of the requirements.
- **Reliability Assessments** — Provide annual, seasonal, probabilistic, and Short-Term special reliability assessments of the reliability of the FRCC BES in accordance with NERC definitions and requirements. Support NERC and the Regional Entities in advancing analytical capabilities for identifying and determining reliability risks and conducting various reliability assessments. Work with NERC and the other Regional Entities to develop and track performance metrics that demonstrate the accuracy of the powerflow and dynamics models to replicate actual system conditions and reliability behavior. Work with NERC and the other Regional Entities to support the BES Exception Process execution, technical validation of the definition and exception requests, self-determined notification submittals, and periodic reviews of network changes affecting BES determinations.
- **Training, Education and Operator Certification** – Continue to conduct System Operator Training seminars to improve collaboration and communication between System Operators, conduct restoration drills and maintain reliability excellence. Continue to hold Compliance and Standards Workshops and Webinars to provide support for stakeholders in understanding and implementing reliability standards requirements.
- **Situation Awareness** — Continue to support NERC in maintaining and enhancing the current and future situation awareness capabilities that include near real-time information and communications protocols that meet the needs of FERC, NERC, and the Regional Entities (SAFNRv2). Issue and track security recommendations to protect the Bulk Power System. Share information learned in Situation Awareness with the Events Analysis program to develop relevant lessons learned and identify gaps in standards, compliance effectiveness, registration and risk control effectiveness.
- **Effective Financial Controls** — Continue to provide rigorous cost controls and efficient management of resources to remain an efficient provider of ERO delegated functions.

## Long Term Business Planning

NERC and the Regional Entities continue to work together to improve the overall ERO business planning and budgeting process, including long-term resource and financial planning. The 2017 Business Plan and Budget process builds upon the improvements made over the past several years including face-to-face meetings, conference calls and exchanges of documentation among senior management and staff of NERC and Regional Entities regarding budget assumptions, resource requirements, and opportunities to improve operational efficiency and effectiveness.

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NERC and the Regional Entities have developed a common operating model that describes the characteristics of a highly effective and efficient ERO Enterprise. The operating model includes action items to address coordinated strategic and business planning as well as performance monitoring processes across the enterprise. These processes remain transparent, with results reported out on a quarterly basis to NERC's Board of Trustees and Corporate Governance and Human Resources Committee.

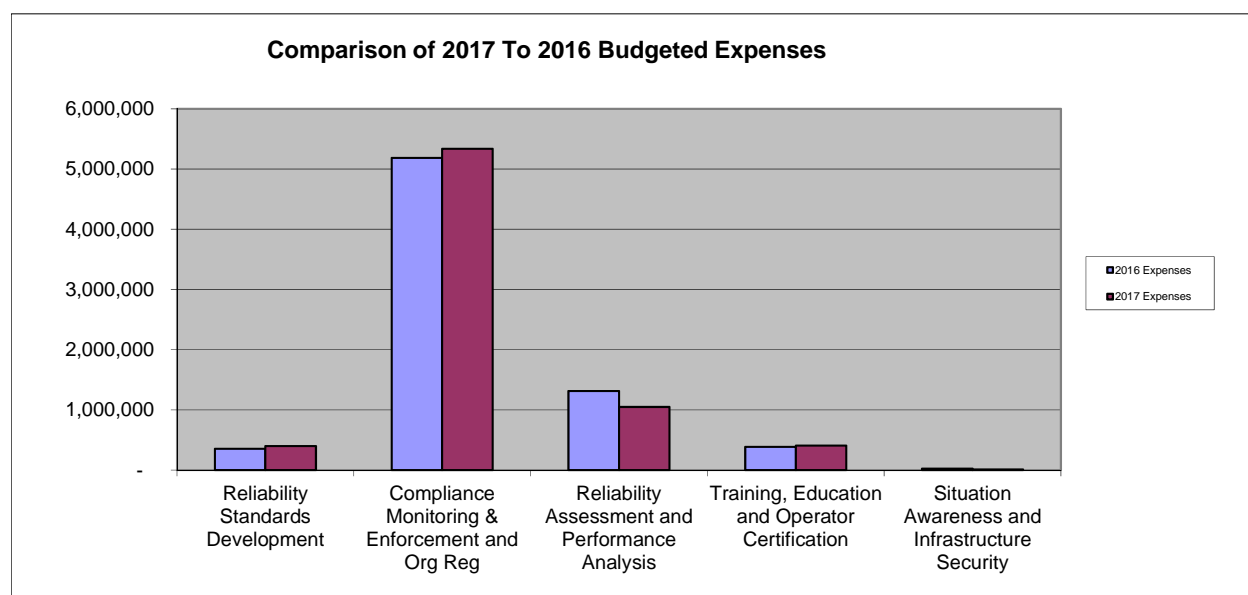
At the November 2015 NERC Board meeting, an updated version of the ERO Enterprise Strategic Plan with goals, objectives, and deliverables for the 2016–2019 planning period was approved. The strategic plan lays out five goals that the ERO Enterprise will focus on over the next three years. They include (1) standards; (2) compliance, enforcement, registration, and certification; (3) risks to reliability; (4) emerging risks; and (5) coordination and collaboration. The plan also identifies a number of associated objectives and deliverables to achieve the goals of the ERO Enterprise. There are also four overarching performance metrics to assess the overall effectiveness of the ERO Enterprise in addressing risk to the Bulk Electric System (BES) and improving BES reliability in 2016. These metrics concentrate on (1) measuring progress in achieving reliability results, (2) assuring standards and compliance effectiveness, (3) improving risk mitigation, and (4) program execution. With the ERO Strategic Plan, the developed performance metrics, and the set of common assumptions, the 2017 Business Plan and Budgets of NERC and the Regional Entities will support and complement each other. The Shared Business Plan and Budget Assumptions (Exhibit A of the 2017 NERC Business Plan and Budget) incorporate assumptions affecting resource demands through the 2019 planning horizon.

NERC and the Regional Entities continue to work together to develop, strengthen and improve an integrated long term ERO business plan and budget that leverages and builds on the combined strength and resources of NERC and the Regional Entities to improve the overall effectiveness and efficiency of ERO operations and improve the reliability of the BES of North America.

## Detailed Business Plans and Budgets by Program

Details of the planning, operation, review, and adjustment for each program area are included in Section A. The corresponding budget details are shown in Section B. Below is an overall summary of the changes by program area.

Program	Budget 2016	Projection 2016	Budget 2017	Variance	
				2017 Budget v 2016 Budget	Variance %
Reliability Standards Development	\$ 353,799	353,799	\$ 398,334	\$ 44,536	12.6%
Compliance Monitoring & Enforcement and Org Reg	5,186,867	5,186,867	5,335,423	148,556	2.9%
Reliability Assessment and Performance Analysis	1,312,392	1,312,392	1,024,290	(288,102)	-22.0%
Training, Education and Operator Certification	386,376	396,886	410,130	23,754	6.1%
Situation Awareness and Infrastructure Security	22,093	22,093	9,678	(12,416)	-56.2%
<b>Total Budget</b>	<b>\$ 7,261,527</b>	<b>\$ 7,272,037</b>	<b>\$ 7,177,854</b>	<b>\$ (83,673)</b>	<b>-1.2%</b>



This graphical representation does not include an allocation of working capital requirements among the Program Areas.

Total FTE's by Program Area	Budget 2016	Projection 2016	Direct	Shared	Total FTEs 2017	Change from 2016 Budget
			FTEs 2017 Budget	FTEs <sup>1</sup> 2017 Budget		
<b>STATUTORY</b>						
<b>Operational Programs</b>						
Reliability Standards Development	1.41	1.41	1.48		1.48	0.07
Compliance Monitoring & Enforcement and Org Reg	18.83	17.47	19.58		19.58	0.75
Reliability Assessment and Performance Analysis	4.71	4.25	1.00	2.60	3.60	-1.11
Training, Education and Operator Certification	1.09	1.05		1.11	1.11	0.02
Situation Awareness and Infrastructure Security	0.08	0.08		0.03	0.03	-0.05
<b>Total FTEs Operational Programs</b>	<b>26.12</b>	<b>24.26</b>	<b>22.06</b>	<b>3.74</b>	<b>25.80</b>	<b>-0.32</b>
<b>Administrative Programs</b>						
General & Administrative	4.47	4.35		4.19	4.19	-0.28
<b>Total FTEs Administrative Programs</b>	<b>4.47</b>	<b>4.35</b>	<b>0.00</b>	<b>4.19</b>	<b>4.19</b>	<b>-0.28</b>
<b>Total FTEs</b>	<b>30.59</b>	<b>28.61</b>	<b>22.06</b>	<b>7.93</b>	<b>29.99</b>	<b>-0.60</b>

<sup>1</sup>A shared FTE is defined by NERC as an employee who performs both Statutory and Non-Statutory functions.

## 2016 Statutory Budget and Projection and 2017 Budget Comparisons

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital 2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>STATUTORY</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
ERO Assessments	\$ 6,628,457	\$ 6,628,457	\$ (0)	6,163,896	\$ (464,562)
Penalty Sanctions	81,000	81,000	0	95,000	14,000
<b>Total ERO Funding</b>	<b>\$ 6,709,457</b>	<b>\$ 6,709,457</b>	<b>\$ (0)</b>	<b>\$ 6,258,896</b>	<b>\$ (450,562)</b>
Membership Dues	\$ -	\$ -	\$ -	\$ -	\$ -
Testing Fees	-	-	-	-	-
Services & Software	24,000	24,000	-	-	(24,000)
Workshops	92,000	102,510	10,510	92,000	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding</b>	<b>\$ 6,825,457</b>	<b>\$ 6,835,967</b>	<b>\$ 10,510</b>	<b>\$ 6,350,896</b>	<b>\$ (474,562)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 4,021,604	3,803,744	\$ (217,860)	\$ 3,958,699	\$ (62,905)
Payroll Taxes	243,373	234,583	(8,790)	233,832	(9,541)
Benefits	608,744	701,233	92,489	687,962	79,218
Retirement Costs	639,971	569,248	(70,723)	591,944	(48,027)
<b>Total Personnel Expenses</b>	<b>\$ 5,513,692</b>	<b>\$ 5,308,808</b>	<b>\$ (204,884)</b>	<b>\$ 5,472,437</b>	<b>\$ (41,255)</b>
<b>Meeting Expenses</b>					
Meetings	\$ 58,176	\$ 59,957	\$ 1,781	\$ 81,212	\$ 23,036
Travel	191,445	169,206	(22,239)	170,086	(21,359)
Conference Calls	13,027	12,991	(36)	13,281	254
<b>Total Meeting Expenses</b>	<b>\$ 262,648</b>	<b>\$ 242,154</b>	<b>\$ (20,494)</b>	<b>\$ 264,579</b>	<b>\$ 1,931</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 641,975	\$ 452,704	\$ (189,271)	\$ 530,329	\$ (111,646)
Office Rent	568,158	561,834	(6,324)	552,603	(15,555)
Office Costs	132,021	143,725	11,704	132,513	492
Professional Services	26,406	27,686	1,280	37,499	11,093
Miscellaneous	-	-	-	-	-
Depreciation	171,380	173,992	2,612	142,625	(28,755)
<b>Total Operating Expenses</b>	<b>\$ 1,539,940</b>	<b>\$ 1,359,941</b>	<b>\$ (179,999)</b>	<b>\$ 1,395,569</b>	<b>\$ (144,371)</b>
<b>Total Direct Expenses</b>	<b>\$ 7,316,280</b>	<b>\$ 6,910,903</b>	<b>\$ (405,377)</b>	<b>\$ 7,132,585</b>	<b>\$ (183,695)</b>
<b>Indirect Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 0</b>	<b>\$ -</b>	<b>\$ (0)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses</b>	<b>\$ 7,316,280</b>	<b>\$ 6,910,903</b>	<b>\$ (405,377)</b>	<b>\$ 7,132,585</b>	<b>\$ (183,695)</b>
<b>Change in Assets</b>	<b>\$ (490,823)</b>	<b>\$ (74,936)</b>	<b>\$ 415,887</b>	<b>\$ (781,690)</b>	<b>\$ (290,867)</b>
<b>Fixed Assets</b>					
Depreciation	\$ (171,380)	\$ (173,992)	\$ (2,612)	\$ (142,625)	\$ 28,755
Total Fixed Asset Purchases	116,627	148,590	31,963	187,894	71,267
<b>Change in Fixed Assets</b>	<b>54,753</b>	<b>25,402</b>	<b>(29,351)</b>	<b>(45,269)</b>	<b>(100,022)</b>
<b>TOTAL BUDGET</b>	<b>\$ 7,261,527</b>	<b>\$ 6,885,501</b>	<b>\$ (376,026)</b>	<b>\$ 7,177,854</b>	<b>\$ (83,673)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL</b>	<b>\$ (436,070)</b>	<b>\$ (49,534)</b>	<b>\$ 386,536</b>	<b>\$ (826,959)</b>	<b>\$ (390,889)</b>
FTEs	30.59	28.61	(1.98)	29.99	(0.60)

**Section A – Statutory Programs**  
**2017 Business Plan and Budget**



## Reliability Standards Development Program

<b>Reliability Standards Development Program</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	1.41	1.48	0.07
Direct Expenses	\$ 307,955	\$ 347,092	\$ 39,137
Indirect Expenses	\$ 47,137	\$ 49,665	\$ 2,529
Inc(Dec) in Fixed Assets	\$ (1,293)	\$ 1,577	\$ 2,870
Total Funding Requirement	\$ 353,799	\$ 398,334	\$ 44,536

### Program Scope and Functional Description

The FRCC may develop, through the FRCC Regional Reliability Standards Development Process, separate Regional Reliability Standards that are specific to the FRCC Region and go beyond, add detail to, or implement NERC Reliability Standards. FRCC Regional Reliability Standards will not be inconsistent with or less stringent than NERC Reliability Standards.

The FRCC Regional Reliability Standards Development Process is an open, balanced and fair process that ensures all interested and affected parties have an opportunity to participate in the development of FRCC Regional Reliability Standards for the FRCC Region.

While the FRCC may develop separate Regional Reliability Standards, the preference is to support the development of continent wide reliability standards. The FRCC staff follows and participates in NERC's Standards Development Process. This includes FRCC standards staff participation at the NERC Standards Committee, the NERC Standards Committee Process Subcommittee, and NERC standards drafting teams as appropriate. In addition, the FRCC supports and encourages stakeholder awareness and participation in the NERC standards development process through educational outreach efforts at workshops, webinars and committee meetings.

### 2017 Key Assumptions

The key assumptions included in the Shared Business Plan and Budget Assumptions, Exhibit A, affecting the Reliability Standards Program include:

1. The number of continent-wide standards development projects will remain stable, except as required to address any new FERC directives to create or modify Reliability Standards, or industry submittals of standard authorization requests.
2. Continent-wide standards projects will consist primarily of conducting enhanced periodic reviews to improve the content and quality of standards, responding to identified risks to reliability, and addressing FERC directives that may arise.

3. The number of interpretation requests is expected to remain low, however the guidance requests associated with the implementation of Standards may increase.
4. FRCC has no Regional Reliability Standards and none are currently planned for the future.
5. NERC and the Regional Entities will continue to provide communication and outreach opportunities as standards are developed and following FERC approval of new and revised standards. Additionally, following FERC approval, Regional Entities will assist the transition of standards to compliance monitoring and enforcement by providing knowledge that supports industry and auditor training.
6. The FRCC will support using feedback loops, including audit and enforcement experience, continent wide perspectives, lessons learned, and events analysis for enhanced periodic reviews focused on conducting measured, in-depth reviews to further improve Reliability Standards using the enhanced periodic review template.

### **2017 Goals and Key Deliverables**

The Standards Program objectives for 2017 are to continue to follow and participate in the NERC Standards Development Process. This includes FRCC standards staff participation in the NERC Standards Committee, the NERC Standards Committee Process Subcommittee and on NERC standards drafting teams or periodic review teams as appropriate.

- Continue to encourage stakeholder awareness and participation in the NERC standards development process. Support the development of Standard's guidance requests as appropriate.
- Continue to monitor the need for development of Regional Reliability Standards or regional variances that are required by NERC Reliability Standards or are needed for reliability within the FRCC region.
- Assist the FRCC members and Registered Entities in following and understanding NERC standards development activities by increasing education and outreach programs to include:
  - Development and presentation at Workshops, Webinars and committee meetings to address continent-wide and regional reliability issues.
  - Develop and deliver project level communications, education and training for new or revised reliability standards.
  - Review, analyze, and identify potential regional concerns and solutions associated with NERC Reliability Standards under development.
  - Continue to support the FRCC Regional Entity Committee and Compliance Forum (RECCF) to fully vet and identify any concerns and assist in articulating the concern and possible solution to standard drafting teams as appropriate.

## Reliability Standards Development Program

Funding sources and related expenses for the reliability standards section of the 2017 business plan are shown in the table below.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital					
2016 Budget & Projection, and 2017 Budget					
Reliability Standards Development					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
ERO Assessments	\$ 349,426	\$ 349,426	\$ (0)	\$ 392,887	\$ 43,461
Penalty Sanctions	\$ 4,373	\$ 4,373	\$ 0	5,448	1,075
<b>Total ERO Funding</b>	<b>\$ 353,799</b>	<b>\$ 353,799</b>	<b>\$ 0</b>	<b>\$ 398,334</b>	<b>\$ 44,536</b>
Membership Dues	\$ -	\$ -	\$ -	\$ -	\$ -
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding</b>	<b>\$ 353,799</b>	<b>\$ 353,799</b>	<b>\$ 0</b>	<b>\$ 398,334</b>	<b>\$ 44,536</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 192,583	\$ 196,684	\$ 4,101	\$ 212,820	\$ 20,237
Payroll Taxes	11,218	12,213	995	12,687	1,469
Benefits	29,362	33,376	4,014	37,965	8,603
Retirement Costs	28,968	28,871	(97)	31,264	2,296
<b>Total Personnel Expenses</b>	<b>\$ 262,131</b>	<b>\$ 271,144</b>	<b>\$ 9,013</b>	<b>\$ 294,736</b>	<b>\$ 32,605</b>
<b>Meeting Expenses</b>					
Meetings	\$ 1,221	\$ 1,256	\$ 35	\$ 1,479	\$ 258
Travel	8,992	12,008	3,016	11,676	2,684
Conference Calls	1,234	1,238	4	1,997	763
<b>Total Meeting Expenses</b>	<b>\$ 11,447</b>	<b>\$ 14,502</b>	<b>\$ 3,055</b>	<b>\$ 15,152</b>	<b>\$ 3,705</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 6,446	\$ 6,359	\$ (87)	\$ 7,443	\$ 997
Office Rent	19,153	20,275	1,122	19,814	661
Office Costs	5,187	5,443	256	5,308	121
Professional Services	1,423	1,606	183	2,150	727
Miscellaneous	-	-	-	-	-
Depreciation	2,168	1,645	(523)	2,489	321
<b>Total Operating Expenses</b>	<b>\$ 34,377</b>	<b>\$ 35,328</b>	<b>\$ 951</b>	<b>\$ 37,204</b>	<b>\$ 2,827</b>
<b>Total Direct Expenses</b>	<b>\$ 307,955</b>	<b>\$ 320,974</b>	<b>\$ 13,019</b>	<b>\$ 347,092</b>	<b>\$ 39,137</b>
<b>Indirect Expenses</b>	<b>\$ 47,137</b>	<b>\$ 50,943</b>	<b>\$ 3,806</b>	<b>\$ 49,665</b>	<b>\$ 2,529</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses</b>	<b>\$ 355,092</b>	<b>\$ 371,917</b>	<b>\$ 16,825</b>	<b>\$ 396,757</b>	<b>\$ 41,666</b>
<b>Change in Assets</b>	<b>\$ (1,293)</b>	<b>\$ (18,118)</b>	<b>\$ (16,825)</b>	<b>\$ 1,577</b>	<b>\$ 2,870</b>
<b>Fixed Assets</b>					
Depreciation	\$ (2,168)	\$ (1,645)	\$ 523	\$ (2,489)	\$ (321)
Total Fixed Asset Purchases	875	1,376	501	4,066	3,191
<b>Change in Fixed Assets</b>	<b>\$ 1,293</b>	<b>\$ 269</b>	<b>\$ (1,024)</b>	<b>\$ (1,577)</b>	<b>\$ (2,870)</b>
<b>TOTAL BUDGET</b>	<b>\$ 353,799</b>	<b>\$ 371,648</b>	<b>\$ 17,849</b>	<b>\$ 398,334</b>	<b>\$ 44,536</b>
<b>TOTAL CHANGE IN WORKING CAPITAL</b>	<b>\$ -</b>	<b>\$ (17,849)</b>	<b>\$ (17,849)</b>	<b>\$ -</b>	<b>\$ -</b>
FTEs	1.41	1.41	-	1.48	0.07

## Compliance Monitoring and Enforcement Program and Organization Registration and Certification Program

<b>Compliance Monitoring and Enforcement and Organization Registration and Certification Program</b>			
(in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	18.83	19.59	0.76
Direct Expenses	\$ 4,609,179	\$ 4,632,111	\$ 22,932
Indirect Expenses	\$ 629,490	\$ 657,391	\$ 27,901
Inc(Dec) in Fixed Assets	\$ (51,802)	\$ 45,921	\$ 97,723
Total Funding Requirement	\$ 5,186,867	\$ 5,335,423	\$ 148,556

### Program Scope and Functional Description

Monitoring, investigating and enforcing compliance with Reliability Standards by owners, operators and users of the BES, as well as the development and adoption of the reliability standards themselves support FRCC's mission to promote and assure the reliability of the bulk power system in peninsular Florida. Appropriate registration and certification of entities also supports the mission of reliability. Reliable operation of the BES is in the public interest, because it will benefit all owners, operators and users of the BES, and, ultimately, all users and consumers of electric power in the FRCC Region.

Compliance and Enforcement activities are carried out by the FRCC compliance staff and are independent of all users, owners and operators of the BES for which FRCC carries out CEA activities. Through a risk-based program that places the focus on those risks that are most important to the reliability of the BES, FRCC will strive to increase the level of reliable operation of the BES in the FRCC Region.

The NERC Compliance Monitoring and Enforcement Program (CMEP) is the program used by the FRCC to monitor, assess, and enforce compliance with Reliability Standards within the FRCC Region. The FRCC compliance staff works with the compliance staff of the other Regional Entities and with NERC to strive for consistency in the implementation of the CMEP.

### 2017 Highlights Compliance Monitoring and Enforcement Processes

The implementation of risk-based compliance monitoring and enforcement will include an analysis of risk to develop an appropriate compliance oversight plan for each Registered Entity. Balancing Authorities and Transmission Operators will continue to be reviewed at least every 3 years. The application of risk based principles will likely result in certain FRCC entities being monitored by some monitoring method more frequently. The review of a Registered Entity's inherent risk will be the foundation in the development of each entity's specific compliance oversight plan. Compliance staff will continue a strong outreach program to assist registered entities in their understanding of the risk-based compliance program as well as the details of the transition from CIP V3 to V5 reliability standards.

## Registration and Certification

The FRCC has registered the organizations responsible for complying with Reliability Standards in accordance with Section 500 of the NERC Rules of Procedure. After implementing the reforms as part of the Risk Based Registration effort in 2015, there are currently 51 Registered Entities with a total of 176 registered functions. Maintaining a complete and accurate registration database will be an ongoing activity. The FRCC will develop, maintain and provide to NERC accurate information on entity registration within the FRCC Region with updates as changes occur. FRCC staff will continue to support and participate in the evaluation of appropriate levels of registration of Registered Entities. The FRCC will support as needed, the implementation of the NERC-led review panel as part of the continuing efforts of the Risk Based Registration program. FRCC will participate in certifications or certification reviews as circumstances warrant. FRCC will also participate in the review of the Certification Program taking place during 2016 and to the extent changes are recommended and approved, will implement those changes in 2017.

## Enforcement and Mitigation

The FRCC has implemented risk-based enforcement and actions may include the imposition of remedial action directives, sanctions and penalties for those risks that pose a more serious risk to reliability. The FRCC will utilize other enforcement disposition methods, such as Compliance Exceptions and FFT's for those violations that pose less risk to reliability. Mitigation of violations of the approved Reliability Standards, and the prevention of recurrence, remains central to the FRCC's reliability focus. Registered Entities found in violation of a Reliability Standard will be required to fully mitigate the violation regardless of the type of enforcement actions taken.

## 2017 Key Assumptions

- As a minimum, audits are expected to continue under the current three year schedule for BA's and TOP's. However, reliability risk profiles for all Registered Entities will be developed and compliance oversight plans will be tailored to the risk profiles which may increase the frequency, depth and complexity of monitoring for some entities and decrease the frequency, depth and complexity of others. The FRCC will continue implementing plans to complete Inherent Risk Assessments (IRAs), implementing refinements to Internal Control Evaluations (ICEs), and ensuring that Compliance Oversight Plans (COPs) are addressing the appropriate risks for each Registered Entity.
- The review of Registered Entity internal controls programs as part of the compliance monitoring program allows NERC and the Regional Entities to further prioritize risk based compliance monitoring activities. NERC and the Regional Entities will develop and implement refinements to Internal Control Evaluations to help ensure that Compliance Oversight Plans are addressing the appropriate risks.
- The use of spot checks and self-certifications is expected to increase as risk-based monitoring is implemented, but that should have little effect on FRCC's overall resource requirements.
- Continued transition to CIP V5 is anticipated to significantly increase the compliance monitoring and outreach activities. The effective date for compliance with the CIP Version 5 standards is July 1, 2016 for High and Medium impact assets and July 1, 2017 for Low impact assets. There is an expectation of additional resource needs to manage the

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increased amount of Registered Entities subject to the CIP Standards due to the addition of the “low impact” assets in 2017. Therefore, the transition between V3 to V5 continues to be a mission critical activity for the ERO Enterprise in 2017. FRCC plans to support the ongoing CIP V5 transition plans and anticipates an expansion in the number of Registered Entities that require guidance during 2016 and 2017. Additional training requirements will be necessary to support the transition and will affect the annual training commitments. For most CIP activities, the resource demands are expected to increase throughout the planning period.

- The number of non-CIP violations is expected to decrease as most Registered Entities have been audited and the standards and RSAWs have matured.
- A compliance tools assessment project began in 2014 and continues into 2016. This will include an evaluation of software systems used for compliance, registration, analysis and tracking which may result in replacing or changing existing systems in the future. Until the assessment is complete, Regional Entities will continue to budget to maintain current systems and tools.
- NERC and the Regional Entities will continue ERO Enterprise-wide collaboration to implement more consistent compliance monitoring and enforcement practices and focus on higher reliability risks to increase efficiency and mitigate overall compliance costs.
- NERC and the Regional Entities must plan to support the training and education requirements and guidelines necessary to meet the criteria set forth by the ERO Auditor ERO Enterprise Compliance Monitoring and Enforcement Manual and the Competency Guide. Regional Entities will be expected to provide training documents and other related compliance guidance to compliance staff, review CMEP job descriptions and properly reflect the guidance provided in the Competency Guide, perform a gap analysis to identify both individual training needs and organizational compliance resource needs, provide an assessment process to evaluate audit team competencies and capability needs, and put a training program in place that addresses initial and continuing training for capability and competency development.
- NERC will continue to budget and incur the cost of a unified learning management system (LMS) for the regional audit staff initially, with near-term consideration for risk-based compliance monitoring and enforcement related staff. NERC will work with the Regional Entities to consolidate training resources and promote better coordination, planning, delivery and management of training efforts across the ERO.
- Additional resources may be required, and increases to NERC and Regional Entity training budgets are expected to support certain training initiatives of the risk-based CMEP. Regional Entities are expected to allocate resources to meet the training requirements for the compliance and enforcement staff that are associated with the implementation of the risk-based compliance monitoring and enforcement.
- Maintaining budgeted qualified compliance and enforcement staff will continue to be a challenge driven by a limited pool of qualified people and an aging work force. Investments in training less experienced personnel are likely to increase.

### **2017 Goals and Key Deliverables**

The Compliance Monitoring and Enforcement Program objectives for 2017 are outlined below:

- Continue to implement the risk-based registration program and implement changes identified in the 2016 review of the certification program.

- Support and continue the implementation of Risk-based Compliance Monitoring and Enforcement, including implementing plans to complete and update Inherent Risk Assessments (IRA), implementing refinements to Internal Controls Evaluations (ICEs) and assuring that Compliance Oversight Plans (COPs) are addressing appropriate risks for all Registered Entities in the FRCC Region.
- Support and continue the implementation of the transition from CIP V3 to CIP V5. Implement the compliance monitoring and assurance program for both CIP V5 and CIP-014.
- Provide the necessary training for compliance and enforcement staff associated with the implementation of the risk-based CMEP.
- Continue collaboration with NERC and the other Regional Entities to improve consistency, quality, and timeliness of compliance monitoring and enforcement practices that focus on higher risks to the reliability of the BES.
- Continue to promote the self-identification of non-compliance by Registered Entities and utilize increased discretion as appropriate. Ensure timely and thorough mitigation of all violations of mandatory reliability standards.
- Promote a culture of compliance excellence through education, transparency, information sharing and incentives.

## Compliance Monitoring and Enforcement Program and Organization Registration and Certification Program

Funding sources and related expenses for the compliance enforcement and organization registration and certification section of the 2017 business plan are shown in the table below.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital 2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>Compliance Monitoring &amp; Enforcement and Organization Registration &amp; Certification</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
ERO Assessments	\$ 5,128,474	\$ 5,128,474	\$ 0	\$ 5,263,317	\$ 134,843
Penalty Sanctions	58,393	58,393	(0)	72,106	13,713
<b>Total ERO Funding</b>	<b>\$ 5,186,867</b>	<b>\$ 5,186,867</b>	<b>\$ (0)</b>	<b>\$ 5,335,423</b>	<b>\$ 148,556</b>
Membership Dues	\$ -	\$ -	\$ -	\$ -	\$ -
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding</b>	<b>\$ 5,186,867</b>	<b>\$ 5,186,867</b>	<b>\$ (0)</b>	<b>\$ 5,335,423</b>	<b>\$ 148,556</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 2,415,379	\$ 2,249,802	\$ (165,577)	\$ 2,461,771	\$ 46,392
Payroll Taxes	149,811	138,089	(11,722)	144,595	(5,216)
Benefits	395,111	464,607	69,496	459,445	64,334
Retirement Costs	398,362	341,146	(57,216)	372,041	(26,321)
<b>Total Personnel Expenses</b>	<b>\$ 3,358,663</b>	<b>\$ 3,193,644</b>	<b>\$ (165,019)</b>	<b>\$ 3,437,852</b>	<b>\$ 79,189</b>
<b>Meeting Expenses</b>					
Meetings	\$ 13,419	\$ 14,255	\$ 836	\$ 10,857	\$ (2,562)
Travel	119,571	89,857	(29,714)	93,365	(26,206)
Conference Calls	10,055	10,030	(25)	9,286	(769)
<b>Total Meeting Expenses</b>	<b>\$ 143,045</b>	<b>\$ 114,142</b>	<b>\$ (28,903)</b>	<b>\$ 113,508</b>	<b>\$ (29,537)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 434,850	\$ 305,547	\$ (129,303)	\$ 417,540	\$ (17,310)
Office Rent	408,416	401,646	(6,770)	413,238	4,822
Office Costs	84,471	87,797	3,326	91,505	7,034
Professional Services	19,035	19,944	909	28,462	9,427
Miscellaneous	-	-	-	-	-
Depreciation	160,699	163,398	2,699	130,006	(30,693)
<b>Total Operating Expenses</b>	<b>\$ 1,107,471</b>	<b>\$ 978,332</b>	<b>\$ (129,139)</b>	<b>\$ 1,080,751</b>	<b>\$ (26,720)</b>
<b>Total Direct Expenses</b>	<b>\$ 4,609,179</b>	<b>\$ 4,286,118</b>	<b>\$ (323,061)</b>	<b>\$ 4,632,111</b>	<b>\$ 22,932</b>
<b>Indirect Expenses</b>	<b>\$ 629,490</b>	<b>\$ 632,496</b>	<b>\$ 3,006</b>	<b>\$ 657,391</b>	<b>\$ 27,901</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses</b>	<b>\$ 5,238,669</b>	<b>\$ 4,918,614</b>	<b>\$ (320,055)</b>	<b>\$ 5,289,502</b>	<b>\$ 50,833</b>
<b>Change in Assets</b>	<b>\$ (51,802)</b>	<b>\$ 268,253</b>	<b>\$ 320,055</b>	<b>\$ 45,921</b>	<b>\$ 97,723</b>
<b>Fixed Assets</b>					
Depreciation	\$ (160,699)	\$ (163,398)	\$ (2,699)	\$ (130,006)	\$ 30,693
Total Fixed Asset Purchases	108,897	136,676	27,779	175,927	67,030
<b>Change in Fixed Assets</b>	<b>\$ 51,802</b>	<b>\$ 26,722</b>	<b>\$ (25,080)</b>	<b>\$ (45,921)</b>	<b>\$ (97,723)</b>
<b>TOTAL BUDGET</b>	<b>\$ 5,186,867</b>	<b>\$ 4,891,892</b>	<b>\$ (294,975)</b>	<b>\$ 5,335,423</b>	<b>\$ 148,556</b>
<b>TOTAL CHANGE IN WORKING CAPITAL</b>	<b>\$ -</b>	<b>\$ 294,975</b>	<b>\$ 294,975</b>	<b>\$ -</b>	<b>\$ -</b>
FTEs	18.83	17.47	(1.36)	19.58	0.75



## Reliability Assessment and Performance Analysis Program

<b>Reliability Assessment and Performance Analysis Program</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	4.71	3.60	(1.11)
Direct Expenses	\$ 1,156,162	\$ 905,868	\$ (250,294)
Indirect Expenses	\$ 157,456	\$ 120,807	\$ (36,649)
Inc(Dec) in Fixed Assets	\$ (1,226)	\$ (2,385)	\$ (1,159)
Total Funding Requirement	\$ 1,312,392	\$ 1,024,290	\$ (288,102)

### Program Scope and Functional Description

The FRCC will perform high quality assessments of the reliability of the BES in the FRCC region and will continue to ensure that the planned system is robust, reliable and stable. The FRCC will continue to participate in Event Analysis teams to analyze any disturbances that may occur within the FRCC region.

The FRCC performs transmission reliability studies in order to provide an assessment to NERC for its periodic NERC Reliability Assessments. These studies evaluate regional and inter-regional facilities. The FRCC prepares a minimum of three reliability assessments each year and a probabilistic assessment every other year and will assist NERC with Short-Term Special Assessments as needed:

- A 10 year long-term reliability assessment report
- Seasonal assessments (Summer & Winter)
- Assist with Short-Term Special Assessments (up to four per year)
- A probabilistic long-term reliability assessment (biennial)

These reports evaluate electricity demand, the adequacy of supply and its deliverability, fuel reliability and the adequacy of the transmission system within the FRCC. The FRCC will prepare special reliability assessment reports as conditions warrant.

The FRCC Reliability Assessment and Performance Analysis Program (RA) will support NERC's efforts to move toward and implement high quality reliability assessments and performance analysis to achieve measureable improvements in the BES reliability. Risks will be identified and prioritized based on reliability impacts, cost/practicality of assessments, projected resources, and emerging issues. This will help support the prioritization of risks to share with standards development and compliance and enforcement activities.

The FRCC will continue to support NERC's efforts to develop and implement expanded and enhanced enterprise-based data collection and analysis systems and capabilities for performance analysis. In addition the FRCC will support development of resource capabilities and tools, including probabilistic and scenario evaluations, which address the impacts of new technologies,

changing resource or demand resource composition, and environmental related regulations or legislation.

The FRCC will support the ERO Essential Reliability Services Working Group (ERSWG) focused on identifying and integrating essential reliability services and measures into the Long-Term Reliability Assessment, including identification of reliability issues due to a changing resource mix.

The FRCC actively participates in the Eastern Interconnection Reliability Assessment Group (ERAG) which will continue to compile the Eastern Interconnection transmission models and conduct Eastern Interconnection reliability assessments. The FRCC will support NERC and the industry during the transition to meet the new requirements of MOD-032-1 and MOD-033-1. The development of the FRCC steady state and dynamic models will be carried out by registered entity staff with support from FRCC shared staff. The time for developing the models will be recorded as a Member Services activity.

The FRCC Events Analysis Program will analyze or support the analysis of significant events and system performance that impact the BES within the FRCC Region. The FRCC will consistently analyze events for identification of sequence, root cause, system performance, remediation, and improvement opportunities to identify reliability risks and trends, and lessons learned. FRCC's analysis may result in the identification of gaps in standards, compliance effectiveness, registration or risk controls effectiveness. The FRCC will provide lessons learned and recommendations from events and identified risks keeping industry well informed of large system events, emerging trends, risk analysis, lessons learned. FRCC will utilize various sharing methods (i.e. website posting and briefings at committee meetings) to ensure FRCC entities are exposed to the latest information in this area.

The FRCC will support NERC continent wide to improve event causal analysis, communication of lessons learned, tracking of recommendations, implementation of good practices, and overcoming barriers to releasing BES event reports to industry on a timely basis through a secure portal. The FRCC will also support NERC to continue to improve consistency, quality, time lines and cost effectiveness of NERC and Regional Entity data collection, analysis systems and capabilities through process improvements and more effective coordination and collaboration.

### **2017 Key Assumptions**

- NERC and the Regional Entities are expected to effectively implement long-term reliability assessment coordination and collaboration efforts to objectively evaluate the reliability characteristics and behavior of the bulk power system.
- NERC will manage the BES Exception Process execution. The FRCC will support the process execution, technical validation of the definition and exception requests, self-determined notification submittals and periodic reviews of network changes affecting BES determinations, as well as requests for registration and certification review.
- NERC and the Regional Entities will work jointly to advance analytical capabilities for identifying and determining reliability risks and conducting various reliability assessments through the following:
  - Integrating essential reliability services (ERS) analysis and measures into the Long-Term Reliability Assessment. The process encompasses new data collection

- and analysis approaches needed to address assessment objectives of identifying reliability issues due to a changing resource mix.
- Requiring objective experts for transmission/deliverability assessments and studies.
  - Maturing and developing interconnection-wide analysis groups to support the assessment of interconnection-wide risks, such as frequency response.
  - Providing technical resources and reliability leadership for the advancement of probabilistic analyses supporting the Long-Term Reliability Assessment.
  - Requiring advanced statistical analysis tools and independent experts to support them for probabilistic assessments.
- NERC and Regional Entities' resources will continue to support the development of long-term sustainable interconnection-based model cases that exhibit the accuracy and fidelity reflecting actual BES reliability performance and dynamic conditions. These models will integrate needed elements that address reliability behavior of changing resource mix and technology of both generation and loads, including:
    - Development and tracking of metrics that demonstrate the accuracy of the powerflow and dynamics models to replicate actual system conditions and reliability behavior.
    - Provision of technical resources to support the effective and continuous improvement of the models that incorporate recognition of reliability behavior of loads and generation associated with the changing resource mix.
    - Develop assessment and performance analysis by expanding the use of advanced techniques and tools for resource analysis to perform probabilistic and scenario evaluations that address the impacts of integrating new technologies, changing resource mix or demand composition, and environmental-related regulations or legislation.
    - Support for the compilation and of long-term sustainable interconnection-wide powerflow and dynamics cases under Reliability Standards MOD-032.
    - Support quality analysis and overall assessment, including guidance for Registered Entities, of high impact, low frequency bulk power system risks, including physical security, geomagnetic disturbance (GMD) vulnerability, planning guides and planning standards.
  - Registered Entity and Regional Entity participation in the ERO Event Analysis Process will continue at or above current levels through 2017.
  - Regional Entities will continue to budget for event analysis and situational awareness activities. Regions will support the analysis of significant events to identify gaps in standards, compliance effectiveness, registration and risk controls effectiveness.
  - NERC will continue to budget and incur costs to operate and maintain the software application known as The Event Analysis Management System (TEAMS) for Event Analysis and the Misoperations Information Data Analysis System (MIDAS).

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## 2017 Goals and Key Deliverables

The Reliability Assessment and Performance Analysis Objectives for 2017 are outlined below:

- Perform a reliability assessment of the FRCC Region to determine if the planned resources and proposed transmission expansion plans will meet the needs of the projected demand throughout the planning horizon.
- Support NERC in preparing its reliability assessment reports.
- Support the existing BES Exception Process. This will include providing a technical review of exception requests that are submitted by the registered entities and periodic reviews of network changes affecting BES determinations.
- Support the integration of essential reliability services analysis and measures into the Long-Term Reliability Assessment, including use of new data collection and analysis approaches needed to address assessment objectives of identifying reliability issues due to a changing resource mix.
- Support ERO activities to identify key reliability risks and appropriate risk control projects designed to enhance reliability or mitigate risks.
- Support data gathering and reporting efforts for the Generating Availability Data System (GADS), the Transmission Availability Data System (TADS), Spare Equipment Database (SED) and Demand Response Availability Data System (DADS).
- Support NERC to strengthen data collection and validation processes by designing, creating, testing and implementing data checking systems to accommodate the increasing amount of data NERC collects for its long-term, seasonal, operational, scenarios and special reliability assessments along with the databases supporting reliability performance assessments.
- Review and/or analyze significant events that impact the FRCC BES and work with NERC to identify the root causes of events that may be precursors of potentially more serious events.
- Support enhancement of risk analysis capabilities through integration of risk data sources, such as event analysis, Transmission Availability Data Systems (TADS), Generating Availability Data System (GADS), and relay misoperations.
- Assess past reliability performance for potential lessons learned.
- Maintain relationships with NERC, regulatory and governmental organizations involved with BES reliability (e.g., Florida Public Service Commission (FPSC), Department of Energy (DOE), FERC, Energy Information Administration (EIA), etc.).
- Maintain a databank of power flow, short circuit and dynamic models to use in planning and evaluating future systems and current operating conditions.
- Work with ERAG to perform Eastern Interconnection reliability assessments and support the industry transition efforts related to MOD-031-1 and MOD-033-1.
- Conduct Loss of Load Probability and the Scenario Analysis studies as needed.

## Reliability Assessment and Performance Analysis Program

Funding sources and related expenses for the reliability assessment and performance analysis section of the 2017 business plan are shown in the table below.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital 2016 Budget & Projection, and 2017 Budget					
Reliability Assessment and Performance Analysis					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2016 Budget v 2015 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
ERO Assessments	\$ 1,273,786	\$ 1,273,786	\$ (0)	\$ 1,011,039	\$ (262,747)
Penalty Sanctions	14,606	14,606	(0)	13,251	(1,355)
<b>Total ERO Funding</b>	<b>\$ 1,288,392</b>	<b>\$ 1,288,392</b>	<b>\$ (0)</b>	<b>\$ 1,024,290</b>	<b>\$ (264,102)</b>
Membership Dues	\$ -	\$ -	\$ -	\$ -	\$ -
Testing Fees	-	-	-	-	-
Services & Software	24,000	24,000	-	-	(24,000)
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding</b>	<b>\$ 1,312,392</b>	<b>\$ 1,312,392</b>	<b>\$ (0)</b>	<b>\$ 1,024,290</b>	<b>\$ (288,102)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 643,309	\$ 592,841	\$ (50,468)	\$ 517,669	\$ (125,640)
Payroll Taxes	37,473	36,813	(660)	30,860	(6,613)
Benefits	91,080	99,173	8,093	85,720	(5,360)
Retirement Costs	96,767	87,023	(9,744)	76,047	(20,720)
<b>Total Personnel Expenses</b>	<b>\$ 868,629</b>	<b>\$ 815,850</b>	<b>\$ (52,779)</b>	<b>\$ 710,296</b>	<b>\$ (158,333)</b>
<b>Meeting Expenses</b>					
Meetings	\$ 2,080	\$ 1,980	\$ (100)	\$ 1,261	\$ (819)
Travel	45,532	47,688	2,156	47,221	1,689
Conference Calls	368	351	(17)	275	(93)
<b>Total Meeting Expenses</b>	<b>\$ 47,980</b>	<b>\$ 50,019</b>	<b>\$ 2,039</b>	<b>\$ 48,757</b>	<b>\$ 777</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 150,325	\$ 108,023	\$ (42,302)	\$ 74,594	\$ (75,731)
Office Rent	63,978	61,113	(2,865)	48,195	(15,783)
Office Costs	13,131	12,838	(293)	10,422	(2,709)
Professional Services	4,765	4,849	84	5,225	460
Miscellaneous	-	-	-	-	-
Depreciation	7,354	7,693	339	8,379	1,025
<b>Total Operating Expenses</b>	<b>\$ 239,553</b>	<b>\$ 194,516</b>	<b>\$ (45,037)</b>	<b>\$ 146,815</b>	<b>\$ (92,738)</b>
<b>Total Direct Expenses</b>	<b>\$ 1,156,162</b>	<b>\$ 1,060,385</b>	<b>\$ (95,777)</b>	<b>\$ 905,868</b>	<b>\$ (250,294)</b>
<b>Indirect Expenses</b>	<b>\$ 157,456</b>	<b>\$ 153,750</b>	<b>\$ (3,706)</b>	<b>\$ 120,807</b>	<b>\$ (36,649)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses</b>	<b>\$ 1,313,618</b>	<b>\$ 1,214,135</b>	<b>\$ (99,483)</b>	<b>\$ 1,026,675</b>	<b>\$ (286,943)</b>
<b>Change in Assets</b>	<b>\$ (1,226)</b>	<b>\$ 98,257</b>	<b>\$ 99,483</b>	<b>\$ (2,385)</b>	<b>\$ (1,159)</b>
<b>Fixed Assets</b>					
Depreciation	\$ (7,354)	\$ (7,693)	\$ (339)	\$ (8,379)	(1,025)
Total Fixed Asset Purchases	6,128	9,435	3,307	5,994	(134)
<b>Change in Fixed Assets</b>	<b>\$ 1,226</b>	<b>\$ (1,742)</b>	<b>\$ (2,968)</b>	<b>\$ 2,385</b>	<b>\$ 1,159</b>
<b>TOTAL BUDGET</b>	<b>\$ 1,312,392</b>	<b>\$ 1,215,877</b>	<b>\$ (96,515)</b>	<b>\$ 1,024,290</b>	<b>\$ (288,102)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL</b>	<b>\$ -</b>	<b>\$ 96,515</b>	<b>\$ 96,515</b>	<b>\$ -</b>	<b>\$ -</b>
FTEs	4.71	4.25	(0.46)	3.60	(1.11)

## Training, Education, and Operator Certification Program

<b>Training, Education and Operator Certification Program</b> (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	1.09	1.11	0.02
Direct Expenses	\$ 350,360	\$ 372,738	\$ 22,378
Indirect Expenses	\$ 36,439	\$ 37,249	\$ 810
Inc(Dec) in Fixed Assets	\$ (423)	\$ 143	\$ 566
Total Funding Requirement	\$ 386,376	\$ 410,130	\$ 23,754

### Program Scope and Functional Description

Maintaining the reliability of the BES requires informed and trained personnel. The FRCC supports training activities through its staff and its System Operator Subcommittee (SOS) which reports to the FRCC Operating Committee. The FRCC is a NERC-approved Continuing Education (CE) Provider. The FRCC SOS develops and delivers training in which FRCC grants NERC CE hours (CEH) to those individuals who successfully complete a course. FRCC will utilize the NERC database to accommodate the recordkeeping requirements for the continuing education program.

The FRCC provides educational workshops and web based seminars to improve Registered Entity understanding of the FRCC CMEP, NERC Standards Development and CIP topics and trends. In addition, the FRCC facilitates one-on-one face to face meetings with Registered Entities to help provide individual entity information. These outreach efforts are aimed at improving the effectiveness, understanding of and adherence to NERC reliability initiatives. The workshops also improve the working relationships between the FRCC Regional Entity program areas and the Registered Entities within the FRCC region.

- Training, Education and Operator Certification – Continue to conduct System Operator Training seminars to improve collaboration and communication between System Operators, conduct restoration drills and maintain high reliability excellence. Continue to hold Compliance and Standards Workshops and Webinars to provide support for stakeholders in understanding and implementing reliability standards requirements.

### System Operator Certification Program

The FRCC SOS identifies and manages annual training activities for the FRCC System Operators and provides information to FRCC members regarding the NERC training standards and any issues they may have related to system operators obtaining/retaining required NERC Certification.

The training and education program activities are carried out by FRCC's professional/technical staff and FRCC members possessing the appropriate technical knowledge and competencies. In addition, vendors that specialize in System Operator training may be used. Providing the FRCC

training and education programs helps to improve collaboration and communication between System Operators (and other operating personnel), conduct restoration drills and maintain reliability excellence. FRCC staff has worked with the FRCC SOS to revitalize the Training and Education Program, with respect to System Operator training, by:

- Incorporating Human Performance improvement and critical thinking and reasoning into training modules
- Incorporating a simulator with a model of the FRCC system
- Preparing the scenarios for the restoration drills and performing the restoration drills using FRCC staff and FRCC SOS to better reflect operations in FRCC

FRCC staff in collaboration and coordination with the FRCC SOS plans to continue to make improvements in 2017 and future years to expand learning and sharing amongst System Operators.

### **Compliance Workshops**

Compliance workshops are typically held in the spring and fall of each year generally consisting of three (3) sessions each. These workshops are aimed at providing information and updates to the Registered Entities on compliance program activities including information on new procedures, instructions on changes to FRCC compliance tools, lessons learned from previous violations and providing sufficient and appropriate evidence in a compliance audit. A main focus for 2016 and again in 2017 are the new approaches being implemented in the risk-based compliance monitoring and enforcement program.

There will be at least one (1) CIP Compliance Workshop that will address technical aspects of the CIP Reliability Standards, including, providing quality evidence, lessons learned and compliance processes specific to the monitoring and enforcement of the CIP standards. In addition, particular focus will be made on the transition from CIP V3 to CIP V5 standards and helping Registered Entities understand the guidance and lessons learned as part of the transition. The FRCC deployed face to face outreach activities for the Registered Entities with High and Medium impact assets during 2015 and this is expected to continue and will likely increase with the addition of the Low impact assets in 2017.

In addition to the face to face venues, in 2017 FRCC compliance staff projects holding at least three (3) webinars (two sessions each) that will address specific topics that may be identified by Registered Entities or by emerging trends within the FRCC.

### **Standards Workshops**

The FRCC Standards Department will be supporting and participating in various FRCC sponsored workshops (e.g., FRCC Compliance Workshops and FRCC SOS seminars) throughout 2017. The Standards Department contribution to the workshops will be designed to promote stakeholder awareness of Reliability Standards activities as well as education and training for new or revised Reliability Standards. In addition, the FRCC Standards Department plans to hold workshops or webinars that will educate stakeholders on the NERC Reliability Standards Development Procedure, and specific changes to existing reliability standards or specifics on new reliability standards. To help encourage stakeholder participation at the continent-wide level, the workshops will provide stakeholders with details of associated NERC Reliability Standards Development Projects, identifying key areas that may be of concern or interest to the stakeholders and identifying areas that are in need of industry support.

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## 2017 Key Assumptions

- The ERO Operating Personnel Certification program is expected to remain at steady state with no additional resources required from the Regional Entities.
- The FRCC System Operator Certification Program and Continuing Education Program will continue to be self-funded through a fee based structure for the exams and applications for approval of continuing education activities.
- The Regional Entities, in collaboration with NERC, are expected to help assess and determine training needs. This includes flexibility in approach between Regional Entities, and anticipating areas of support for their staffs and stakeholders for standards, compliance monitoring and enforcement, situation awareness and event analysis, and information technology. Addressing these needs will likely require additional resource allocation and budgeting considerations.
- NERC in collaboration with the Regional Entities, will develop and deliver additional CIP V5 training to support the transition. This may require consideration for additional funding of the NERC and Regional Entities training and education budgets.

## 2017 Goals and Key Deliverables

The training, education and operator certification program objectives for 2017 are outlined below:

- Provide assistance to Regional Entity members in any issues they may have related to System Operator Certification.
- Conduct the annual System Operator training seminars over a five (5) week period, with two (2) days each for the training. The training seminars involve from two (2) to four (4) FRCC staff members, as well as industry volunteers who participate as presenters. This activity is funded primarily through registration fees.
- Host FRCC Compliance Workshops and Webinars open to all FRCC Members and Registered Entities aimed at providing updates on compliance procedures, instructions on changes to compliance tools, changes associated with the implementation of risk-based compliance monitoring and enforcement, the transition from CIP V3 to V5, and guidance on the providing of appropriate and sufficient evidence in a compliance audit.
- Host Reliability Standards Workshops and Webinars open to all FRCC Members and Registered Entities aimed at providing information concerning reliability standards under development, as well as the identification of technical concerns or issues that may impact FRCC registered entities and the reliability of the FRCC BES.
- Conduct FRCC Reliability Standards Department presentations to support multiple training objectives (i.e., FRCC Compliance Workshops and FRCC SOS Seminars) to promote stakeholder awareness of continent wide and regional standards activities.
- Conduct face to face outreach with Registered Entities subject to the CIP V5 reliability standards to assist them in a successful transition from CIP V3 to V5.
- Work with NERC and the other Regional Entities to achieve improvements in the coordination, content and manner of internal and external training programs.



## Training, Education, and Operator Certification Program

Funding sources and related expenses for the training, education, and operator certification section of the 2017 business plan are shown in the table below.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>Training, Education and Operator Certification</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
ERO Assessments	\$ 290,996	\$ 290,996	\$ 0	\$ 314,044	\$ 23,048
Penalty Sanctions	3,380	3,380	(0)	4,086	705
<b>Total ERO Funding</b>	<b>\$ 294,376</b>	<b>\$ 294,376</b>	<b>\$ 0</b>	<b>\$ 318,130</b>	<b>\$ 23,754</b>
Membership Dues	\$ -	\$ -	\$ -	\$ -	\$ -
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	92,000	102,510	10,510	92,000	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding</b>	<b>\$ 386,376</b>	<b>\$ 396,886</b>	<b>\$ 10,510</b>	<b>\$ 410,130</b>	<b>\$ 23,754</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 148,877	\$ 146,467	\$ (2,410)	\$ 159,615	\$ 10,738
Payroll Taxes	8,672	9,095	423	9,515	843
Benefits	18,616	22,069	3,453	23,701	5,085
Retirement Costs	22,394	21,500	(894)	23,448	1,054
<b>Total Personnel Expenses</b>	<b>\$ 198,559</b>	<b>\$ 199,131</b>	<b>\$ 572</b>	<b>\$ 216,279</b>	<b>\$ 17,720</b>
<b>Meeting Expenses</b>					
Meetings	\$ 41,423	\$ 42,430	\$ 1,007	\$ 67,603	\$ 26,180
Travel	17,266	19,563	2,297	17,786	520
Conference Calls	1,364	1,366	2	1,720	356
<b>Total Meeting Expenses</b>	<b>\$ 60,053</b>	<b>\$ 63,359</b>	<b>\$ 3,306</b>	<b>\$ 87,109</b>	<b>\$ 27,056</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 50,002	\$ 32,430	\$ (17,572)	\$ 30,583	\$ (19,419)
Office Rent	14,806	15,099	293	14,860	54
Office Costs	24,733	33,531	8,798	20,588	(4,145)
Professional Services	1,105	1,200	95	1,612	507
Miscellaneous	-	-	-	-	-
Depreciation	1,102	1,191	89	1,707	605
<b>Total Operating Expenses</b>	<b>\$ 91,748</b>	<b>\$ 83,451</b>	<b>\$ (8,297)</b>	<b>\$ 69,350</b>	<b>\$ (22,398)</b>
<b>Total Direct Expenses</b>	<b>\$ 350,360</b>	<b>\$ 345,941</b>	<b>\$ (4,419)</b>	<b>\$ 372,738</b>	<b>\$ 22,378</b>
<b>Indirect Expenses</b>	<b>\$ 36,439</b>	<b>\$ 38,054</b>	<b>\$ 1,615</b>	<b>\$ 37,249</b>	<b>\$ 810</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses</b>	<b>\$ 386,799</b>	<b>\$ 383,995</b>	<b>\$ (2,804)</b>	<b>\$ 409,987</b>	<b>\$ 23,188</b>
<b>Change in Assets</b>	<b>\$ (423)</b>	<b>\$ 12,891</b>	<b>\$ 13,314</b>	<b>\$ 143</b>	<b>\$ 566</b>
<b>Fixed Assets</b>					
Depreciation	\$ (1,102)	\$ (1,191)	\$ (89)	\$ (1,707)	\$ (605)
Total Fixed Asset Purchases	679	1,028	349	1,850	1,171
<b>Change in Fixed Assets</b>	<b>\$ 423</b>	<b>\$ 163</b>	<b>\$ (260)</b>	<b>\$ (143)</b>	<b>\$ (566)</b>
<b>TOTAL BUDGET</b>	<b>\$ 386,376</b>	<b>\$ 383,832</b>	<b>\$ (2,544)</b>	<b>\$ 410,130</b>	<b>\$ 23,754</b>
<b>TOTAL CHANGE IN WORKING CAPITAL</b>	<b>\$ -</b>	<b>\$ 13,054</b>	<b>\$ 13,054</b>	<b>\$ -</b>	<b>\$ -</b>
FTEs	1.09	1.05	(0.04)	1.11	0.02

## Situation Awareness and Infrastructure Security Program

<b>Situation Awareness and Infrastructure Security Program</b> (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	0.08	0.03	(0.05)
Direct Expenses	\$ 19,428	\$ 8,658	\$ (10,770)
Indirect Expenses	\$ 2,674	\$ 1,007	\$ (1,668)
Inc(Dec) in Fixed Assets	\$ (9)	\$ 13	\$ 22
Total Funding Requirement	\$ 22,093	\$ 9,678	\$ (12,416)

### Program Scope and Functional Description

The FRCC and the other Regional Entities continue to support the ERO's situation awareness, cyber security preparedness and to provide independent reliability information to policy makers and regulators. The Reliability Process for the FRCC Bulk Electric System documents the various reliability roles and functions that are coordinated, monitored and established by FRCC to provide situation awareness of the reliability of the FRCC BES. Two of the primary reliability goals of the FRCC are continuous improvement of the situation awareness of the operators within the FRCC and ensuring that adequate physical, operational and cyber security objectives are in place for the Regions' shared communications networks.

The FRCC continues to support and participate in NERC's Situation Awareness/Event Analysis coordination conference calls, supports the Situation Awareness for FERC, NERC and the Regions (SAFNR) Version 2 project and maintains the FRCC satellite phone for situation awareness across the FRCC Region.

The NERC Rules of Procedure, Section 1000, requires that NERC monitor present conditions on the BES and provide leadership coordination, technical expertise and assistance to the industry in responding to events as necessary.

The Situation Awareness process will be used to support NERC and FERC's efforts to maintain situation awareness of Bulk Electric System conditions.

### 2017 Key Assumptions

- NERC and the Regions will continue to provide required support and leadership for the Operating Committee and the Critical Infrastructure Protection Committee, and standing committees' subcommittees, working groups, and task forces serving the standing committees. Regional Entity involvement is expected to remain at current levels with no additional resources required from the Regional Entities.
- NERC will continue to budget and incur costs to operate and maintain the software applications and systems known as Situational Awareness for NERC, FERC and the Regional Entities (SAFNRv2). Additional resource investments are expected to be required to maintain the capabilities of SAFNRv2 throughout the planning period.

- NERC will continue to fund the Grid Security Exercise (GridEx) with no increased cost to the Regional Entities. The Regional Entities will participate as appropriate in the wide-area exercises.
- NERC will continue to fund, operate and maintain the Electricity Information Sharing and Analysis Center (E-ISAC), with no increased cost to Regional Entities.
- There will be continued focus on detecting off-normal events to be analyzed by the responsible entity, FRCC or NERC.

### **2017 Goals and Key Deliverables**

- Ensure that FRCC goals and activities support the mission to provide FERC, NERC and the staffs from the eight Regional Entities a visualization tool that enables the appropriate level of situation awareness for the near real-time conditions on the BES. Continue to work with the FRCC Reliability Coordinator to ensure that SAFNRv2 and appropriate hardware and software resources are allocated. Continue to support future development of the situation awareness project capabilities.
- Issue and track security recommendations to protect the Bulk Electric System. Share information learned and recommendations in Situation Awareness with the Events Analysis program to develop relevant lessons learned.
- Support critical infrastructure security by promoting rapid and appropriate sharing of situational awareness information regarding security occurrences.
- Participate as appropriate in periodic wide-area grid security exercises.
- Participate in the analysis of significant events to identify gaps in standards, compliance effectiveness, registration, and risk controls effectiveness.

## Situation Awareness and Infrastructure Security Program

Funding sources and related expenses for the situation awareness and infrastructure security section of the 2017 business plan are shown in the table below.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital					
2016 Budget & Projection, and 2017 Budget					
Situation Awareness and Infrastructure Security					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
ERO Assessments	\$ 21,845	\$ 21,845	\$ (0)	\$ 9,567	\$ (12,278)
Penalty Sanctions	248	248	\$ (0)	110	(138)
<b>Total ERO Funding</b>	<b>\$ 22,093</b>	<b>\$ 22,093</b>	<b>\$ (0)</b>	<b>\$ 9,678</b>	<b>\$ (12,416)</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding</b>	<b>\$ 22,093</b>	<b>\$ 22,093</b>	<b>\$ (0)</b>	<b>\$ 9,678</b>	<b>\$ (12,416)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 10,927	\$ 11,159	\$ 232	\$ 4,314	\$ (6,613)
Payroll Taxes	636	693	57	257	(379)
Benefits	2,305	2,612	307	649	(1,656)
Retirement Costs	1,644	1,638	(6)	634	(1,010)
<b>Total Personnel Expenses</b>	<b>\$ 15,512</b>	<b>\$ 16,102</b>	<b>\$ 590</b>	<b>\$ 5,854</b>	<b>\$ (9,658)</b>
<b>Meeting Expenses</b>					
Meetings	\$ 33	\$ 36	\$ 3	\$ 12	\$ (21)
Travel	84	90	6	38	(46)
Conference Calls	6	6	-	3	(3)
<b>Total Meeting Expenses</b>	<b>\$ 123</b>	<b>\$ 132</b>	<b>\$ 9</b>	<b>\$ 53</b>	<b>\$ (70)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 352	\$ 345	\$ (7)	\$ 169	\$ (183)
Office Rent	1,087	1,150	63	402	(685)
Office Costs	2,219	1,599	(620)	2,086	(133)
Professional Services	78	87	9	50	(28)
Miscellaneous	-	-	-	-	-
Depreciation	57	65	8	44	(13)
<b>Total Operating Expenses</b>	<b>\$ 3,793</b>	<b>\$ 3,246</b>	<b>\$ (547)</b>	<b>\$ 2,751</b>	<b>\$ (1,042)</b>
<b>Total Direct Expenses</b>	<b>\$ 19,428</b>	<b>\$ 19,480</b>	<b>\$ 52</b>	<b>\$ 8,658</b>	<b>\$ (10,770)</b>
<b>Indirect Expenses</b>	<b>\$ 2,674</b>	<b>\$ 2,762</b>	<b>\$ 88</b>	<b>\$ 1,007</b>	<b>\$ (1,668)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses</b>	<b>\$ 22,102</b>	<b>\$ 22,242</b>	<b>\$ 140</b>	<b>\$ 9,665</b>	<b>\$ (12,438)</b>
<b>Change in Assets</b>	<b>\$ (9)</b>	<b>\$ (149)</b>	<b>\$ (140)</b>	<b>\$ 13</b>	<b>\$ 22</b>
<b>Fixed Assets</b>					
Depreciation	\$ (57)	\$ (65)	\$ (8)	\$ (44)	\$ 13
Total Fixed Asset Purchases	48	75	27	57	9
<b>Change in Fixed Assets</b>	<b>\$ 9</b>	<b>\$ (10)</b>	<b>\$ (19)</b>	<b>\$ (13)</b>	<b>\$ (22)</b>
<b>TOTAL BUDGET</b>	<b>\$ 22,093</b>	<b>\$ 22,252</b>	<b>\$ 159</b>	<b>\$ 9,678</b>	<b>\$ (12,416)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL</b>	<b>\$ -</b>	<b>\$ (159)</b>	<b>\$ (159)</b>	<b>\$ -</b>	<b>\$ -</b>
FTEs	0.08	0.08	-	0.03	(0.05)

## General and Administrative

	General and Administrative (in whole dollars)					
	Direct Expenses and Fixed Assets			FTEs		
	2016 Budget	2017 Budget	Increase (Decrease)	2016 Budget	2017 Budget	Increase (Decrease)
General and Administrative	\$ 873,196	\$ 866,118	\$ (7,078)	4.47	4.19	(0.28)

### Program Scope and Functional Description Background

Charges included in General and Administrative are general legal expenses, executive time and expenses, human resources, information technology and accounting and finance. Every effort is made to charge items and time directly to activities and to designate as statutory or non-statutory. Undesignated items are shared costs between the Regional Entity Division and the Member Services Division and are allocated based on actual labor hours charged.

### Legal and Regulatory Background

The FRCC General Counsel serves as the chief legal advisor to the President and CEO, Board of Directors, staff and stakeholders on all legal and regulatory matters affecting the FRCC. FRCC may use additional specialized legal resources on an as-needed basis, such as for tax matters, employee benefit plan issues and significant policy or FERC matters.

### 2017 Goals and Key Deliverables

- Assist the FRCC in carrying out its responsibilities as required by the approved delegation agreement between NERC and FRCC.
- Provide general corporate legal advice, legal training and timely, accurate filings to Regulatory authorities.

### 2017 Assumptions

In the 2017 Budget, as in the 2016 and 2015 budgets, there are no specific funds for hearings under CMEP Rules.

### Information Technology Background

The FRCC maintains a number of tools and other support services for the benefit of its members, Registered Entities, Reliability Coordinator agent(s) and other system operators. These services include the FRCC Load and Resource Database (LRDB), the Compliance Tracking System (CTS), Compliance Issues Tracking System (CITS), the FRCC corporate website, as well as other systems for collaboration, communication, data gathering and analysis.

The FRCC supports the ERO Enterprise efforts to implement, operate and maintain software tools and applications supporting common enterprise wide operations which have been approved by the ERO Executive Management Group (EROEMG), which is comprised of the senior leadership of NERC and each of the Regional Entities. FRCC's budget assumes the availability of enterprise software tools and applications as described in NERC's business plan and budget. If implementation of these software applications are delayed or otherwise not available as planned,

FRCC could incur additional costs to conduct operations pending the availability of these applications.

NERC and the Regional Entities are committed to working collaboratively to minimize duplication of effort and investments, and to improve operational efficiency. This collaboration continues to refine existing strategies, governance and procurement practices applicable to the development, operation and maintenance of enterprise architecture, software and data systems supporting combined NERC and Regional Entity operations.

The NERC information technology budget does not supplant the FRCC's need for IT expenditures for specific regional projects and internal region specific IT support needs. FRCC's 2017 Business Plan and Budget assumes agreed-upon ERO Enterprise applications will be available and includes only costs for internal region specific support needs.

### **2017 Goals and Key Deliverables**

- Refresh and enhance the communications and audio/visual capabilities of the FRCC meeting spaces.
- Improve the reliability, security and capability of FRCC IT systems by upgrading core IT infrastructure.
- Expand IT support of the FRCC CMEP and provide additional metrics to improve accuracy and tracking within the CMEP processes.
- Continue the Implementation of needed changes to improve the FRCC corporate security posture as identified in the security assessment performed in 2014; improve overall security in all programs, enhance access controls with improved processes and procedures.
- Continue to improve disaster recovery and business continuity capabilities by continuing to test and refine implemented geographically diverse data recovery solutions.

### **Human Resources Background**

The FRCC has assembled an exceptional team of highly qualified employees to carry out the activities of the FRCC. The human resources department, in adherence with applicable federal and state laws, develops plans, and implements human resources policies and procedures, including staffing, compensation, benefits, employee relations, and training and development.

### **2017 Goals and Key Deliverables**

- Recruit and retain successful employees
- Improve human resource policies and procedures
- Provide management and training programs
- Ensure competitive employee compensation and benefits

### **Finance and Accounting Background**

The FRCC will submit its annual budget for statutory and non-statutory activities to the FRCC Board of Directors for approval and then file the approved annual budget to NERC. This includes supporting materials such as a complete business plan and organizational chart, and the

proposed expenditure of funds collected in sufficient detail to justify the requested funding collection and budget expenditures.

The Finance and Accounting Department will: direct the overall financial plans and accounting practices of the organization; oversee treasury, accounting, budget preparation and reporting, tax, and audit activities; and oversee financial and accounting system controls and standards.

### **2017 Goals and Key Deliverables**

- Prepare the 2018 statutory and non-statutory budgets
- Report budget variances to the FRCC Corporate Compliance Finance and Audit Committee, the FRCC Board and to NERC on a quarterly basis
- Prepare the 2017 audited financial statements
- Continue to provide on-going training to employees to ensure employees charge their time and expenses correctly

## General and Administrative

Funding sources and related expenses for the general and administrative section of the 2017 business plan are shown in the table below.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>General and Administrative</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
ERO Assessments	\$ (436,070)	\$ (436,070)	\$ (0)	\$ (826,959)	\$ (390,889)
Penalty Sanctions	-	-	-	-	-
<b>Total ERO Funding</b>	<b>\$ (436,070)</b>	<b>\$ (436,070)</b>	<b>\$ (0)</b>	<b>\$ (826,959)</b>	<b>\$ (390,889)</b>
Membership Dues	\$ -	\$ -	\$ -	\$ -	\$ -
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding</b>	<b>\$ (436,070)</b>	<b>\$ (436,070)</b>	<b>\$ (0)</b>	<b>\$ (826,959)</b>	<b>\$ (390,889)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 610,529	\$ 606,791	\$ (3,738)	\$ 602,510	\$ (8,019)
Payroll Taxes	35,563	37,680	2,117	35,918	355
Benefits	72,270	79,396	7,126	80,482	8,212
Retirement Costs	91,836	89,070	(2,766)	88,510	(3,326)
<b>Total Personnel Expenses</b>	<b>\$ 810,198</b>	<b>\$ 812,937</b>	<b>\$ 2,739</b>	<b>\$ 807,420</b>	<b>\$ (2,778)</b>
<b>Meeting Expenses</b>					
Meetings	\$ -	\$ -	\$ -	\$ -	\$ -
Travel	-	-	-	-	-
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -
Office Rent	60,718	62,551	1,833	56,094	(4,624)
Office Costs	2,280	2,517	237	2,604	324
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 62,998</b>	<b>\$ 65,068</b>	<b>\$ 2,070</b>	<b>\$ 58,698</b>	<b>\$ (4,300)</b>
<b>Total Direct Expenses</b>	<b>\$ 873,196</b>	<b>\$ 878,005</b>	<b>\$ 4,809</b>	<b>\$ 866,118</b>	<b>\$ (7,078)</b>
<b>Indirect Expenses</b>	<b>\$ (873,196)</b>	<b>\$ (878,005)</b>	<b>\$ (4,809)</b>	<b>\$ (866,118)</b>	<b>\$ 7,078</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Change in Assets</b>	<b>\$ (436,070)</b>	<b>\$ (436,070)</b>	<b>\$ (0)</b>	<b>\$ (826,959)</b>	<b>\$ (390,889)</b>
<b>Fixed Assets</b>					
Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -
Total Fixed Asset Purchases	-	-	-	-	-
<b>Change in Fixed Assets</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL BUDGET</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL CHANGE IN WORKING CAPITAL</b>	<b>\$ (436,070)</b>	<b>\$ (436,070)</b>	<b>\$ (0)</b>	<b>\$ (826,959)</b>	<b>\$ (390,889)</b>
FTEs	4.47	4.35	(0.12)	4.19	(0.28)



## **Section B – Supplemental Financial Information 2017 Business Plan and Budget**

## Reserve Balance

Table B-1

<b>Working Capital Reserve Analysis 2016-2017</b>	
<b>STATUTORY</b>	
<b>Beginning Working Capital Reserve (Deficit), December 31, 2015</b>	1,474,647
Plus: 2016 ERO Funding (from LSEs or designees)	6,628,457
Plus: Projected 2016 Other funding sources	126,510
Plus: Penalty Sanctions Applied	81,000
Less: 2016 Projected expenses & capital expenditures	<b>(6,885,501)</b>
<b>Projected Working Capital Reserve Surplus/(Deficit), December 31, 2016</b>	<b>1,425,113</b>
<b>Desired Working Capital Reserve, December 31, 2017</b>	<sup>2</sup> 598,155
Less: Projected Working Capital Reserve, December 31, 2016	<b>(1,425,113)</b>
<b>Increase(decrease) in assessments to achieve desired Working Capital Reserve</b>	<b>(826,959)</b>
2017 Expenses and Capital Expenditures	7,177,854
Less: Penalty Sanctions <sup>1</sup>	<b>(95,000)</b>
Less: Other Funding Sources	<b>(92,000)</b>
Adjustment to achieve desired Working Capital Reserve	<b>(826,959)</b>
<b>2017 Assessment</b>	<b>6,163,896</b>

<sup>1</sup> Represents collections prior to June 30, 2016.

<sup>2</sup> On June 26, 2013, the FRCC Board of Directors set a working capital and operating working capital and operating reserve requirement of one (1) month of the total annual budget. The FRCC has a \$1.5 million line of credit.

## Breakdown by Statement of Activity Sections

The following detailed schedules are in support of the Table on page 13, of the 2017 FRCC Business Plan and Budget.

### Penalty Sanctions

Penalty monies received prior to June 30, 2016 are to be used to offset assessments in the 2017 Budget, as documented in the NERC Policy – ACCOUNTING, FINANCIAL STATEMENT AND BUDGETARY TREATMENT OF PENALTIES IMPOSED AND RECEIVED FOR VIOLATIONS OF RELIABILITY STANDARD. Penalty monies received from July 1, 2016 through June 30, 2017 will be used to offset assessments in the 2018 Budget.

All penalties received prior to June 30, 2016 are detailed below.

Allocation Method: Penalty sanctions received have been allocated to the following statutory programs to reduce assessments: Reliability Standards; Compliance Monitoring & Enforcement and Organization Registration & Certification; Reliability Assessments and Performance Analysis; Training, Education and Operator Certification; and Situation Awareness and Infrastructure Security. Penalty sanctions are allocated based upon the number of FTEs in the Program divided by the aggregate total FTEs in the Programs receiving the allocation.

**Table B-2**

<b>Penalty Sanctions Received On or Prior to June 30, 2016</b>		
	<b>Date Received</b>	<b>Amount Received</b>
<b>Penalty #1</b>	8/4/2015	\$ 13,000
<b>Penalty #2</b>	7/17/2015	\$ 3,000
<b>Penalty #3</b>	7/17/2015	\$ 50,000
<b>Penalty #4</b>	2/24/2016	\$ 6,000
<b>Penalty #5</b>	3/10/2016	\$ 2,000
<b>Penalty #6</b>	3/10/2016	\$ 21,000
	<b>Total Penalties Received</b>	<u>\$ 95,000</u>

## Supplemental Funding

Table B-3

Outside Funding Breakdown By Program	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget
<b>Reliability Standards Development</b>				
Total	\$ -	\$ -	\$ -	\$ -
<b>Compliance Monitoring, Enforcement &amp; Org. Registration</b>				
Total	\$ -	\$ -	\$ -	\$ -
<b>Reliability Assessment and Performance Analysis</b>				
Services & Software Fees	\$ 24,000	\$ 24,000	\$ -	\$ (24,000)
Total	\$ 24,000	\$ 24,000	\$ -	\$ (24,000)
<b>Training, Education and Operator Certification</b>				
Workshops	\$ 92,000	\$ 102,510	\$ 92,000	\$ -
Total	\$ 92,000	\$ 102,510	\$ 92,000	\$ -
<b>Situation Awareness and Infrastructure Security</b>				
Total	\$ -	\$ -	\$ -	\$ -
<b>General and Administrative*</b>				
Interest	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -
<b>Total Outside Funding</b>	<b>\$ 116,000</b>	<b>\$ 126,510</b>	<b>\$ 92,000</b>	<b>\$ (24,000)</b>

Assumes that no appreciable excess cash will be in the Bank Accounts and due to current low interest rates, no Interest is being budgeted.

**Reliability Assessment Services & Software Fees** for Eastern Interconnection Model development shifts from Regional Entity to Member Services consistent with NERC's expectations for work related to MOD-032.

## Personnel Expenses

### Table B-4

Personnel Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
<b>Salaries</b>					
<b>Total Salaries</b>	\$ 4,021,604	\$ 3,803,744	\$ 3,958,699	\$ (62,905)	-1.56%
<b>Total Payroll Taxes</b>	\$ 243,373	\$ 234,583	\$ 233,832	\$ (9,541)	-3.92%
<b>Benefits</b>					
Workers Compensation	\$ 11,201	\$ 10,830	\$ 11,219	\$ 18	0.16%
Medical, LTD, STD Insurances	476,715	476,711	508,632	31,917	6.70%
Temp to Perm Fees	-	-	-	-	-
Education	98,656	129,240	130,303	31,647	32.08%
Employee Welfare & Contract Labor	22,172	84,452	27,808	5,636	25.42%
Relocation	-	-	10,000	10,000	-
<b>Total Benefits</b>	\$ 608,744	\$ 701,233	\$ 687,962	\$ 79,218	13.01%
<b>Retirement</b>					
Retirement Costs	\$ 639,971	\$ 569,248	\$ 591,944	\$ (48,027)	-7.50%
<b>Total Retirement</b>	\$ 639,971	\$ 569,248	\$ 591,944	\$ (48,027)	-7.50%
<b>Total Personnel Costs</b>	\$ 5,513,692	\$ 5,308,808	\$ 5,472,437	\$ (41,255)	-0.75%
<b>FTEs</b>	30.59	28.61	29.99	(0.6)	-1.96%
<b>Cost per FTE</b>					
Salaries	\$ 131,468	\$ 132,952	\$ 132,001	533	0.41%
Payroll Taxes	7,956	8,199	7,797	(159)	-2.00%
Benefits	19,900	24,510	22,940	3,040	15.27%
Retirement	20,921	19,897	19,738	(1,183)	-5.65%
<b>Total Cost per FTE</b>	\$ 180,245	\$ 185,558	\$ 182,475	\$ 2,230	1.24%

**Salaries** are based on the assumption of a 3% salary increase plus promotions and adjustments, an additional FTE in 2017 that is replacing the work done by a contractor in 2016 and a discretionary lump sum pay out of excess "IRS capped benefits". These increases are offset by a 13% attrition factor in 2017.

**Payroll taxes** are budgeted to decrease primarily due to applying a 13% attrition factor to personnel costs in 2017.

**Medical Insurance** is assumed to increase by 5% as the rates continue to increase due to the market continuing to struggle with the cost and appropriate rates for small companies due to the Affordable Care Act.

**Education** includes funds for staff leadership training.

**Relocation** costs are budgeted for a new hire in 2017.

**Retirement costs** are budgeted to decrease primarily due to applying a 13% attrition factor to personnel costs in 2017 and using the historical match average in 2017 as opposed to the maximum match percentage in 2016.

## Meetings, Travel &amp; Conference Calls

Table B-5

Meetings, Travel and Conference Calls	Budget 2016	Projection 2016	Budget 2017	Variance	
				2017 Budget v 2016 Budget	Variance %
Meetings	\$ 58,176	\$ 59,957	\$ 81,212	\$ 23,036	39.60%
Travel	191,445	169,206	170,086	\$ (21,359)	-11.16%
Conference Calls	13,027	12,991	13,281	\$ 254	1.95%
<b>Total Meetings, Travel &amp; Conf Calls</b>	<b>\$ 262,648</b>	<b>\$ 242,154</b>	<b>\$ 264,579</b>	<b>\$ 1,931</b>	<b>0.74%</b>

**Meeting** costs are budgeted to increase due to higher SOS facility and meeting costs.

**Travel** costs are budgeted to decrease due to reducing the travel budget to reflect historical costs.

## Consultants and Contracts

Table B-6

Contracts & Consultants and Software & Licenses	Budget 2016	Projection 2016	Budget 2017	Variance	
				2017 Budget v 2016 Budget	Variance %
<b>Contracts &amp; Consultants and Software &amp; Licenses</b>					
Reliability Standards Development	\$ 6,446	\$ 6,359	\$ 7,443	\$ 997	15.47%
Compliance Monitoring & Enforcement and Org Reg	434,850	305,547	417,540	(17,310)	-3.98%
Reliability Assessment and Performance Analysis	150,325	108,023	74,594	(75,731)	-50.38%
Training, Education and Operator Certification	50,002	32,430	30,583	(19,419)	-38.84%
Situation Awareness and Infrastructure Security	352	345	169	(183)	-51.99%
General and Administrative	-	-	-	-	
<b>Total Contracts &amp; Consultants and Software &amp; Licenses</b>	<b>\$ 641,975</b>	<b>\$ 452,704</b>	<b>\$ 530,329</b>	<b>\$ (111,646)</b>	<b>-17.39%</b>

**The Compliance Monitoring & Enforcement Program's** Contracts & Consulting budget has decreased mainly due to a decreased estimate by SERC to perform as the CEA in 2017 because 2016 was an audit year for the FRCC RC function.

**The Reliability Assessment and Performance Analysis Program's** budget has decreased primarily due to a shift in expenses to Member Services to align Eastern Interconnection Model development with NERC's expectations for MOD-032.

**The Training, Education and Operator Certification's** budget decreases due to using internal staff for a portion of the seminars.

**The General & Administrative areas** budgeted for expenses in 2016 and 2017 are being allocated to the different programs and will continue to be allocated.

## Office Rent

Table B-7

Office Rent	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Office Rent	\$ 568,158	\$ 561,834	\$ 552,603	\$ (15,555)	-2.74%
<b>Total Office Rent</b>	<b>\$ 568,158</b>	<b>\$ 561,834</b>	<b>\$ 552,603</b>	<b>\$ (15,555)</b>	<b>-2.74%</b>

Rent is budgeted to decrease due to Common Area Maintenance charges (CAMs) that are expected to decrease in 2017.

## Office Costs

Table B-8

Office Costs	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Telephone	\$ 49,643	\$ 48,387	\$ 48,545	\$ (1,098)	-2.21%
Internet	4,119	4,014	1,773	\$ (2,346)	-56.96%
Office Supplies	16,937	20,540	20,347	\$ 3,410	20.13%
Computer Supplies	7,430	25,338	6,861	\$ (569)	-7.66%
Publications, Subscriptions & Dues	11,275	11,122	12,225	\$ 950	8.43%
Postage	1,141	1,741	1,895	\$ 754	66.08%
Equipment Maintenance	597	2,303	3,795	\$ 3,198	535.68%
Copying				\$ -	
Printing	25,720	15,426	21,321	\$ (4,399)	-17.10%
Stationary Forms				\$ -	
Commerical Insurance	15,159	14,851	15,753	\$ 594	3.92%
Miscellaneous				\$ -	
<b>Total Office Costs</b>	<b>\$ 132,021</b>	<b>\$ 143,722</b>	<b>\$ 132,515</b>	<b>\$ 494</b>	<b>0.37%</b>

## Professional Services

Table B-9

Professional Services	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Outside Legal	\$ 15,165	\$ 11,082	\$ 19,773	\$ 4,608	30.39%
Accounting & Auditing Fees	11,241	16,604	17,727	\$ 6,486	57.70%
<b>Total Services</b>	<b>\$ 26,406</b>	<b>\$ 27,686</b>	<b>\$ 37,500</b>	<b>\$ 11,094</b>	<b>42.01%</b>

Legal Fees are budgeted to increase in order to cover potential administrative issues that may arise.

**Accounting Fees** are budgeted to increase because 2016 is the first year of a new contract.

## Miscellaneous Expenses

**Table B-10**

**Miscellaneous Expenses** are not budgeted in 2016 or 2017.

## Other Non-Operating Expenses

**Table B-11**

Other Non-Operating Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	
				Variance %	
Interest Expense	\$ -	\$ -		\$ -	
Office Relocation	-	-		\$ -	
<b>Total Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	

**Interest Rates** are assumed to continue being so low that they remain immaterial.

## Fixed Assets

**Table B-12**

Professional Services	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	
				Variance %	
Depreciation	\$ (171,380)	\$ (173,992)	\$ (142,625)	\$ 28,755	-16.78%
Total Fixed Asset Purchases	\$ 116,627	\$ 148,590	\$ 187,894	\$ 71,267	61.11%
<b>Total Services</b>	<b>\$ 54,753</b>	<b>\$ 25,402</b>	<b>\$ (45,269)</b>	<b>\$ (100,022)</b>	<b>-182.68%</b>

**Fixed Asset Purchases** are budgeted to increase in 2017 due to increased Compliance Portal Software enhancements and the replacement of conference room tables.



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## 2018 and 2019 Projected Expenses

The following table showing 2018 and 2019 budget projections is based on the following assumptions:

### Personnel Expenses

- There is one additional CMEP staff included in the 2018 budget for the full year
- There is one additional RA staff included in the 2018 budget for the full year
- A 3% increase in personnel costs due to salary increases in both 2018 and 2019
- Estimated medical expense increase of 5% in both 2018 and 2019
- 2018 includes funds for staff leadership training
- An attrition factor of 13% was used in both 2018 and 2019

### Meeting Expenses

- Travel and Meeting expenses increase by a 3% inflation factor in both 2018 and 2019

### Operating Expenses

- Contracts and Consultants in 2018 includes Contingency Study Modeling in Reliability Assessment
- Office Costs increase in 2019 primarily due to rising Commercial Insurance costs
- Office Rent, Professional Services, and Depreciation remain flat in both 2018 and 2019

**Indirect Expenses** – Administrative costs increase approximately 3% each year in 2018 and 2019

### Fixed Assets

- Compliance Portal Software increases in 2018 to cover planned enhancements

## 2017, 2018 and 2019 Projections

Table B-13

Statement of Activities and Capital Expenditures 2017, 2018 and 2019 Projections										
Regional Entity										
	2016 Budget	2017 Budget	\$ Change 2017:2016 Over(Under)	% Chg 2017:2016 Over(Under)	2018 Projection	\$ Change 2018:2017 Over(Under)	% Chg 2018:2017 Over(Under)	2019 Projection	\$ Change 2019:2018 Over(Under)	% Chg 2019:2018 Over(Under)
<b>Funding</b>										
<b>ERO Funding</b>										
ERO Assessments	\$ 6,628,457	\$ 6,163,896	\$ (464,562)	-7.01%	\$ 7,477,495	\$ 1,313,600	21.31%	\$ 7,580,172	\$ 102,677	1.37%
Penalty Sanctions	81,000	95,000	14,000	0.00%	-	(95,000)	-100.00%	-	-	-
<b>Total ERO Funding</b>	<b>\$ 6,709,457</b>	<b>\$ 6,258,896</b>	<b>\$ (450,562)</b>	<b>-6.72%</b>	<b>\$ 7,477,495</b>	<b>\$ 1,218,600</b>	<b>19.47%</b>	<b>\$ 7,580,172</b>	<b>\$ 102,677</b>	<b>1.37%</b>
Membership Dues	\$ -	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-
Testing Fees	-	-	-	-	-	-	-	-	-	-
Services & Software	24,000	-	(24,000)	-100.00%	-	-	-	-	-	-
Workshops	92,000	92,000	-	0.00%	92,000	-	0.00%	92,000	-	0.00%
Interest	-	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-	-
<b>Total Funding</b>	<b>\$ 6,825,457</b>	<b>\$ 6,350,896</b>	<b>\$ (474,562)</b>	<b>-6.95%</b>	<b>\$ 7,569,495</b>	<b>\$ 1,218,600</b>	<b>19.19%</b>	<b>\$ 7,672,172</b>	<b>\$ 102,677</b>	<b>1.36%</b>
<b>Expenses</b>										
<b>Personnel Expenses</b>										
Salaries	\$ 4,021,604	\$ 3,958,699	\$ (62,905)	-1.56%	\$ 4,221,242	\$ 262,543	6.63%	\$ 4,354,265	\$ 133,023	3.15%
Payroll Taxes	243,373	233,832	(9,541)	-3.92%	250,726	16,894	7.22%	253,751	3,025	1.21%
Benefits	608,744	687,962	79,218	13.01%	716,286	28,324	4.12%	652,937	(63,349)	-8.84%
Retirement Costs	639,971	591,944	(48,027)	-7.50%	630,526	38,582	6.52%	637,981	7,455	1.18%
<b>Total Personnel Expenses</b>	<b>\$ 5,513,692</b>	<b>\$ 5,472,437</b>	<b>\$ (41,255)</b>	<b>-0.75%</b>	<b>\$ 5,818,780</b>	<b>\$ 346,343</b>	<b>6.33%</b>	<b>\$ 5,898,934</b>	<b>\$ 80,154</b>	<b>1.38%</b>
<b>Meeting Expenses</b>										
Meetings	\$ 58,176	\$ 81,212	\$ 23,036	39.60%	\$ 83,584	\$ 2,372	2.92%	\$ 86,112	\$ 2,528	3.02%
Travel	191,445	170,086	(21,359)	-11.16%	175,161	5,075	2.98%	180,433	5,272	3.01%
Conference Calls	13,027	13,281	254	1.95%	13,277	(4)	-0.03%	13,279	2	0.02%
<b>Total Meeting Expenses</b>	<b>\$ 262,648</b>	<b>\$ 264,579</b>	<b>\$ 1,931</b>	<b>0.74%</b>	<b>\$ 272,022</b>	<b>\$ 7,443</b>	<b>2.81%</b>	<b>\$ 279,824</b>	<b>\$ 7,802</b>	<b>2.87%</b>
<b>Operating Expenses</b>										
Consultants & Contracts	\$ 641,975	\$ 530,329	\$ (111,646)	-17.39%	\$ 523,973	\$ (6,356)	-1.20%	\$ 533,583	\$ 9,610	1.83%
Office Rent	568,158	552,603	(15,555)	-2.74%	551,273	(1,330)	-0.24%	555,044	3,771	0.68%
Office Costs	132,021	132,513	492	0.37%	133,093	580	0.44%	149,230	16,137	12.12%
Professional Services	26,406	37,499	11,093	42.01%	37,183	(316)	-0.84%	37,281	98	0.26%
Miscellaneous	-	-	-	-	-	-	-	-	-	-
Depreciation	171,380	142,625	(28,755)	-16.78%	151,159	8,534	5.98%	149,609	(1,550)	-1.03%
<b>Total Operating Expenses</b>	<b>\$ 1,539,940</b>	<b>\$ 1,395,569</b>	<b>\$ (144,371)</b>	<b>-9.38%</b>	<b>\$ 1,396,681</b>	<b>\$ 1,112</b>	<b>0.08%</b>	<b>\$ 1,424,747</b>	<b>\$ 28,066</b>	<b>2.01%</b>
<b>Total Direct Expenses</b>	<b>\$ 7,316,280</b>	<b>\$ 7,132,585</b>	<b>\$ (183,695)</b>	<b>-2.51%</b>	<b>\$ 7,487,483</b>	<b>\$ 354,898</b>	<b>4.98%</b>	<b>\$ 7,603,505</b>	<b>\$ 116,022</b>	<b>1.55%</b>
<b>Indirect Expenses</b>	\$ -	\$ -	\$ (0)	-	\$ -	\$ -	-	\$ -	\$ -	-
<b>Other Non-Operating Expenses</b>	\$ -	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-
<b>Total Expenses</b>	<b>\$ 7,316,280</b>	<b>\$ 7,132,585</b>	<b>\$ (183,695)</b>	<b>-2.51%</b>	<b>\$ 7,487,483</b>	<b>\$ 354,898</b>	<b>4.98%</b>	<b>\$ 7,603,505</b>	<b>\$ 116,022</b>	<b>1.55%</b>
<b>Change in Assets</b>	<b>\$ (490,823)</b>	<b>\$ (781,690)</b>	<b>\$ (290,867)</b>	<b>59.26%</b>	<b>\$ 82,012</b>	<b>\$ 863,702</b>	<b>-110.49%</b>	<b>\$ 68,667</b>	<b>\$ (13,345)</b>	
<b>Fixed Assets</b>										
Depreciation	\$ (171,380)	\$ (142,625)	\$ 28,755	-16.78%	\$ (151,159)	\$ (8,534)	5.98%	\$ (149,609)	\$ 1,550	-1.03%
Total Fixed Asset Purchases	116,627	187,894	71,267	61.11%	233,171	45,277	24.10%	218,276	(14,895)	-6.39%
<b>Change in Fixed Assets</b>	<b>\$ 54,753</b>	<b>\$ (45,269)</b>	<b>\$ (100,022)</b>	<b>-182.68%</b>	<b>\$ (82,012)</b>	<b>\$ (36,743)</b>	<b>81.17%</b>	<b>\$ (68,667)</b>	<b>\$ 13,345</b>	
<b>TOTAL BUDGET</b>	<b>\$ 7,261,527</b>	<b>\$ 7,177,854</b>	<b>\$ (83,673)</b>	<b>-1.15%</b>	<b>\$ 7,569,495</b>	<b>\$ 391,641</b>	<b>5.46%</b>	<b>\$ 7,672,172</b>	<b>\$ 102,677</b>	<b>1.36%</b>
<b>TOTAL CHANGE IN WORKING CAPITAL</b>	<b>\$ (436,070)</b>	<b>\$ (826,959)</b>	<b>\$ (390,889)</b>	<b>89.64%</b>	<b>\$ -</b>	<b>\$ 826,959</b>	<b>-100.00%</b>	<b>\$ -</b>	<b>\$ -</b>	
FTEs	30.59	29.99	(0.60)	-1.96%	29.99	-	0.00%	29.92	(0.1)	-0.23%

## **Section C – Non-Statutory Activities** **2017 Business Plan and Budget**

## Non-Statutory Members Services Division

<b>Member Services Activities</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	18.1	20.4	2.4
Direct Expenses	8,430,698	10,103,890	1,673,192
Indirect Expenses	-	-	-
Inc(Dec) in Fixed Assets	261,299	94,695	(166,604)
<b>Total Funding Requirement</b>	<b>8,691,997</b>	<b>10,198,585</b>	<b>1,506,588</b>

### Non-Statutory Functional Scope

The FRCC MS Division provides services that enhance the reliable coordination of planning and operations relating to the bulk power system within the FRCC Region. These services are carried out on behalf of FRCC MS members with oversight by two of the standing committees. The Planning Committee (PC) and Operating Committee (OC) and their various subcommittees, task forces and working groups, as well as the FRCC Planning and Operations (P&O) staff, support the MS activities of the Region. Two key activities include oversight of the two registered functions for which FRCC is a NERC registered entity: the FRCC Planning Authority (PA) and the FRCC Reliability Coordinator (RC). The PC has primary oversight of the FRCC PA function while the OC has primary oversight of the FRCC RC function.

### Current Member Services Division Activities

#### Planning Committee (PC)

The PC functional scope is to promote the reliability of the BES within the FRCC Region by assessing and encouraging generation and transmission adequacy. The PC assesses generation adequacy by performing a reliability assessment taking into account projected load and resources. The PC, through the FRCC Regional Transmission Planning Process, provides a vehicle for ensuring that transmission planning within the FRCC will provide for the development of a robust transmission network within the FRCC Region. The Regional Transmission Planning Process is a coordinated transmission planning process that evaluates all BES and non-BES transmission facilities. The major goal of this process is to ensure that the planning of transmission facilities will meet the needs of all market participants in a coordinated, open and transparent transmission planning environment.

The FRCC will continue to develop, on an annual basis, a Regional Transmission Plan following the Regional Transmission Planning Process. The Regional Transmission Planning process will be revised to incorporate the planning principles from FERC Order 1000. The Regional Plan is based on the Ten Year Site Plans that are required to be submitted to the Florida Public Service Commission (FPSC) on April 1<sup>st</sup> of each year. The FRCC participates in an annual Ten Year Site Plan Workshop held by the FPSC where the results of resource and transmission adequacy assessments are presented.

The FRCC PC relies on the following subordinate groups to achieve its goals: Regional Projects Subcommittee (RPS), Resource Working Group (RWG), Stability Working Group (SWG), and the Transmission Working Group (TWG).

### **Regional Projects Subcommittee (RPS)**

The RPS has a focused team of experienced individuals dedicated towards implementing and carrying out the Biennial Transmission Planning Process (“BTPP”) portion of the overall FRCC Regional Transmission Planning Process (“RTPP”) under the advice and direction of the FRCC PC. Several of the responsibilities that the RPS would be assigned include: (1) analyze the Board approved regional plan, (2) pro-actively develop potential Cost Effective and Efficient Regional Transmission Solution (“CEERTS”) projects (and/or review proposed CEERTS project submittals) that provide regional benefits, (3) identify all project beneficiaries and impacted entities, (4) quantify the benefits and impacts, and (5) deliver the CEERTS project recommendations to the PC, at least biennially, in accordance with the timelines established in the RTPP and schedules set by the PC, which take into consideration jurisdictional utilities’ OATT requirements and timing.

### **Resource Working Group (RWG)**

The RWG updates the Load and Resource Database annually and develops an aggregated Load & Resource Plan. The RWG performs reliability assessments of FRCC resource adequacy for the future 10-year period for peninsular Florida based on individual entity information that is the basis of their respective Ten Year Site Plan filings with the Florida Public Service Commission. The RWG compiles entity information in support of the FERC 715 filing. In addition, the RWG collects and provides EIA-411 information to NERC.

### **Stability Working Group (SWG)**

The SWG is responsible for assessing the dynamic performance of the FRCC BES under various credible system conditions. In addition, the SWG performs the following assessments and studies: Coordination and performance of Special Protection Systems, the effectiveness of FRCC under frequency load shedding (UFLS) program, coordination with other protection and control systems, Extreme Event Study and other assessments in support of the FRCC Regional Transmission Planning Process. The SWG annually develops FRCC dynamic models. In addition, the SWG develops evidentiary documentation to demonstrate compliance with applicable NERC Standards such as TPL-001-4, PRC-006.

### **Transmission Working Group (TWG)**

The TWG engages in active coordination of transmission planning within the FRCC Region under the direction of the FRCC Planning Committee in support of the FRCC Regional Transmission Planning Process. The TWG annually performs a FRCC Long Range Study, sensitivity studies as directed by the PC, evaluates Transmission Service Requests and evaluates Generator Interconnection Service Requests. The TWG annually develops a FRCC Transmission Map, FRCC power flow models and FRCC short circuit models. In addition, the TWG develops evidentiary documentation to demonstrate compliance with applicable NERC Standards such as FAC-010, FAC-013, PRC-023, and TPL-001-4.

### **FRCC Planning Authority (PA) Registered Function**

The FRCC is a NERC registered Planning Authority that, by FERC order, comes under the jurisdiction of the SERC Regional Entity as its Compliance Enforcement Authority (CEA). In addition to the committee work and oversight of its subordinate groups, the PC supports reliability assessment activities through the implementation and oversight of those FRCC PA functions for the reliability of the FRCC Bulk Electric System.

The PC, supported by FRCC MS staff, has the primary responsibility of the Planning Authority (PA) function including implementation of all applicable PA NERC Reliability Standards as outlined in the Coordinated Functional Agreement with the other Planning Authority entities within the FRCC.

### **Operating Committee (OC)**

The FRCC Operating Committee (OC) has been established to carry out Member Services Activities on behalf of the Membership. The OC reports directly to the FRCC Board of Directors and is charged with responsibility for providing for the reliable operations of the Bulk Power System (BPS) in the FRCC Region through coordination activities of operations and maintenance. The OC is responsible for the coordination, operations planning, operation and maintenance of the interconnected systems operating in the Region. The OC's primary reliability goals include effective implementation of the *Reliability Process for the FRCC Bulk Electric System* document by all operators within the Region. This includes oversight of the FRCC Reliability Coordinator (RC) registered entity function, development and approval of processes and procedures that support reliability and compliance with applicable regulations, including NERC Reliability Standards and support of the FRCC Internal Compliance Program (ICP) for the RC registered function. In addition, the OC supports continuous improvement of operations coordination, an effective and secure communications network, a robust operations planning study program as well as various training activities and initiatives. The OC relies on several subordinate groups to implement its objectives. These include the Operating Reliability Subcommittee (ORS), Data Exchange Working Group (DEWG), Fuel Reliability Working Group (FRWG), Operations Planning Working Group (OPWG), Telecommunications Subcommittee (TS), System Protection and Control Subcommittee (SPCS), Critical Infrastructure Protection Subcommittee (CIPS) and the System Operator Subcommittee (SOS).

### **Operating Reliability Subcommittee (ORS)**

The ORS provides overall administration for the development and implementation of operating procedures and other reliability matters including the oversight of the FRCC RC function for Operating and Planning (non-CIP) NERC Standards and direct support of the FRCC Internal Compliance Program for the RC registered function. The ORS reviews and assesses regional import and export limits, scheduled transmission outages, real-time system reliability, events analysis, information and data exchange and other reliability issues. The ORS provides formal oversight and implementation of the *Reliability Process for the FRCC Bulk Electric System* document which establishes the reliability responsibilities of the various operating entities within the Region and specifically monitors the agent responsible for performing the RC functions.

### **Data Exchange Working Group (DEWG)**

The DEWG, subordinate to the ORS, supports the real-time data needs of the FRCC RC and other operating entities. It is also responsible for developing methodologies to facilitate the exchange of real-time, modeling and other operational data to help ensure reliable BPS

operations. Accurate data exchange and modeling of the FRCC is essential to maintaining situation awareness and ensuring reliability. Within the FRCC, operating entities provide system data via the FRCC Reliability Data Link (RDL). The FRCC RDL is used to share electric system reliability data from the operating entities on a real-time basis.

### **Fuel Reliability Working Group (FRWG)**

The FRWG, subordinate to the ORS, has been established to deal with matters relating to fuel and impacts to BES reliability. Specifically, the FRWG provides the administrative oversight of a Regional fuel reliability forum that studies the interdependencies of fuel availability and electric reliability and supports coordinated Regional responses to fuel issues and fuel emergencies.

### **Operations Planning Working Group (OPWG)**

The OPWG, also subordinate to the ORS, was established to provide oversight, guidelines and procedures to the FRCC Operations Planning Coordinator (OPC) function in accordance with the *Reliability Process for the FRCC Bulk Electric System* document. The OPWG focuses on BES reliability and developing operations planning processes and study protocols that support regional reliability and adherence to the NERC Reliability Standards as they relate to the OPC function.

### **Telecommunications Subcommittee (TS)**

The TS provides oversight for the TS budget which is included in the OC budget. The primary purpose of the TS is to ensure that adequate and redundant communications facilities are made available to the operating entities within the FRCC, including the FRCC RC. The TS administers the FRCC Hotline program, Satellite phone program, and also ensures that reliable and redundant communications are maintained within, and external to, the FRCC RC footprint. All TS programs are non-statutory and support the RC and operating entity functions; with the exception of the FRCC satellite phone (located at the FRCC office) which is a tool that can be used by the Regional Entity to enhance situation awareness and thus is budgeted as statutory.

### **System Protection and Control Subcommittee (SPCS)**

The FRCC System Protection and Control Subcommittee (SPCS) has primary responsibility for supporting the coordination of protection and control systems within the FRCC region, including regional disturbance monitoring equipment, review of protective system mis-operations, protection related disturbance analysis and implementation of specific regional programs and procedures including the assessments of the FRCC Under-Frequency Load Shedding Program. The SPCS also reviews and coordinates system protection and control equipment installations, settings, protection philosophies and testing criteria within the Region when installations can impact multiple entities. The SPCS serves as an important forum for sharing subject matter expert guidance and lessons learned / best practices for equipment issues and protection coordination.

### **Critical Infrastructure Protection Subcommittee (CIPS)**

The purpose of the FRCC CIPS is to recommend improvements to enhance the physical and cyber security of the critical BES infrastructure in the FRCC Region, with an emphasis on protecting, preventing, limiting and recovering from malicious activities directed at the FRCC critical energy infrastructure. The CIPS provides guidance to the OC on matters of critical energy infrastructure security, including cyber and physical security. The CIPS provides advice

to the OC including impact and implementation of CIP NERC Reliability Standards that apply to the FRCC Reliability Coordinator registered function.

### **Event Analysis Working Group (EAWG)**

The FRCC Event Analysis Working Group (EAWG) has been established as a peer review process within the FRCC Region to encourage consistency and quality of entity event reports submitted through the ERO Event Analysis Process. The EAWG also serves as a forum for FRCC registered entities to voluntarily disseminate individual entity lessons learned in a timely manner as well as serve as an interface with the ERO to receive other relevant event and “lessons learned” information. The EAWG primarily supports the Regional Entity efforts in Event Analysis and Reliability Improvements.

### **System Operator Subcommittee (SOS)**

The FRCC System Operator Subcommittee (SOS) develops and delivers training in which FRCC grants NERC Continuing Education Hours (CEHs) to those individuals who successfully complete sanctioned courses through the SOS organized activities. The SOS is made up of member company training personnel and supports FRCC training activities by reviewing and providing training content. While most of the activities of the SOS support FRCC Regional Entity efforts, the SOS reports to the FRCC Operating Committee.

### **FRCC Reliability Coordinator (RC) Registered Function**

The FRCC is a NERC registered Reliability Coordinator that, by FERC order, comes under the jurisdiction of the SERC Regional Entity as its Compliance Enforcement Authority (CEA). In addition to the committee work and oversight of its subordinate groups, the OC supports reliable operations and maintenance activities through the implementation and oversight of those FRCC Reliability Coordinator (RC) functions as established in the *Reliability Process for the FRCC Bulk Electric System*. The FRCC RC responsibilities include the real-time operating function and the next-day operations planning function. The RC tasks are performed by a designated agent of the FRCC with direction and oversight by FRCC committees and support staff. The designated agent performs real-time operations and next-day planning operations. FRCC staff further supports Regional reliability by performing the roles of the Operations Planning Coordinator (OPC), and State Capacity Emergency Coordinator (SCEC) as defined in the *Reliability Process for the FRCC Bulk Electric System* document.

The FRCC RC function is accountable to the FRCC OC who has overall responsibility of the administration, development and implementation of RC and some non-RC operating procedures approved by the OC. Many of the policies and procedures developed by the OC and its sub groups, support Regional reliability as well as entity compliance with NERC Operations & Planning Standards.

### **Regulatory Oversight of Registered Functions**

The FRCC continues to improve FRCC PA and RC compliance management programs under the Member Services Division. The Division along with its committees, support an independent Member Services Regulatory Department with a dedicated Regulatory Director who reports directly to the FRCC President and CEO and who has direct access to the FRCC Board of Directors. This position is responsible for the implementation, maintenance and oversight of the FRCC Internal Compliance Program (ICP) including all compliance activities for the FRCC registered entity functions and is the primary interface for all regulatory activities associated with



the FRCC Member Services committees and is the FRCC liaison between external Compliance Enforcement Authorities.

## Major 2017 Cost Impacts

The FRCC's proposed 2017 Members Services budgeted expenses and net fixed assets are \$10,198,585, which is a \$1,506,588 or 17% increase over the 2016 budgeted expenses.

### Planning Committee (PC)

The Member Services Planning Committee (PC) expenses for 2017 are made up of the PC Committee budget, as well as the administrative costs to provide support personnel for implementation of the FRCC Planning Authority (PA) functions and all other Member Services PC activities.

The 2017 PC budget is developed based on the activities of the Regional Projects Subcommittee (RPS), the Resource Working Group (RWG), the Stability Working Group (SWG) and the Transmission Working Group (TWG). These budgets are primarily for the labor involved in coordination activities performed by member representatives, software and meeting costs.

### Operating Committee (OC)

The Member Services Operating Committee (OC) expenses for 2017 are made up of a 2017 OC technical budget as well as the Member Services Department related administrative costs to provide support personnel for implementation of the FRCC Reliability Coordinator (RC) functions and other Member Services (Non RC) activities. In 2017, the OC, along with staff, will continue to directly support implementation of the RC function, support RC and entity training, improve the compliance posture of the RC function as well as continue coordinating the activities of member companies to ensure continued reliability of the FRCC RC footprint.

The 2017 OC budget was developed based primarily on the activities of the Operating Reliability Subcommittee (ORS), the Telecommunications Subcommittee (TS), the Fuel Reliability Working Group (FRWG) and the Critical Infrastructure Protection Subcommittee (CIPS). These budgets are related to, or in support of both the FRCC Reliability Coordinator (RC) and Member Services entity's reliability functions and include consulting costs, contract costs, computer software purchases and expenses to support the associated activities. The technical budgets do not include FRCC staff salaries or associated personnel costs.

The staff includes dedicated employees as well as shared employees.

## 2016 Member Services Budget and Projection and 2017 Budget Comparisons

### Statement of Activities, Fixed Assets Expenditures and Change in Working Capital 2016 Budget & Projection, and 2017 Budget

#### NON-STATUTORY MEMBER SERVICES

Funding	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>ERO Funding</b>					
ERO Assessments	\$ -	\$ -	\$ -	\$ -	\$ -
Penalty Sanctions	-	-	-	-	-
<b>Total ERO Funding</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Membership Dues	\$ 8,595,503	\$ 8,595,503	\$ -	10,301,621	1,706,118
Testing Fees	-	-	-	-	-
Services & Software	277,790	277,790	-	203,700	(74,090)
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding</b>	<u>\$ 8,873,293</u>	<u>\$ 8,873,293</u>	<u>\$ -</u>	<u>\$ 10,505,321</u>	<u>\$ 1,632,028</u>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 2,426,216	\$ 2,525,632	\$ 99,416	\$ 2,872,547	\$ 446,331
Payroll Taxes	143,604	153,533	9,929	171,024	27,420
Benefits	358,720	449,650	90,930	482,575	123,855
Retirement Costs	370,837	370,757	(80)	410,392	39,555
<b>Total Personnel Expenses</b>	<u>\$ 3,299,377</u>	<u>\$ 3,499,572</u>	<u>\$ 200,195</u>	<u>\$ 3,936,538</u>	<u>\$ 637,161</u>
<b>Meeting Expenses</b>					
Meetings	\$ 34,082	\$ 34,297	\$ 215	\$ 31,209	\$ (2,873)
Travel	68,597	80,950	12,353	88,973	20,376
Conference Calls	32,957	32,991	34	32,713	(244)
<b>Total Meeting Expenses</b>	<u>\$ 135,636</u>	<u>\$ 148,238</u>	<u>\$ 12,602</u>	<u>\$ 152,895</u>	<u>\$ 17,259</u>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 4,193,583	\$ 4,413,498	\$ 219,915	\$ 5,255,111	\$ 1,061,528
Office Rent	245,183	259,649	14,466	273,573	28,390
Office Costs	423,151	462,445	39,294	330,765	(92,386)
Professional Services	47,894	53,615	5,721	42,501	(5,393)
Miscellaneous	-	-	-	-	-
Depreciation	85,874	86,695	821	112,507	26,633
<b>Total Operating Expenses</b>	<u>\$ 4,995,685</u>	<u>\$ 5,275,902</u>	<u>\$ 280,217</u>	<u>\$ 6,014,457</u>	<u>\$ 1,018,772</u>
<b>Total Direct Expenses</b>	<u>\$ 8,430,698</u>	<u>\$ 8,923,712</u>	<u>\$ 493,014</u>	<u>\$ 10,103,890</u>	<u>\$ 1,673,192</u>
<b>Indirect Expenses</b>	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Other Non-Operating Expenses</b>	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Expenses</b>	<u>\$ 8,430,698</u>	<u>\$ 8,923,712</u>	<u>\$ 493,014</u>	<u>\$ 10,103,890</u>	<u>\$ 1,673,192</u>
<b>Change in Assets</b>	<u>\$ 442,595</u>	<u>\$ (50,419)</u>	<u>\$ (493,014)</u>	<u>\$ 401,431</u>	<u>\$ 41,164</u>
<b>Fixed Assets</b>					
Depreciation	\$ (85,874)	\$ (86,695)	\$ (821)	\$ (112,507)	\$ (26,633)
Total Fixed Asset Purchases	347,173	318,838	(28,335)	207,202	(139,971)
<b>Change in Fixed Assets</b>	<u>\$ (261,299)</u>	<u>\$ (232,143)</u>	<u>\$ 29,156</u>	<u>\$ (94,695)</u>	<u>\$ 166,604</u>
<b>TOTAL BUDGET</b>	\$ 8,691,997	\$ 9,155,855	\$ 463,858	\$ 10,198,585	\$ 1,506,588
<b>TOTAL CHANGE IN WORKING CAPITAL</b>	<u>\$ 181,296</u>	<u>\$ (282,562)</u>	<u>\$ (463,858)</u>	<u>\$ 306,736</u>	<u>\$ 125,440</u>
FTEs	18.06	18.06	-	20.43	2.37

## Personnel Analysis

Total FTE's by Program Area	Budget 2016	Projection 2016	Direct FTEs 2017 Budget	Shared FTEs <sup>1</sup> 2017 Budget	Total FTEs 2017 Budget	Change from 2016 Budget
<b>NON-STATUTORY</b>						
<b>Operational Programs</b>						
Operations Committee	10.55	10.18		10.90	10.90	0.35
Planning Committee	3.96	4.20		5.43	5.43	1.47
<b>Total FTEs Operational Programs</b>	<b>14.51</b>	<b>14.38</b>	<b>0.00</b>	<b>16.33</b>	<b>16.33</b>	<b>1.82</b>
<b>Administrative Programs</b>						
General & Administrative	3.55	3.68		4.10	4.10	0.55
<b>Total FTEs Administrative Programs</b>	<b>3.55</b>	<b>3.68</b>	<b>0.00</b>	<b>4.10</b>	<b>4.10</b>	<b>0.55</b>
<b>Total FTEs</b>	<b>18.06</b>	<b>18.06</b>	<b>0.00</b>	<b>20.43</b>	<b>20.43</b>	<b>2.37</b>

<sup>1</sup>A shared FTE is defined by NERC as an employee who performs both Statutory and Non-Statutory functions.

**Member Services Reserve Analysis — 2016 – 2017**

Working Capital Reserve Analysis 2016-2017	
NON-STATUTORY MEMBER SERVICES	
Beginning Working Capital Reserve (Deficit), December 31, 2015	825,708
	2016 Funding (from members) 8,595,503
	2016 Projected Other funding sources 277,790
<b>Total Cash Available 2016</b>	<b>9,699,001</b>
Less: '2016 Projected expenses & capital expenditures	<b>(9,155,855)</b>
<b>Projected Working Capital Reserve Surplus/(Deficit), December 31, 2016</b>	<b>543,146</b>
Desired Working Capital Reserve, December 31, 2017	<sup>1</sup> 849,882
Less: Projected Working Capital Reserve, December 31, 2016	<b>(543,146)</b>
<b>Increase(decrease) in assessments to achieve desired Working Capital Reserve</b>	<b>306,736</b>
	2017 Expenses and Capital Expenditures 10,198,585
	Less: Other Funding Sources <b>(203,700)</b>
Adjustment to achieve desired Working Capital Reserve	<b>306,736</b>
<b>2017 Funding (reserve adjustment)</b>	<b>10,301,621</b>

<sup>1</sup> On June 26, 2013, the FRCC Board of Directors set a working capital and operating working capital and operating reserve requirement of one (1) month of the total annual budget. The FRCC has a \$1.5 million line of credit.

**Section D – Additional Consolidated Financial  
Statements**  
**2017 Business Plan and Budget**

**Section D — 2017 Additional Consolidated Financial Information**

Statement of Activities and Capital Expenditures by Program 2017 Budget	Total	Statutory Total	Non-Statutory Total	Statutory Total	Reliability Standards Development (Section 300)	Compliance Monitoring and Org Reg % Cert (Section 400 & 500)	Reliability Assessment and Performance Analysis (Section 800)	Training and Education (Section 900)	Situation Awareness and Infrastructure Security (Section 1000)	General and Administrative	Non-Statutory Total	Operating Committee	Planning Committee
<b>Funding</b>													
<b>ERO Funding</b>													
ERO Assessments	\$ 6,163,896	\$ 6,163,896	\$ -	\$ 6,163,896	\$ 392,887	\$ 5,263,317	\$ 1,011,039	\$ 314,044	\$ 9,567	\$ (826,959)	\$ -	\$ -	\$ -
Penalty Sanctions	95,000	95,000	-	95,000	5,448	72,106	13,251	4,086	110	-	-	-	-
<b>Total ERO Funding</b>	<b>6,258,896</b>	<b>6,258,896</b>	<b>-</b>	<b>6,258,896</b>	<b>398,334</b>	<b>5,335,423</b>	<b>1,024,290</b>	<b>318,130</b>	<b>9,678</b>	<b>(826,959)</b>	<b>-</b>	<b>-</b>	<b>-</b>
Membership Dues	\$ 10,301,621	\$ -	\$ 10,301,621	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,301,621	\$ 8,490,433	\$ 1,811,188
Testing Fees	-	-	-	-	-	-	-	-	-	-	-	-	-
Services & Software	203,700	-	203,700	-	-	-	-	-	-	-	203,700	179,700	24,000
Workshops	92,000	92,000	-	92,000	-	-	-	92,000	-	-	-	-	-
Interest	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Funding</b>	<b>\$ 16,856,217</b>	<b>\$ 6,350,896</b>	<b>\$ 10,505,321</b>	<b>\$ 6,350,896</b>	<b>\$ 398,334</b>	<b>\$ 5,335,423</b>	<b>\$ 1,024,290</b>	<b>\$ 410,130</b>	<b>\$ 9,678</b>	<b>\$ (826,959)</b>	<b>\$ 10,505,321</b>	<b>\$ 8,670,133</b>	<b>\$ 1,835,188</b>
<b>Expenses</b>													
<b>Personnel Expenses</b>													
Salaries	\$ 6,831,246	\$ 3,958,699	\$ 2,872,547	\$ 3,958,699	\$ 212,820	\$ 2,461,771	\$ 517,669	\$ 159,615	\$ 4,314	\$ 602,510	\$ 2,872,547	\$ 1,927,237	\$ 945,310
Payroll Taxes	404,856	233,832	171,024	233,832	12,687	144,595	30,860	9,515	257	35,918	171,024	114,780	56,244
Benefits	1,170,537	687,962	482,575	687,962	37,965	459,445	85,720	23,701	649	80,482	482,575	335,357	147,218
Retirement Costs	1,002,336	591,944	410,392	591,944	31,264	372,041	76,047	23,448	634	88,510	410,392	271,625	138,767
<b>Total Personnel Expenses</b>	<b>\$ 9,408,975</b>	<b>\$ 5,472,437</b>	<b>\$ 3,936,538</b>	<b>\$ 5,472,437</b>	<b>\$ 294,736</b>	<b>\$ 3,437,852</b>	<b>\$ 710,296</b>	<b>\$ 216,279</b>	<b>\$ 5,854</b>	<b>\$ 807,420</b>	<b>\$ 3,936,538</b>	<b>\$ 2,648,999</b>	<b>\$ 1,287,539</b>
<b>Meeting Expenses</b>													
Meetings	\$ 112,421	\$ 81,212	\$ 31,209	\$ 81,212	\$ 1,479	\$ 10,857	\$ 1,261	\$ 67,603	\$ 12	\$ -	\$ 31,209	\$ 16,616	\$ 14,593
Travel	259,059	170,086	88,973	170,086	11,676	93,365	47,221	17,786	38	-	88,973	75,484	13,489
Conference Calls	45,994	13,281	32,713	13,281	1,997	9,286	275	1,720	3	-	32,713	17,745	14,968
<b>Total Meeting Expenses</b>	<b>\$ 417,474</b>	<b>\$ 264,579</b>	<b>\$ 152,895</b>	<b>\$ 264,579</b>	<b>\$ 15,152</b>	<b>\$ 113,508</b>	<b>\$ 48,757</b>	<b>\$ 87,109</b>	<b>\$ 53</b>	<b>\$ -</b>	<b>\$ 152,895</b>	<b>\$ 109,845</b>	<b>\$ 43,050</b>
<b>Operating Expenses</b>													
Consultants & Contracts	\$ 5,785,440	\$ 530,329	\$ 5,255,111	\$ 530,329	\$ 7,443	\$ 417,540	\$ 74,594	\$ 30,583	\$ 169	\$ -	\$ 5,255,111	\$ 5,011,149	\$ 243,962
Office Rent	826,176	552,603	273,573	552,603	19,814	413,238	48,195	14,860	402	56,094	273,573	182,495	91,078
Office Costs	463,278	132,513	330,765	132,513	5,308	91,505	10,422	20,588	2,086	2,604	330,765	304,796	25,969
Professional Services	80,000	37,499	42,501	37,499	2,150	28,462	5,225	1,612	50	-	42,501	21,681	20,820
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-
Depreciation	255,132	142,625	112,507	142,625	2,489	130,006	8,379	1,707	44	-	112,507	96,900	15,607
<b>Total Operating Expenses</b>	<b>\$ 7,410,026</b>	<b>\$ 1,395,569</b>	<b>\$ 6,014,457</b>	<b>\$ 1,395,569</b>	<b>\$ 37,204</b>	<b>\$ 1,080,751</b>	<b>\$ 146,815</b>	<b>\$ 69,350</b>	<b>\$ 2,751</b>	<b>\$ 58,698</b>	<b>\$ 6,014,457</b>	<b>\$ 5,617,021</b>	<b>\$ 397,436</b>
<b>Total Direct Expenses</b>	<b>\$ 17,236,475</b>	<b>\$ 7,132,585</b>	<b>\$ 10,103,890</b>	<b>\$ 7,132,585</b>	<b>\$ 347,092</b>	<b>\$ 4,632,111</b>	<b>\$ 905,868</b>	<b>\$ 372,738</b>	<b>\$ 8,658</b>	<b>\$ 866,118</b>	<b>\$ 10,103,890</b>	<b>\$ 8,375,865</b>	<b>\$ 1,728,025</b>
<b>Indirect Expenses</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>49,665</b>	<b>657,391</b>	<b>120,807</b>	<b>37,249</b>	<b>1,007</b>	<b>(866,118)</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Other Non-Operating Expenses</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Expenses</b>	<b>\$ 17,236,475</b>	<b>\$ 7,132,585</b>	<b>\$ 10,103,890</b>	<b>\$ 7,132,585</b>	<b>\$ 396,757</b>	<b>\$ 5,289,502</b>	<b>\$ 1,026,675</b>	<b>\$ 409,987</b>	<b>\$ 9,665</b>	<b>\$ -</b>	<b>\$ 10,103,890</b>	<b>\$ 8,375,865</b>	<b>\$ 1,728,025</b>
<b>Change in Assets</b>	<b>\$ (380,258)</b>	<b>\$ (781,690)</b>	<b>\$ 401,431</b>	<b>\$ (781,690)</b>	<b>\$ 1,577</b>	<b>\$ 45,921</b>	<b>\$ (2,385)</b>	<b>\$ 143</b>	<b>\$ 13</b>	<b>\$ (826,959)</b>	<b>\$ 401,431</b>	<b>\$ 294,268</b>	<b>\$ 107,163</b>
<b>Fixed Assets</b>													
Depreciation	\$ (255,132)	\$ (142,625)	\$ (112,507)	\$ (142,625)	\$ (2,489)	\$ (130,006)	\$ (8,379)	\$ (1,707)	\$ (44)	\$ -	\$ (112,507)	\$ (96,900)	\$ (15,607)
Total Fixed Asset Purchases	395,096	187,894	207,202	187,894	4066	175,927	5,994	1,850	57	-	207,202	186,527	20,675
<b>Change in Fixed Assets</b>	<b>\$ (139,964)</b>	<b>\$ (45,269)</b>	<b>\$ (94,695)</b>	<b>\$ (45,269)</b>	<b>\$ (1,577)</b>	<b>\$ (45,921)</b>	<b>\$ 2,385</b>	<b>\$ (143)</b>	<b>\$ (13)</b>	<b>\$ -</b>	<b>\$ (94,695)</b>	<b>\$ (89,627)</b>	<b>\$ (5,068)</b>

## Statement of Financial Position

### Statement of Financial Position 2015 Audited, 2016 Projection, 2017 Budget and 2018 Projected

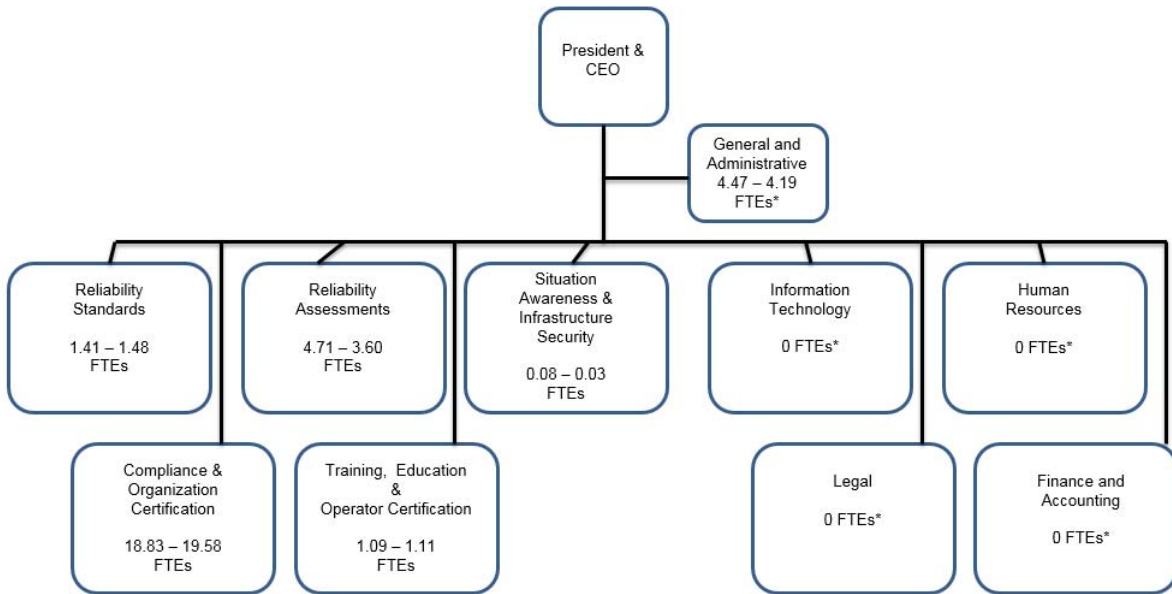
#### STATUTORY and NON-STATUTORY

	(Per Audit) 12/31/2015	Projected 12/31/2016	Budget 12/31/2017	Projected 12/31/2018
<b>ASSETS</b>				
Cash	5,162,919	4,830,823	4,310,601	4,610,601
Accounts receivable	3,246,441	3,266,441	3,286,441	3,436,441
Other receivables	-	-	-	-
Prepaid expenses and other current assets	123,991	125,000	135,000	145,000
Other Assets	327,261	234,761	242,261	249,761
Property and equipment (net of depreciation)	417,372	432,372	447,372	462,372
Total Assets	<b>9,277,984</b>	<b>8,889,397</b>	<b>8,421,675</b>	<b>8,904,175</b>
<b>LIABILITIES AND NET ASSETS</b>				
Liabilities				
Accounts payable and accrued expenses	2,614,847	2,682,347	2,764,847	2,822,347
Deferred income	3,809,740	3,805,990	4,116,379	4,633,339
Compliance Penalty Assessment	147,000	81,000	95,000	-
Accrued postretirement benefits obligation	423,862	441,862	463,955	487,153
Total Liabilities	<b>6,995,449</b>	<b>7,011,199</b>	<b>7,440,181</b>	<b>7,942,839</b>
Net Assets - unrestricted	2,282,535	1,878,198	981,493	961,336
Total Liabilities and Net Assets	<b>9,277,984</b>	<b>8,889,397</b>	<b>8,421,675</b>	<b>8,904,175</b>

## Statutory Organizational Chart

**Florida Reliability Coordinating Council, Inc.  
Statutory Organization Chart**

**2016 Budgeted FTEs 30.59  
2017 Budgeted FTEs 29.99**



\*All FTEs for Information Technology, Legal, Finance, and Human Resources, are recorded within General and Administrative



**DOCKET NO. RR17-\_\_-000**

**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**2017 BUSINESS PLAN AND BUDGET FILING**

**ATTACHMENT 4**

**MIDWEST RELIABILITY ORGANIZATION**

**PROPOSED 2017 BUSINESS PLAN AND BUDGET**



**MIDWEST  
RELIABILITY  
ORGANIZATION**

380 St Peter Street, #800  
Saint Paul, MN 55102  
651-855-1760/651-855-1712  
[www.midwestreliability.org](http://www.midwestreliability.org)

# **Midwest Reliability Organization**

## **2017 Business Plan and Budget**

**Approved by:  
MRO Board of Directors**

**Date:  
June 30, 2016**

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## Introduction

The following table summarizes the Midwest Reliability Organization (MRO) budget for 2017.

TOTAL RESOURCES (in whole dollars)				
	2017 Budget	U.S.	Canada	Mexico
Statutory FTEs	43.00			
Non-statutory FTEs				
<b>Total FTEs</b>	43.00			
Statutory Expenses	\$ 11,413,887			
Non-Statutory Expenses	\$ -			
<b>Total Expenses</b>	\$ 11,413,887			
Statutory Inc(Dec) in Fixed Assets	\$ (187,219)			
Non-Statutory Inc(Dec) in Fixed Assets	\$ -			
<b>Total Inc(Dec) in Fixed Assets</b>	\$ (187,219)			
Statutory Working Capital Requirement	\$ (566,073)			
Non-Statutory Working Capital Requirement				
<b>Total Working Capital Requirement</b>	\$ (566,073)			
Total Statutory Funding Requirement	\$ 10,660,595			
Total Non-Statutory Funding Requirement	\$ -			
<b>Total Funding Requirement</b>	\$ 10,660,595			
<b>Statutory Funding Assessments</b>	\$ 10,494,345	\$ 8,717,286	\$ 1,777,059	-
<b>Non-Statutory Fees</b>				
NEL	283,136,065	235,938,940	47,197,125	-
NEL%	100.00%	83.33%	16.67%	0.00%

**Table 1. MRO Budget for 2017**

## Organizational Overview

MRO is a nonprofit corporation<sup>1</sup> responsible for promoting and improving the reliability of the bulk power system (BPS). MRO's Region is the north central area of North America, including parts of both the United States and Canada. Under section 215(e)(4) of the Federal Power Act (FPA), the Federal Energy Regulatory Commission (FERC) approved the North American Electric Reliability Corporation (NERC) as the electric reliability organization (ERO) and the delegation of certain statutory functions to the Regional Entities (REs). NERC executed an initial Delegation Agreement with MRO on May 2, 2007 for the purpose of delegating to MRO certain responsibilities and authorities of an RE as defined by FPA section 215. The most recent Delegation Agreement was approved by the Federal Energy Regulatory Commission on March 23, 2016 and expires December 31, 2020. MRO's delegated functions under the approved agreement are: Development and Proposal of Reliability Standards and Organization Registration and

<sup>1</sup> MRO is classified under the Internal Revenue Service as a 501(c)(3) organization.

Certification, Compliance, Risk Assessment and Mitigation, Enforcement, Reliability Assessment and Performance Analysis, Event Analysis, Training and Education, Situation Awareness, and Infrastructure Security.

## Membership and Governance

Membership in MRO is voluntary and at no cost, affording organizations the opportunity to participate in the technical activities and governance of the organization. MRO has approximately fifty-eight members.

The governance structure of MRO is a hybrid stakeholder board with seventeen board members elected by seven sectors and two independent directors elected by all members. No two sectors can control a vote. This governance structure is permitted under the Energy Policy Act of 2005 for Regional Entities operating under delegated authority from the ERO. The Board has four committees:

- Dispute Resolution Committee
- Finance and Audit Committee
- Governance and Personnel Committee
- Hearing Body Committee

The Board's primary role is to ensure the organization meets its requirements under the bylaws and performs its responsibilities with due care and in an efficient manner. The Board makes no determinations on compliance or enforcement matters. The Board has adopted procedures to ensure it carries out its responsibilities free of conflicts. The Hearing Body of the Board fulfills the obligations in the conduct of hearings, a mandated function under the Hearing Procedures found in the Compliance Monitoring and Enforcement Program (CMEP).

In addition, the Board has appointed four standing technical committees comprised of stakeholders:

- Compliance Committee
- Operating Committee
- Planning Committee
- Standards Committee

The charters for these standing committees are published on MRO's website and the processes for all organizational groups are defined in the Board-approved Policy and Procedure 3 (Establishment, Responsibilities, and Procedures of Organizational Groups).<sup>2</sup>

## Statutory Functional Scope

The primary purposes of MRO are to:

1. Determine compliance with Reliability Standards, including enforcement determinations in a non-discriminatory manner consistent with the NERC Rules of Procedure.
2. Perform seasonal, long-term, and other assessments of reliability.
3. Provide independent technical analysis of system events and work with industry on recommendations and lessons learned.
4. Develop, propose, and/or adopt Regional Reliability Standards or variances to Reliability Standards.

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<sup>2</sup> See Policy and Procedure 3 (Establishment, Responsibilities, and Procedures of Organizational Groups) on MRO's website at: [http://www.midwestreliability.org/01\\_about\\_mro/overview/policies\\_procedures/PP3\\_%20Organizational%20Groups.pdf](http://www.midwestreliability.org/01_about_mro/overview/policies_procedures/PP3_%20Organizational%20Groups.pdf)

5. Perform other services consistent with its reliability charter, Delegation Agreement, and the Rules of Procedure.

MRO provides a transparent, effective, and efficient reliability organization<sup>3</sup> across a broad geographic region with open meetings:

1. MRO is an effective Regional Entity that has a long tradition of managing within and across complex, multiple seams including an interconnection seam, structured markets to bilateral market seams, and an international border.
2. MRO creates a common forum for the region without barriers to participation.
3. The MRO Region has a tradition of working successfully on reliability matters despite the complexities in seams, diverse constituencies, and jurisdictions. Approximately half of the load in MRO is public power, including Canada. MRO is a vital link to maintain and expand existing “reliability” relationships among regulators, bulk electric users, owners, and operators.
4. Because of the seams, unique power system technical configurations (such as very long distances between load and generator, stability-limited transmission, the large percentage of hydro generation, and the diversity of its constituency), the region must have the ability and means to represent its own regional reliability interests for the benefit of the users, owners, and operators of the Bulk Electric System (BES) and the public it serves as a Cross Border Regional Entity under the final reliability rule and consistent with the Bilateral Principles.
5. MRO has a Standards Process Manual that has been approved by NERC and FERC.

The 2017 Business Plan and Budget fulfills MRO’s commitments related to the delegated functions, consistent with FERC and Canadian authorities to:

- Implement compliance and enforcement programs to those subject to Reliability Standards.
- Execute a non-discriminatory, consistent enforcement process to those subject to Reliability Standards.
- Adopt Reliability Standards to ensure enforceability. Canadian enforceability has been sought through agreements with Saskatchewan Power Corporation and in Manitoba pursuant to the Manitoba Hydro Act (2012) as implemented in the Manitoba Reliability Standards Regulation.
- Maintain a Standards Process Manual that provides for an open, technically valid process to adopt standards as needed to benefit the reliability of the MRO Region.
- Provide education and resources for operators, users, and owners of the BES.
- Assess and report on regional BES reliability and adequacy.
- Analyze and report on regional BES system events.

## Budget

MRO prepares an annual Business Plan and Budget for each calendar year. The development of the Business Plan and Budget begins with an annual MRO Board strategic planning session, at which long-term goals are set for MRO. The Business Plan and Budget is then developed by MRO staff between March and June of the year preceding the budget year with input from MRO’s stakeholders. The Business Plan and Budget is developed in conjunction with those of other REs and NERC to ensure consistency in the budgets of entities charged with FPA section 215

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<sup>3</sup> In its *Order on the Electric Reliability Organization’s Five-Year Performance Assessment* the Federal Energy Regulatory Commission found that “the Regional Entities [including MRO] continue to satisfy applicable statutory and regulatory criteria.” North American Electric Reliability Corporation, 149 F.E.R.C. ¶ 61,141 at P 2 (2014).

responsibilities. MRO staff also participates in NERC's ERO Executive Management Group to review strategic goals and objectives for the REs, and to review common assumptions included in their business plans and budgets.

MRO's budget development employs both a "top-down" and a "bottom-up" approach. The top-down approach is initiated by MRO's Chief Executive Officer (CEO), who sets the parameters for the number of staff and an initial overall percent increase in the budget based on the strategic initiatives of the organization. The bottom-up approach is coordinated among MRO's managers and vice presidents, who calculate budget amounts for their respective departments using a detailed, line-by-line approach after reviewing actual costs from the most recent year-end, as well as current year-to-date costs. This is a zero based budgeting approach. The bottom-up figures from all departments are then aggregated and reconciled with the CEO's top-down budget figures.

MRO maintains a cash reserve at all times, capable of funding MRO's operations as laid out in MRO's Operating and Working Capital Reserves policy. This cash reserve is in addition to the funding necessary for MRO's normal operations. MRO's annual Business Plan and Budget includes a request to fund MRO's operating and working capital reserves consistent with the policy. The operating and working capital reserves shall be identified and quantified each year in the Business Plan and Budget, submitted first to the Finance and Audit Committee (FAC) for review and then to the Board for approval.

Upon completion, the Business Plan and Budget is reviewed by the FAC. The Business Plan and Budget is posted for stakeholder comment and then sent to the Board for approval. Once approved by the Board, the plan is submitted to NERC for approval and then to the government regulator. The plan is typically finalized by FERC approval in October or November of the year preceding the budget year.

## Accounting and Recordkeeping

MRO's accounting is performed by the Vice President of Finance and the MRO accounting staff. MRO bases its current Chart of Accounts upon NERC's System of Accounts, as required in the Delegation Agreement, and uses Generally Accepted Accounting Principles for the classification of its expenses. Additionally, MRO maintains an accounting manual to provide instructions to its accounting staff on accounting transactions and functions. MRO maintains its books on an accrual basis, recognizing revenues when earned and expenses when incurred. The majority of MRO expenses are direct labor costs. These costs are recorded in the accounting system by NERC account. Indirect costs are allocated to each MRO program area based on the number of full-time equivalents (FTEs) in each program area.

## Organizational Structure and Staffing

MRO is organized into departments, all of which are dedicated to a statutory function or program area. Additionally, some functions, such as training and education, and committee and member functions, are the responsibility of multiple departments. The NERC System of Accounts assigns an account number to each statutory function outlined in the delegation agreements between NERC and the Regional Entities. MRO's accounting system is similarly organized by NERC account, meaning that while MRO tracks costs by department, MRO simultaneously tracks costs by NERC account.

All MRO employees have a "home" department area to which they are assigned. However, most MRO employees work in multiple program areas. For instance, employees whose home



department area is compliance may also assist in Reliability Standards development. MRO employees track their time working in each program area, and their budgeted labor costs are allocated to the various program areas in which they work.

The Compliance department encompasses MRO's audit, spot checks and self-certification activities and is headed by a Vice President.

The Risk Assessment and Mitigation and Registration and Reliability Standards functions are two departments reporting to one Vice President.

Enforcement and Regulatory Affairs is responsible for enforcement of Reliability Standards violations within the MRO region based upon the evaluations provided by the risk assessment and mitigation staff and is headed by a Vice President.

MRO's Operations department is responsible for reliability assessment, performance analysis, event analysis, situation awareness, infrastructure security, and IT functions. This department is headed by a Vice President.

MRO's Vice President, General Counsel, Corporate Secretary and Director of External Affairs provides legal advice to MRO, serves as the corporate secretary, and heads MRO's communications efforts and external affairs.

MRO's Finance and Administration department performs human resources, accounting, finance, budget, and treasury functions and is headed by a Vice President.

The Executive department, led by the CEO, is responsible for governance activities of the Board.

## **Financial Controls and Expense Approvals**

MRO maintains formal policies governing travel expense reimbursement, corporate credit card usage, contractor use, and procurement. MRO's Employee Handbook also addresses financial controls and expense approvals.

MRO staff travel to conduct audits, perform reliability assessments, and attend industry meetings and training. MRO's Expense Statement Guidelines provide guidance to MRO employees on reimbursable travel expenses. Expenses are reviewed for proper documentation and reasonableness by department managers and MRO's Vice President (VP) of Finance.

An independent auditing firm annually audits MRO's financial statements. MRO staff consults the FAC in reviewing the selection of the external auditor and the scope of the audit work. Once hired, the independent auditor communicates directly with the FAC Chair regarding audit matters. The FAC and MRO staff perform an annual review of the auditing firm's performance.

MRO's Contract Management Procedures (Procedures) govern the procurement of goods and services in excess of \$500. The Procedures dictate that an employee must have a Master Purchase Order approved by MRO's VP of Finance and his or her department VP for all purchases in excess of \$500. Additionally, purchases in excess of \$10,000 must also be approved by MRO's President and CEO.

MRO utilizes a time-tracking and reporting system for its employees. The system allows employees to track their labor hours by program area, project, and Registered Entity. New employees are trained on MRO's time-tracking policies and systems upon hiring.

## Compensation Process and Personnel Policies

MRO bases employee compensation on eight pay principles. The current pay structure uses a five-tiered structure. Each tier is divided into four scales reflecting experience and degree of knowledge, skills and abilities. MRO performs periodic compensation reviews.

MRO employees are required to sign a Standards of Conduct form, attesting that they will always act in the best interests of MRO, and that they will avoid conduct and commitments that may compromise their responsibilities to MRO. MRO employees are forbidden from owning a financial interest in any entity subject to Reliability Standards within the MRO region.

## 2017 Key Assumptions

The NERC and Regional Entity business plans and budgets reflect a set of common assumptions developed jointly by NERC and the Regional Entities as part of the annual business plan and budget process. NERC and the Regional Entities will also continue to work collaboratively to refine and revise procedures to eliminate duplication, increase operational efficiencies, enhance ERO-wide consistency, and achieve measurable reliability outcomes consistent with their respective roles and responsibilities located in Exhibit A of NERC's 2017 Business Plan and Budget.

## 2017 Goals and Key Deliverables

1. Serve as an independent, objective, and fair enforcement authority, without conflicts of interest.
  - A. Register entities commensurate to the risk to the BPS and ensure all key reliability entities are certified to have essential capabilities.
  - B. Enforce compliance of Registered Entities with mandatory Reliability Standards in accordance with the Delegation Agreement and CMEP. Perform timely and transparent reviews.
  - C. Ensure that all violations of mandatory Reliability Standards are mitigated in a timely, thorough, and comprehensive manner to prevent recurrence.
2. Promote a culture of compliance that addresses reliability risks across the MRO Region and the ERO.
  - A. Ensure that the industry understands the essential purpose of standards and compliance expectations.
  - B. Work with the industry to maintain effective risk control programs for compliance, reliability, and security.
  - C. Use efficient processes and proportional exercise of discretion to verify that the industry meets compliance objectives.
3. Identify the most significant risks to reliability in the MRO Region.
  - A. Identify and prioritize risks based on reliability impacts, cost/practicality assessments, projected resources, and emerging issues.

- B. Analyze events and system performance consistently to determine sequence, cause, and remediation. Identify reliability risks and trends to inform standards, compliance, and other programs.
  - C. Ensure that the industry is well-informed of emerging trends, risk analysis, lessons learned, and expected actions.
4. Mitigate reliability risks.
    - A. Ensure that the industry understands security threats and addresses them effectively.
    - B. Facilitate information-sharing among industry, Regions, ERO, and government.
    - C. Work with the ERO to track industry accountability for critical reliability and security recommendations.
  5. Promote a culture of reliability excellence.
    - A. Ensure reliable data modeling. Verify that the data represents system behavior accurately. Facilitate data-sharing among reliability entities.
    - B. Serve as a leading resource to industry and policy makers to supply reliability information.
  6. Improve transparency, consistency, quality and timeliness of results; collaborate with NERC and the other Regions; improve efficiencies and cost effectiveness.
    - A. Identify, understand, and manage internal risks.
    - B. Ensure processes are effective, efficient, and continually improving.

The vision of MRO is to “Maintain and improve the quality of life through a highly reliable regional Bulk Power System.” MRO’s purpose is to: “Strive to assure each Bulk Power System owner and operator within our region is a Highly Effective Reliability Organization.” MRO will leverage industry experts to address risks and improve reliability and security for the overall benefit of regional reliability. Through stakeholder processes, MRO will provide clarity on expectations and requirements; look to embed risk controls for assurance across the networked Bulk Electric System; and demonstrate results that improve reliability. For more information on MRO’s Vision, Purpose, and Principles, please refer to MRO’s website at <http://www.midwestreliability.org/>.

MRO’s business planning is driven by the annual strategic initiatives, which are used in conjunction with the organizational vision, purpose, and principles:

1. Simplification of regulation
2. Risk-based methodologies are implemented with proper rigor and safeguards
3. Improve clarity of standards and rules
4. Greater consistency within MRO and across NERC/Regional Entities
5. Coordinated communications around key policy matters

## Long-Term Business Planning

NERC and the Regional Entities are actively working together to improve the overall business planning and budgeting process, including long-term resource and financial planning. The 2017 Business Plan and Budget process included numerous face-to-face meetings, conference calls, and exchanges of documentation among senior management and staff of NERC and the REs regarding budget assumptions, resource requirements, and opportunities to improve operational efficiency and effectiveness, including factors affecting resource needs beyond the 2017 planning

horizon. As an important first step in the development of a long-term business plan and budgeting process, the Common Business Plan and Budget Assumptions attached as Exhibit A in the NERC 2017 Business Plan and Budget incorporates assumptions affecting resource demands through the 2019 planning horizon. NERC and the REs continue to work together to develop, strengthen and improve an integrated long-term business plan and budget that leverages and builds on the combined strengths and resources of NERC and the REs to improve the overall effectiveness and efficiency of operations. NERC and the REs will also continue to work collaboratively to refine and revise procedures to eliminate duplication, increase operational efficiencies, enhance ERO-wide consistency, and achieve measurable reliability outcomes consistent with their respective roles and responsibilities.

## 2017 Overview of Cost Impacts

MRO proposes to decrease its operating budget from \$11.35 million to \$11.23 million, a decrease of \$127,975. Funding assessments will decrease by \$397,215 or 3.7%.

## Operational Programs

### Funding Requirements — Explanation of Increase (Decrease)

#### Standards and Organization Registration and Certification

MRO will continue to focus on continent-wide standards. MRO will coordinate with NERC and the other regions on the implementation of Risk-Based Registration, which establishes a new NERC-led technical panel (containing three MRO employees) for the review of entity-specific registration requests based on risk. MRO will also participate in any ERO-wide efforts that impact Registration or Certification processes.

#### Compliance Monitoring and Enforcement Program (CMEP)

MRO has three independent programs within the NERC-defined CMEP:

##### 1) Compliance

Compliance staff is responsible for conducting compliance monitoring activities, including Compliance Audits, Self-Certifications, and Spot Checks. Additionally, Compliance conducts Internal Control Evaluations (ICEs) and leads development of Compliance Oversight Plans (COPs). Increased efforts tied to COP development in 2017 will be offset by a decrease in effort related to preparation for CIP v5 monitoring compliance, resulting in no significant net change in workload. Costs associated with this program are budgeted to decrease in 2017, primarily due to decreased business travel as there are fewer on-site audits scheduled for 2017.

##### 2) Risk Assessment and Mitigation (RAM)

Risk Assessment and Mitigation (RAM) undertakes an independent review of the facts and circumstances surrounding each potential noncompliance, and then determines whether sufficient evidence supports each finding. RAM works with the registered entity to develop an effective mitigation plan in the event that a finding is validated, and develops a recommended risk determination of the noncompliance for MRO Enforcement. RAM reviews each BPS event from a compliance perspective. RAM leads the development of entity Inherent Risk Assessments (IRAs) in order to develop customized oversight plans for each entity based

upon risk, and is working with NERC and the other Regions to develop ERO-wide procedures and concepts to ensure consistent approaches to the IRA process. RAM coordinates MRO's outreach with registered entities regarding application of standards for entity-specific facilities and configurations. CIP v5 has necessitated an expansion in these outreach efforts, which is expected to continue into 2017 and will include involvement in the development of the next version of CIP Standards with NERC and industry, as well as continued one-on-one meetings with entities requiring guidance.

### **3) Enforcement**

Validated violations move to the Enforcement staff, who review recommendations made by Risk Assessment and Mitigation, verify all relevant facts, and evaluate appropriate enforcement actions for final disposition and resolution. Enforcement staff reports to NERC regarding the status of all possible violations. MRO Enforcement staff may negotiate penalty settlements with registered entities, and coordinates review of settlement agreements by MRO's Hearing Body committee. Enforcement determinations are submitted by MRO staff to NERC for approval. Costs for this program are budgeted to decrease in 2017 because there is no planned Hearing Body training.

The factual review conducted by Risk Assessment and Mitigation and Enforcement staff is intended to ensure a consistent, accurate application of the NERC Reliability Standards. The three-step process also provides for segregation of duties, establishing independence among those making the findings, those assessing risk, and those determining and negotiating penalties and sanctions.

Budgeted 2017 costs are flat compared to the 2016 budget when considering the overall impact of the three independent programs combined. However, in 2017 there is a shift in resources to Risk Assessment and Mitigation as we put more emphasis on outreach efforts and less on Compliance and Enforcement. Due to rule changes approved by the Commission, we have increased efficiencies in Enforcement; in Compliance Monitoring, we have gained efficiencies through better planning, tools, and training; and revisions to the Fill in the Blank standards have also resulted in a more efficient use of resources. These factors have allowed us to re-invest resources into RAM. As a result, even though our workload has increased, we have been able to maintain a relatively flat headcount over the past years.

### **Reliability Assessment and Performance Analysis (RAPA)**

MRO's RAPA staff ensures comprehensive periodic assessments are performed, oversees periodic data collection, and reviews all event analysis efforts. RAPA identifies reliability risks to the BES in the MRO footprint in accordance with the Delegation Agreement and NERC's Rules of Procedure. RAPA's mission is to promote a culture of reliability excellence within the MRO BES. The program accomplishes this mission by identifying risks to reliability, analyzing performance, and prioritizing mitigation of significant risks. MRO reimburses travel expenses for stakeholder representation on both NERC and MRO technical groups to ensure organizations can participate on a "level playing field."

### **Training and Education**

For 2017, MRO will provide training to Registered Entities through workshops, webinars and via other opportunities at industry meetings; and by providing lessons learned in MRO's newsletter

and other publications. MRO will continue to identify training opportunities for Registered Entities in the MRO region so that they can also accomplish the objectives of the NERC programs.

## **Situation Awareness & Infrastructure Security Program**

### **Situation Awareness**

MRO utilizes the NERC Situation Awareness tool and monitors other communication systems to maintain an awareness of BES events and incidents. Staff is prepared to maintain awareness about the conditions of the BES and to respond to events by providing coordination assistance and communications between key parties.

### **General and Administrative**

There is an increase in the number of meetings and outreach efforts planned in 2017; however, budgeted meeting expenses are reduced slightly because of efficiencies and cost savings realized from hosting meetings at MRO. Reimbursement for stakeholder participant travel expenses will increase. Fees for independent MRO board members are included in Legal and Regulatory.

### **Legal and Regulatory**

There is a reduction in costs in legal and regulatory, as the staff in this area supports the expanded efforts in outreach, which is charged to the Training and Education program. Overall legal and regulatory budgeted costs for outside counsel will increase slightly.

### **Information Technology**

MRO strives to provide a secure network infrastructure and information technology systems to support the users. Systems that provide cyber and physical security will continue to be reviewed and updated to address the latest risks and protect data and information. MRO will use an independent party to assess the security of its infrastructure. MRO will continue to work with NERC and the other Regions to share solutions and work together on common issues.

### **Accounting / Human Resources**

#### **Building Rent and Facilities**

2017 costs include 12 months of the expanded facility.

#### **Other Non-Operating Expenses**

None

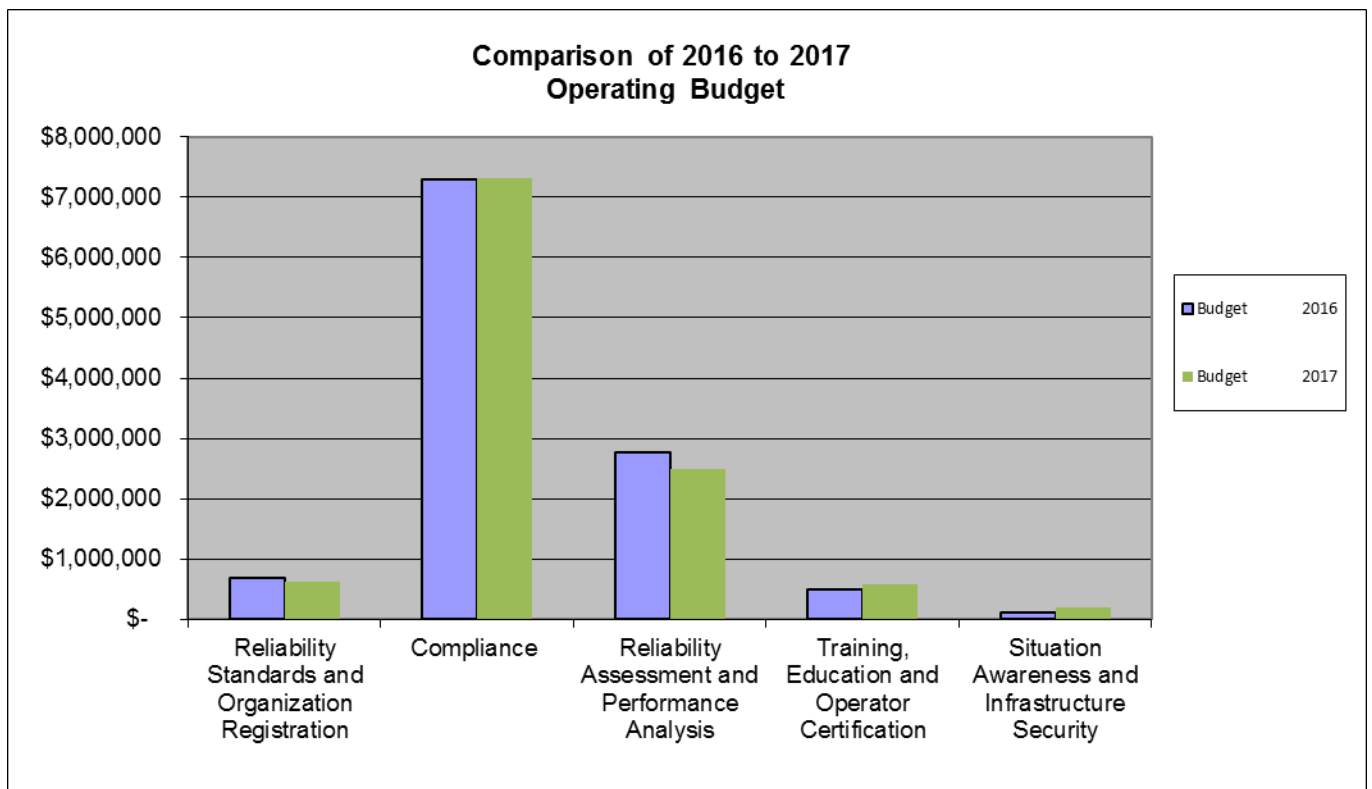
## Summary by Program

The following table and figure summarize and illustrate the MRO budget by program area.

Program	Budget	2016	Budget	2017	Change	
					2016 Budget v	% Change
Reliability Standards and Organization Registration	\$	684,208	\$	633,865	\$ (50,343)	-7.36%
Compliance		7,297,310		7,313,627	16,317	0.22%
Reliability Assessment and Performance Analysis		2,758,745		2,498,586	(260,160)	-9.43%
Training, Education and Operator Certification		488,858		589,598	100,741	20.61%
Situation Awareness and Infrastructure Security		125,523		190,992	65,470	52.16%
<b>TOTAL BUDGET</b>	\$	11,354,643	\$	11,226,668	\$ (127,975)	-1.13%

This table does not include an allocation of working capital requirements among the program areas.

**Table 2. Budget by Program Area**



This graphical representation does not include an allocation of working capital requirements among the program areas.

**Figure 1. Budget by Program Area Chart**

The following table displays total FTEs by program area.

Total FTEs by Program Area	Budget	Projection	Direct FTEs	Shared	Total FTEs	Change
	2016	2016	2017 Budget	FTEs 20167 Budget <sup>1</sup>	2017 Budget	from 2016 Budget
<b>STATUTORY</b>						
<b>Operational Programs</b>						
Reliability Standards and Organization and Certification	2.11	2.11	1.96		1.96	(0.15)
Compliance	11.22	11.22	9.77		9.77	(1.45)
Compliance Risk Assessment and Mitigation	6.97	6.97	8.39		8.39	1.42
Compliance Enforcement	3.07	3.07	2.95		2.95	(0.12)
Training and Education	1.34	1.34	1.35		1.35	0.01
Reliability Assessment and Performance Analysis	7.52	7.52	6.42		6.42	(1.10)
Situation Awareness and Infrastructure Security	0.28	0.28	0.49		0.49	0.21
<b>Total FTEs Operational Programs</b>	<b>32.51</b>	<b>32.51</b>	<b>31.33</b>	<b>-</b>	<b>31.33</b>	<b>(1.18)</b>
<b>Administrative Programs</b>						
Technical Committees and Member Forums	-	-	-		-	-
General and Administrative	2.61	2.61	2.91		2.91	0.30
Legal and Regulatory	0.87	0.87	0.95		0.95	0.08
Information Technology	3.26	3.26	3.92		3.92	0.66
Human Resources	-	-	-		-	-
Finance and Accounting	3.75	3.75	3.89		3.89	0.14
<b>Total FTEs Administrative Programs</b>	<b>10.49</b>	<b>10.49</b>	<b>11.67</b>	<b>-</b>	<b>11.67</b>	<b>1.18</b>
<b>Total FTEs</b>	<b>43.00</b>	<b>43.00</b>	<b>43.00</b>	<b>-</b>	<b>43.00</b>	<b>-</b>

**Table 3. Total FTEs by Program Area**

For an explanation of the variances, refer to the Resource Requirements section in each program area in Section A.

In 2017 there is a shift in resources to Risk Assessment and Mitigation as we put more emphasis on outreach efforts and less on Compliance and Enforcement. Due to rule changes approved by the Commission, we have increased efficiencies in Enforcement; in Compliance Monitoring, we have gained efficiencies through better planning, tools, and training; and revisions to the Fill in the Blank standards have also resulted in a more efficient use of resources. These factors have allowed us to re-invest resources into RAM. As a result, even though our workload has increased, we have been able to maintain a relatively flat headcount over the past years.



## 2016 Budget and Projection and 2017 Budget Comparisons

The following table lists the 2016 budget and projection compared to the 2017 budget.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>STATUTORY</b>					
	<b>2016 Budget</b>	<b>2016 Projection</b>	<b>Variance 2016 Projection v 2016 Budget Over(Under)</b>	<b>2017 Budget</b>	<b>Variance 2017 Budget v 2016 Budget Over(Under)</b>
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 10,891,562	\$ 10,891,562	\$ -	\$ 10,494,345	\$ (397,217)
Penalty Sanctions	136,250	136,250	-	166,250	30,000
<b>Total NERC Funding</b>	<b>\$ 11,027,812</b>	<b>\$ 11,027,812</b>	<b>\$ -</b>	<b>\$ 10,660,595</b>	<b>\$ (367,217)</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 11,027,812</b>	<b>\$ 11,027,812</b>	<b>\$ -</b>	<b>\$ 10,660,595</b>	<b>\$ (367,217)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 5,682,871	\$ 5,682,871	-	\$ 5,874,689	\$ 191,818
Payroll Taxes	361,827	361,827	-	366,600	4,773
Benefits	582,253	582,253	-	608,751	26,498
Retirement Costs	1,094,515	1,094,515	-	1,195,387	100,872
<b>Total Personnel Expenses</b>	<b>\$ 7,721,466</b>	<b>\$ 7,721,466</b>	<b>\$ -</b>	<b>\$ 8,045,427</b>	<b>\$ 323,961</b>
<b>Meeting Expenses</b>					
Meetings	\$ 85,500	\$ 85,500	\$ -	\$ 85,000	\$ (500)
Travel	680,330	680,330	-	635,000	(45,330)
Conference Calls	900	900	-	-	(900)
<b>Total Meeting Expenses</b>	<b>\$ 766,730</b>	<b>\$ 766,730</b>	<b>\$ -</b>	<b>\$ 720,000</b>	<b>\$ (46,730)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 679,681	\$ 679,681	\$ -	\$ 674,077	\$ (5,604)
Office Rent	648,946	648,946	-	701,900	52,954
Office Costs	534,818	534,818	-	539,933	5,115
Professional Services	218,500	218,500	-	228,550	10,050
Miscellaneous	-	-	-	-	-
Depreciation	480,722	480,722	-	504,000	23,278
<b>Total Operating Expenses</b>	<b>\$ 2,562,667</b>	<b>\$ 2,562,667</b>	<b>\$ -</b>	<b>\$ 2,648,460</b>	<b>\$ 85,793</b>
<b>Total Direct Expenses</b>	<b>\$ 11,050,863</b>	<b>\$ 11,050,863</b>	<b>\$ -</b>	<b>\$ 11,413,887</b>	<b>\$ 363,024</b>
<b>Indirect Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 11,050,863</b>	<b>\$ 11,050,863</b>	<b>\$ -</b>	<b>\$ 11,413,887</b>	<b>\$ 363,024</b>
<b>Change in Assets</b>	<b>\$ (23,051)</b>	<b>\$ (23,051)</b>	<b>\$ -</b>	<b>\$ (753,292)</b>	<b>\$ (730,241)</b>
<b>Fixed Assets</b>					
Depreciation	\$ (480,722)	\$ (480,722)	\$ -	\$ (504,000)	\$ (23,278)
Computer & Software CapEx	317,500	317,500	-	173,670	(143,830)
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	467,000	467,000	-	143,111	(323,889)
Allocation of Fixed Assets	-	-	-	-	-
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>303,778</b>	<b>303,778</b>	<b>-</b>	<b>(187,219)</b>	<b>(490,997)</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 11,354,641</b>	<b>\$ 11,354,641</b>	<b>\$ -</b>	<b>\$ 11,226,668</b>	<b>\$ (127,973)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (326,829)</b>	<b>\$ (326,829)</b>	<b>\$ -</b>	<b>\$ (566,073)</b>	<b>\$ (239,244)</b>
<b>FTEs</b>	43.00	43.00	-	43.00	(0.00)

**Table 4. Budget and Projection Comparison, 2016 to 2017**

# Section A – Statutory Programs

## 2017 Business Plan and Budget



## Section A – Statutory Programs

### Reliability Standards, Organization Registration and Certification Program

The following table shows funding sources and related expenses for the Reliability Standards, Organization Registration and Certification Program.

<b>Reliability Standards Program</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	2.11	1.96	(0.15)
Direct Expenses	\$ 390,234	\$ 356,096	\$ (34,138)
Indirect Expenses	\$ 274,257	\$ 289,481	\$ 15,225
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ 19,716	\$ (11,712)	\$ (31,429)
Total Funding Requirement	\$ 684,208	\$ 633,865	\$ (50,343)

**Table A-1. Reliability Standards Budget**

#### Program Scope and Functional Description

NERC uses stakeholder-driven processes consistent with the Rules of Procedure to develop and maintain Reliability Standards that apply to bulk power system owners, operators, and users and that enable NERC and Regional Entities to measure the reliability performance of bulk power system owners, operators and users; and to hold them accountable for reliable operation of the Bulk Electric System. The Reliability Standards must be technically sound, timely, just, reasonable, not unduly discriminatory or preferential, in the public interest, and consistent with other applicable requirements.

MRO supports NERC Standards development through its Standards Committee (SC). Organization Registration criteria and requirements are approved by NERC and the Commission in the United States, and MRO staff carries out those responsibilities through its Delegation Agreement with NERC. Registration is documented by MRO and incorporated into the overall NERC Registry. MRO staff registers all known entities (owners, operators, and users) subject to the Reliability Standards and revises the Registered Entity list as required under the Rules of Procedure.

MRO will work with NERC on development of common and consistent registration processes, information systems and methods among regions.

#### 2017 Key Assumptions

The NERC and Regional Entity business plans and budgets reflect a set of common assumptions developed jointly by NERC and the Regional Entities as part of the annual business plan and budget process. The common assumptions for the Reliability Standards Program and the Organization Registration and Certification Program can be located in the Key Assumptions section of Exhibit A in NERC’s 2017 Business Plan and Budget.

MRO utilizes a balanced stakeholder SC to administer the regional standards program, educate stakeholders about the application of Reliability Standards, and provide regional input to the NERC Standards development efforts. The SC is charged with the following responsibilities:

- Recommend to the MRO Board regional representatives for NERC Standards development and drafting-related working groups and committees
- Promote coordination of MRO's efforts with other Regional Entities and NERC, including a periodic review of NERC Reliability Standards and their applicability to those subject to the Reliability Standards
- Provide non-binding assistance to stakeholders in understanding the application of continent-wide Reliability Standards and the types of evidence needed to demonstrate compliance through examples
- Identify pools of subject matter experts (SMEs) in the industry to assist in the development of application guides
- Oversee the development of application guides for NERC Reliability Standards
- Review frequently occurring compliance violations and emerging risks to determine if there are any additional application guidelines that are needed or additional changes to standards or request interpretations
- Provide education and training on effectively demonstrating compliance to stakeholders through webinars, emails, conference calls, presentations or workshops
- Provide recommendations to the NERC standing committees or other working groups as required
- Provide comments and voting positions on NERC-proposed standards, interpretations and implementation plans from MRO stakeholders
- Where necessary, ensure Regional Reliability Standards are consistent with continent-wide Reliability Standards
- Process all requests for new or modifications to Reliability Standards
- Maintain MRO Reliability Standards process documentation
- Assign the development of a regional Reliability Standard to a drafting team
- Present new, or modifications to, regional reliability standards for adoption by the MRO Board upon recommendation from the SC

In supporting the work of the SC, MRO staff monitors the NERC Standards development efforts and facilitates the efforts of the SC and its subgroups to provide input in a coordinated manner. Staff also ensures the regional processes are followed for the regional standards development. Currently, MRO has no regional standards under development and does not anticipate any Standards Authorization Request (SAR) submittals in the future.

The SC is committed to developing and delivering training to industry stakeholders on meeting the obligations and requirements of existing, new, or emerging Reliability Standards. In support of the SC's commitment, MRO staff provides input to the SME teams in developing their training tools and reviews the Application Guidance documents and presentations. In addition, MRO staff helps manage all SME team projects and provides technical support. MRO staff appreciates the SME teams sharing their technical expertise and knowledge to improve power system reliability for all.

MRO staff and stakeholders provide technical advice and comment to NERC when developing reliability standards applicable across North America and the Eastern Interconnection. MRO staff and Registered Entities participate in NERC and MRO standards drafting teams, hold meetings and conferences to discuss standards, and actively work with NERC on its standards development plan.

NERC's Four Year Standards Development Plan, included in NERC's 2015 Business Plan and Budget as Exhibit A, supports the significant effort required by MRO to participate in standards development.

### **Organization Registration**

- 2017 variance: Elimination of third party vendor costs associated with a software application used to ballot regional standards. MRO's use of this software has been replaced with a manual process, due to the expectation that MRO will not need to develop any regional standards and can therefore rely upon a manual process.
- Workload associated with maintaining the registry will likely continue, but there are anticipated increased travel costs associated with the new NERC-led review panel for materiality, which includes MRO staff being called upon to travel and deliberate registration materiality cases across North America.
- Pre-June 18, 2007 voluntary program (28 participants/255 functions.)
- June 18, 2007 mandatory implementation (110 Registered Entities/432 functions.)
- 2016 (94 Registered Entities/314 functions.)
- Registration is an ongoing assignment.
- Continue to inventory Bulk Electric System facilities.
- Joint Registration Organization (JRO) maintenance.
- Coordinated Functional Registration (CFR) development and maintenance.
- Modify registry if it is discovered an entity meets additional functional criteria or no longer performs any function.
- Continue to obtain and review system one-line diagrams, maps, and agreements used to identify owners and operators of the Bulk Electric System.
- Continue to manage overall registry by having a staff person directly assigned to this task.

### **Organization Certification**

- 2017 variance: no material changes.
- Work performed to review changes to existing Registered Entities, and work performed to certify new Registered Entities, are expected to continue. The equivalent rate or amount of work is expected to stabilize in 2017 as many Registered Entities have replaced their EMS/SCADA systems.
- The ERO Organization, Registration and Certification Group (ORCG) is expected to review the overall ERO process for Certifications, which could impact workload based on any changes adopted to the Certification program.

### **2017 Goals and Key Deliverables**

The 2017 goals and key deliverables are the following:

- Provide comments and support to other NERC and MRO SC activities
- Work with NERC to improve interpretation of existing Reliability Standards
- Work with NERC to improve the timeliness of Reliability Standards development
- Communicate with stakeholders and vote on all NERC Standards
- Support and inform the MRO SC and Board of standards-related activities
- Participate on various NERC committees and subgroups

- MRO SME teams and staff train and educate Registered Entities on the application of standards by participating in MRO workshops (costs are captured in Training and Education)

### **Resource Requirements**

No additional resource requirements are projected for 2017.

### **Personnel Expenses**

MRO continues to facilitate additional technical resources from the industry in drafting teams and in other areas to augment staff involvement, which has resulted in a relatively stabilized number of FTEs in prior years. MRO reimburses travel expenses for stakeholder participation.

### **Consultants and Contracts**

There are no expected consultant or contract costs for 2017. Third party vendor costs associated with a software application used to ballot regional standards have been eliminated. MRO's use of this software has been replaced with a manual process, due to the expectation that MRO will not need to develop any regional standards and can therefore rely upon a manual process.

## Reliability Standards, Organization Registration and Certification Budget Details

The following table shows funding sources and related expenses for the Reliability Standards Program, Organization Registration and Certification Program section of the *2017 Business Plan and Budget*. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital 2016 Budget & Projection, and 2017 Budget					
RELIABILITY STANDARDS AND ORGANIZATIONAL REGISTRATION					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 675,364	\$ 675,364		\$ 623,464	\$ (51,899)
Penalty Sanctions	8,843	8,843		10,401	1,558
<b>Total NERC Funding</b>	<b>\$ 684,207</b>	<b>\$ 684,207</b>		<b>\$ 633,865</b>	<b>\$ (50,342)</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 684,207</b>	<b>\$ 684,207</b>		<b>\$ 633,865</b>	<b>\$ (50,342)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 235,577	\$ 235,577	\$ -	\$ 214,962	\$ (20,615)
Payroll Taxes	14,726	14,726	-	13,591	(1,135)
Benefits	28,571	28,571	-	26,474	(2,097)
Retirement Costs	53,266	53,266	-	50,081	(3,185)
<b>Total Personnel Expenses</b>	<b>\$ 332,140</b>	<b>\$ 332,140</b>	<b>\$ -</b>	<b>\$ 305,108</b>	<b>\$ (27,032)</b>
<b>Meeting Expenses</b>					
Meetings	\$ 2,000	\$ 2,000	\$ -	\$ 2,500	\$ 500
Travel	37,200	37,200	-	42,400	5,200
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 39,200</b>	<b>\$ 39,200</b>	<b>\$ -</b>	<b>\$ 44,900</b>	<b>\$ 5,700</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 13,236	\$ 13,236	\$ -	\$ -	\$ (13,236)
Office Rent	-	-	-	-	-
Office Costs	5,658	5,658	-	6,088	430
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 18,894</b>	<b>\$ 18,894</b>	<b>\$ -</b>	<b>\$ 6,088</b>	<b>\$ (12,806)</b>
<b>Total Direct Expenses</b>	<b>\$ 390,234</b>	<b>\$ 390,234</b>	<b>\$ -</b>	<b>\$ 356,096</b>	<b>\$ (34,138)</b>
<b>Indirect Expenses</b>	<b>\$ 274,257</b>	<b>\$ 274,257</b>	<b>\$ -</b>	<b>\$ 289,481</b>	<b>\$ 15,225</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 664,491</b>	<b>\$ 664,491</b>	<b>\$ -</b>	<b>\$ 645,577</b>	<b>\$ (18,913)</b>
<b>Change in Assets</b>	<b>\$ 19,716</b>	<b>\$ 19,716</b>	<b>\$ -</b>	<b>\$ (11,712)</b>	<b>\$ (31,429)</b>
<b>Fixed Assets</b>					
Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 19,716	19,716	-	(11,712)	(31,429)
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>19,716</b>	<b>19,716</b>	<b>-</b>	<b>(11,712)</b>	<b>(31,429)</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 684,207</b>	<b>\$ 684,207</b>	<b>\$ -</b>	<b>\$ 633,865</b>	<b>\$ (50,342)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>FTEs</b>	2.11	2.11	-	1.96	(0.15)

Table A-2. Reliability Standards, Organization Registration and Certification Budget Detail

## Compliance Monitoring and Enforcement Program

The following table lists the budget for the Compliance Monitoring and Enforcement Program.

<b>Compliance Monitoring and Enforcement Program</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	21.26	21.11	(0.15)
Direct Expenses	\$ 4,335,290	\$ 4,321,942	\$ (13,347)
Indirect Expenses	\$ 2,763,363	\$ 3,117,832	\$ 354,469
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ 198,656	\$ (126,147)	\$ (324,804)
Total Funding Requirement	\$ 7,297,310	\$ 7,313,627	\$ 16,318

**Table A-3. Compliance Monitoring and Enforcement Program Budget**

### Program Scope and Functional Description

In 2017, the MRO Compliance Monitoring and Enforcement Program (CMEP) includes performing CMEP activities with approximately 94 Registered Entities in the MRO Region.

All Registered Entities are subject to periodic compliance audits and/or spot checks. For 2017, there are a total of 6 compliance audits planned, and spot checks will be conducted as needed.

In addition to the normal and ongoing compliance discovery activities under the NERC CMEP, MRO Compliance staff will be prepared to assist with compliance investigations, system performance monitoring and assessment, and compliance reviews for all events in which the NERC Event Analysis and Compliance Review Process is initiated. These activities are included in the business plan for 2017. Investigations are handled through MRO's Risk Assessment and Mitigation team.

### 2017 Key Assumptions

NERC and Regional Entity business plans and budgets reflect a set of common assumptions developed jointly by NERC and the Regional Entities as part of the annual business plan and budget process. NERC and the Regional Entities will also continue to work collaboratively to refine and revise procedures to eliminate duplication, increase operational efficiencies, enhance ERO-wide consistency, and achieve measurable reliability outcomes, consistent with their respective roles and responsibilities. The common assumptions for the Compliance Monitoring Program can be located in the Key Assumptions section of Exhibit A in NERC's 2017 Business Plan and Budget.

MRO will monitor compliance with Reliability Standards for each Registered Entity that has compliance responsibilities as defined in the Compliance Registry for MRO. In the United States, MRO monitors Reliability Standards according to Commission-approved Rules. In Manitoba, MRO monitors Reliability Standards under provincial law as implemented in the Manitoba Reliability Standards Regulation. In Saskatchewan, MRO carries out its compliance monitoring responsibilities according to an agreement with the Saskatchewan Electric Reliability Authority. 2017 key focus areas include:

- Monitoring and management of enforcement measures and metrics in support of NERC's



- Strategic Plan and Oversight Program;
- Ongoing implementation of the risk-based CMEP;
- Use of consistent compliance monitoring and enforcement practices focused on higher reliability risks.

## Compliance Monitoring and Enforcement

Using generally accepted risk-based approaches to compliance monitoring and enforcement as transformed through the Reliability Assurance Initiative (RAI), requires revisions to processes and procedures. MRO does not anticipate a material impact from the revisions in 2017.

### 2017 Compliance Monitoring Program Goals and Key Deliverables

- Ensure that professionally-trained staff is available to perform the required activities under the NERC Rules of Procedure
- Deliver consistent results when processing all instances of noncompliance
- Process initial compliance determinations of standards in a fair, uniform, systematic, and timely manner
- Maintain internal controls for “one-up and next door” reviews to ensure all determinations receive adequate “due care” and review
- Conduct secondary independent review to ensure all determinations of possible noncompliance are accurate, complete, and technically sufficient
- Ensure accurate and complete work papers are created, maintained, and retained for each noncompliance discovered, as well as where there are no findings
- Conduct system performance compliance monitoring (such as due diligence review of misoperations, physical inspections, etc.)
- Conduct compliance investigations as warranted
- Participate in working groups or task forces where ERO-wide compliance and enforcement program processes and procedures will be developed to drive consistency

### Funding Requirements — Explanation of Increase (Decrease)

#### Compliance Monitoring Explanation of Variances – 2017 Budget versus 2016 Budget

##### Annual Implementation Plan

- Monitor compliance with all regulatory-approved Reliability Standards as defined in the NERC Annual Implementation Plan
- Continued implementation of the risk-based compliance monitoring framework, customizing scope of individual compliance monitoring engagements and putting forth additional effort when reviewing Registered Entities’ internal controls
- Per the NERC CMEP Implementation Plan, it is assumed that Compliance audits will only be required in 2017 for those entities registered for the Reliability Coordinator (RC), Balancing Authority (BA), and Transmission Operator (TOP) functions. Additionally, in place of the annual Self-Certification, a quarterly program of guided Self-Certifications will be employed to address those NERC Reliability Standards and requirements that mitigate the most significant risks in the MRO region.
- Unscheduled spot checks and/or compliance audits may be conducted if:
  - Entity registration changes (such as adding TOP, BA, RC function)
  - Evidence of compliance provided during an audit (or other discovery method) is found to be non-compliant and the entity is using another entity’s program or process
  - Follow-up is needed as a result of self-certifications or events

## Compliance Audits

- 2017 variance: decrease workload
- MRO shifted resources to Risk Assessment and Mitigation (RAM) to develop risk assessments for compliance oversight scopes
- The rigor, scope, depth and recurrence of audits and spot checks will be driven by reliability risk. Beginning in 2017, oversight plans will be developed for registered entities according to their risk and the best CMEP tools. This is reflected in the annual implementation plan.

## Self-Certifications

- 2017 variance: stable workload
- In 2014, MRO instituted an internal quality assurance process (C-QA) to ensure proper rigor in using risk-based methods in the CMEP
- Quarterly guided Self-Certifications will continue to be conducted in 2017. The number of requirements for which Self-Certifications are issued, as well as the number of affected registered entities, are anticipated to be similar to 2016.

## Spot Checks

- 2017 variance: increase of workload
- The use of spots checks may increase as a result of more reliance on guided self-certification and self-logging, but should have little effect on overall resource requirements

## Technical Feasibility Exceptions (TFEs)

- 2017 variance: stable workload
- During 2017, MRO Compliance staff does not anticipate significant variation in effort associated with TFE processing.

## Compliance Investigations (CIs) and Compliance Evaluations of Events

- 2017 variance: increase in workload
- Workload related to compliance evaluations of events is anticipated to remain consistent.
- MRO Risk Assessment and Mitigation staff are responsible for conducting a review of all reported events, and developing compliance assessments of those events for all Category 2 and above events.

## Compliance Findings Discovery

- 2017 variance: stable workload
- For every potential noncompliance, MRO Risk Assessment and Mitigation performs a fact and circumstance review necessary to determine the potential and actual risk posed by the noncompliance, as well as appropriate mitigating activities.
- MRO expects an increase in workload associated with reviewing facts and circumstances around entity implementations of CIP v5.

## Compliance Findings Record Development

- 2017 variance: consistent workload
- MRO's CMEP Quality Assurance (C-QA) program was fully implemented in 2016. The program seeks to ensure that all CMEP activities have sufficient technical rigor and discretion is applied without discrimination.

## Mitigation Plan Acceptance and Verification of Completion

- 2017 variance: stable workload
- MRO uses number of days in process (DIP) and violation aging as key indicators for process efficiency and effectiveness. CIP personnel will continue to be focused on the conversion from v3 to v5, with a large number of registered entities being subject to CIP for the first time in 2017. Instances of noncompliance related to operations and planning standards are expected to remain at their current levels as most Registered Entities have been audited and their compliance programs have matured; however, risk-based approaches to compliance monitoring are focusing efforts on certain Standards for the first time.
- For every noncompliance identified by MRO staff or a Registered Entity, a description of mitigating activities/mitigation plan must be submitted. MRO Risk Assessment and Mitigation staff reviews each submission to assess whether the proposed actions will mitigate and prevent recurrence of the subject noncompliance. The development of the mitigating activities/mitigation plan provides the information necessary to determine the potential and actual risk to the reliability of the BES.

## Compliance Enforcement and Mitigation Explanation of Variances – 2017 Budget versus 2016 Budget

### 2017 Enforcement and Mitigation Program Goals and Key Deliverables

- Ensure that professionally-trained staff is available to perform the required activities under the NERC Rules of Procedure
- Deliver consistent results when processing all instances of noncompliance and Possible Violations
- Process noncompliance and Possible Violations of standards in a fair, uniform, systematic, and timely manner
- Maintain internal controls for “one-up and next door” reviews to ensure all determinations receive adequate “due care” and review
- Provide security related outreach to MRO members.

MRO is evaluating the formation of an MRO Security Advisory Panel, which would provide opportunities for sharing security implementation approaches utilized by Registered Entities, contain representatives on the NERC CIPC from within the MRO Region, and sponsor the annual MRO Security Workshop. If formed, this committee would begin meeting in late 2016 or 2017. The 2017 budget for this proposed committee shows a 25% decrease to reflect the expectation that this group would utilize technology for remote meetings, rather than holding four face-to-face committee meetings per year at MRO’s offices.

### Processing of Alleged Violations

- 2017 variance: decreased workload
- For every instance of noncompliance identified by MRO Compliance staff or a Registered Entity, MRO Risk Assessment and Mitigation staff performs a review to confirm its validity.
- For Possible Violations deemed valid and subject to enforcement, MRO Enforcement staff prepares and issues a Notice of Possible Violation and MRO Risk Assessment and Mitigation staff performs a facts and circumstances review to determine if the Registered Entity was or was not in violation of the Reliability Standard(s). If the Registered Entity is in violation of a standard, MRO Enforcement staff prepares a Notice of Alleged Violation that may include a Disposition Document for each alleged violation or a Notice of Find, Fix, Track and Report processing for each remediated issue. Where a Notice of Alleged Violation is issued, a proposed penalty is calculated and reviewed and considered by at

least two MRO Enforcement staff. Upon acceptance or lapse of the required time for response to the Notice of Alleged Violation, MRO Enforcement staff prepares a Notice of Confirmed Violation. The drafting of these notices is an iterative process and requires resources. For more complex or significant matters, MRO Enforcement staff anticipates resolution through negotiated settlement. This process is sometimes lengthy and typically results in ongoing tracking and monitoring requirements for MRO and the Registered Entity to ensure completion of agreed-upon remedies. MRO encourages Registered Entities to make investments in equipment and people as an offset for proposed penalties. This results in longer-term monitoring commitments in the enforcement process. MRO will continue to promote self-identification of noncompliance as a factor in determining how to resolve instances of noncompliance.

- It is anticipated that a high percentage of self-identified instances of noncompliance will be resolved as Compliance Exceptions
- Instances of noncompliance and/or Possible Violations related to operations and planning standards are expected to remain low as most Registered Entities have been audited and their compliance efforts and programs have matured

### **Record Development and Maintenance**

- 2017 variance: stable workload
- Processes have been formalized and necessary documentation identified to complete the record
- The webCDMS application provides for a central repository accessible to each Registered Entity
- An assessment project was completed in 2014 to evaluate software systems used for compliance, registration, analysis and tracking, which may result in changing or replacing existing systems in the future. Until a decision is made to change or replace systems, MRO is continuing to maintain its current multi-year contract to utilize webCDMS compliance, registration, analysis and tracking.

### **Resource Requirements**

The transition to CIP v5 will continue to be a mission critical activity in 2017. MRO plans to support the ongoing CIP v5 transition and has seen an expansion in the number of Registered Entities that require CIP guidance, which is expected to continue into 2017.

### **Consultants and Contracts**

2017 Consultants and Contracts reflects the addition of consulting costs to augment MRO CIP staff.

## Compliance Monitoring and Enforcement Program Budget Detail

The following table shows funding sources and related expenses for the Compliance Monitoring and Enforcement and Organization Registration and Certification section of the *2017 Business Plan and Budget*. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital					
2016 Budget & Projection, and 2017 Budget					
COMPLIANCE MONITORING AND ENFORCEMENT PROGRAM					
	2016	2016	Variance	2017	Variance
	Budget	Projection	2016 Projection	Budget	2017 Budget
			v 2016 Budget		v 2016 Budget
			Over(Under)		Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 7,208,209	\$ 7,208,209		\$ 7,201,608	\$ (6,600)
Penalty Sanctions	89,101	89,101		112,018	22,917
<b>Total NERC Funding</b>	<b>\$ 7,297,310</b>	<b>\$ 7,297,310</b>		<b>\$ 7,313,627</b>	<b>\$ 16,317</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 7,297,310</b>	<b>\$ 7,297,310</b>		<b>\$ 7,313,627</b>	<b>\$ 16,317</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 2,888,818	\$ 2,888,818	\$ -	\$ 2,842,052	\$ (46,766)
Payroll Taxes	188,646	188,646	-	187,019	(1,627)
Benefits	288,012	288,012	-	298,571	10,559
Retirement Costs	496,769	496,769	-	535,130	38,361
<b>Total Personnel Expenses</b>	<b>\$ 3,862,245</b>	<b>\$ 3,862,245</b>	<b>\$ -</b>	<b>\$ 3,862,772</b>	<b>\$ 527</b>
<b>Meeting Expenses</b>					
Meetings	\$ 7,250	\$ 7,250	\$ -	\$ 6,500	\$ (750)
Travel	235,400	235,400	-	199,900	(35,500)
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 242,650</b>	<b>\$ 242,650</b>	<b>\$ -</b>	<b>\$ 206,400</b>	<b>\$ (36,250)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 114,000	\$ 114,000	\$ -	\$ 169,000	\$ 55,000
Office Rent	-	-	-	-	-
Office Costs	91,395	91,395	-	83,770	(7,625)
Professional Services	25,000	25,000	-	-	(25,000)
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 230,395</b>	<b>\$ 230,395</b>	<b>\$ -</b>	<b>\$ 252,770</b>	<b>\$ 22,375</b>
<b>Total Direct Expenses</b>	<b>\$ 4,335,290</b>	<b>\$ 4,335,290</b>	<b>\$ -</b>	<b>\$ 4,321,942</b>	<b>\$ (13,348)</b>
<b>Indirect Expenses</b>	<b>\$ 2,763,363</b>	<b>\$ 2,763,363</b>	<b>\$ -</b>	<b>\$ 3,117,832</b>	<b>\$ 354,469</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 7,098,653</b>	<b>\$ 7,098,653</b>	<b>\$ -</b>	<b>\$ 7,439,774</b>	<b>\$ 341,121</b>
<b>Change in Assets</b>	<b>\$ 198,656</b>	<b>\$ 198,656</b>	<b>\$ -</b>	<b>\$ (126,147)</b>	<b>\$ (324,804)</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 198,656	198,656	-	(126,147)	(324,804)
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ 198,656</b>	<b>\$ 198,656</b>	<b>\$ -</b>	<b>\$ (126,147)</b>	<b>\$ (324,804)</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 7,297,310</b>	<b>\$ 7,297,310</b>	<b>\$ -</b>	<b>\$ 7,313,627</b>	<b>\$ 16,317</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>FTEs</b>	<b>21.26</b>	<b>21.26</b>	<b>-</b>	<b>21.11</b>	<b>(0.15)</b>

**Table A-4. Compliance Monitoring and Enforcement Budget Detail**

## Reliability Assessment and Performance Analysis Program (RAPA)

The following table lists the budget for the Reliability Assessment and Performance Analysis program (RAPA).

<b>Reliability Assessment and Performance Analysis</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	7.52	6.42	(1.10)
Direct Expenses	\$ 1,711,032	\$ 1,588,751	\$ (122,281)
Indirect Expenses	\$ 977,445	\$ 948,199	\$ (29,247)
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ 70,268	\$ (38,364)	\$ (108,632)
Total Funding Requirement	\$ 2,758,745	\$ 2,498,586	\$ (260,161)

**Table A-5. Reliability Assessment and Performance Analysis (RAPA) Budget**

### Program Scope and Functional Description

The objectives of the Reliability Assessment and Performance Analysis program are to:

1. Review seasonal and long-term reliability assessments of the Planning Coordinator reporting areas within the MRO Region from an operation and planning perspective. Ensure the assessments are technically sound and address appropriate risk areas.
2. Evaluate existing and planned generation and transmission facilities to identify key reliability issues and the risks and uncertainties affecting adequacy and security of the Bulk Electric System.
3. Review event analysis efforts by Registered Entities to ensure causes are identified and corrected and that lessons learned are shared with industry.
4. Facilitate data collection and the development of power flow and dynamics simulation models for the MRO Region and the Eastern Interconnection.
5. Perform legacy Regional Reliability Organization functions until those functions are assigned to Registered Entities through Reliability Standards.
6. Support MRO stakeholder groups and participate in NERC efforts.
7. Implement enhancements to improve ERO enterprise-wide efficiency and effectiveness of RAPA-related functions.

RAPA identifies reliability risks to the BES in the MRO footprint in accordance with the Delegation Agreement and NERC's Rules of Procedure. RAPA's mission is to promote a culture of reliability excellence within the MRO BES. The program accomplishes this mission by identifying risks to reliability, analyzing performance, and prioritizing mitigation of significant risks.

### 2017 Key Assumptions

The NERC and Regional Entity business plans and budgets reflect a set of common assumptions developed jointly by NERC and the Regional Entities as part of the annual business plan and budget process. The common assumptions for the RAPA program can be located in the Key Assumptions section of Exhibit A in NERC's 2017 Business Plan and Budget.

Regarding periodic assessments, Planning Coordinators in the MRO Region perform assessments of reliability and adequacy and report results of short-term, long-term and specific

scenario assessments. MRO staff performs independent reviews of reports with supplemental analysis to ensure competence and rigor.

These MRO committees have balanced stakeholder representation, report to the MRO Board and provide input to the staff reviews of the assessments.

Other activities in the 2017 RAPA program include:

- Review of protection system misoperation trends and development of ways to reduce misoperations.
- Periodic special protection scheme reviews.
- Identification of reliability impacts related to the changing resource mix and integration of renewables.
- Development of enhanced reliability metrics.
- Monitoring situation awareness.
- Reviews of event analysis efforts to ensure thoroughness, root cause identification and sharing lessons learned.
- Enhancing Eastern Interconnection Reliability Assessment Group (ERAG) assessment efforts.
- Responding to NERC and regulatory data requests.
- Improvement of electric system models.
- Analysis of measures of essential reliability services.
- Ongoing reviews of regional reliability criteria and procedures.
- Validation of data collected by Generating Availability Data System, Transmission Availability Data System, and Demand Response Availability Data System.
- Facilitation and validation of BES exception reporting.

### **2017 Goals and Key Deliverables**

- Review the assessments developed by the Planning Coordinators in the MRO Region and Eastern Interconnection to ensure they are comprehensive, complete and address all risks including impacts of new technologies, changing resource or demand resource composition, and environmental-related regulations or legislation.
- Perform special reliability assessments on a regional, interregional, and interconnection basis as conditions warrant, or as directed by the board or NERC.
- Review system disturbance reports and event analyses to ensure the appropriate analysis is performed and that lessons learned are identified and shared with the industry.
- Coordinate with NERC on system event analyses on a regional, interregional, and interconnection basis as conditions warrant.
- Support the compilation of long-term sustainable Eastern Interconnection models.
- Verify and validate quality reliability assessment and analyses model and data quality characteristics.
- Perform legacy Regional Reliability Organization (RRO) responsibilities associated with “fill in the blank” standards until they are transitioned to Registered Entities.
- Participate in and represent the MRO Region in all ERAG and NERC groups, as required, that report to the ERAG Management Committee (MC), the NERC Planning Committee (PC) and the NERC Operating Committee (OC).
- Support the ongoing implementation of BES exception process and validate exception requests.
- Develop and implement improved enterprise-based data collection and analysis systems and capabilities.
- Support the integration of RAPA information systems.
- Provide for technical resources and expertise to perform analyses as needed to support and determine risk priorities for standards development and compliance and enforcement

activities.

- Support quality analysis and overall assessment of high impact, low frequency system risks, including physical security, geomagnetic disturbance (GMD) vulnerability, planning guides, and planning standards.
- Support the development of measures and assessment of adequate levels of Essential Reliability Services.
- Continue to develop quality metrics of BES performance to demonstrate effectiveness of activities to improve reliability.

To the extent that significant events occur, contractor services may be required to support wide-area system analyses and root cause evaluations.

### **Resource Requirements**

MRO reimburses travel expenses for stakeholder participation on MRO and NERC committees.

### **Personnel Expenses**

The overall budgeted FTE count for RAPA was reduced by 1.1 FTE as headcount was shifted to RAM. Resource allocation is aligned with current priorities.



## Reliability Assessment and Performance Analysis Budget Detail

The following table lists funding sources and related expenses for the Reliability Assessment and Performance Analysis section of the *2017 Business Plan and Budget*. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>RELIABILITY ASSESSMENT and PERFORMANCE ANALYSIS</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 2,727,229	\$ 2,727,229		\$ 2,464,519	\$ (262,710)
Penalty Sanctions	31,516	31,516		34,067	2,551
<b>Total NERC Funding</b>	<b>\$ 2,758,745</b>	<b>\$ 2,758,745</b>		<b>\$ 2,498,586</b>	<b>\$ (260,160)</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 2,758,745</b>	<b>\$ 2,758,745</b>		<b>\$ 2,498,586</b>	<b>\$ (260,160)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 997,720	\$ 997,720	\$ -	\$ 917,627	\$ (80,093)
Payroll Taxes	64,905	64,905	-	56,875	(8,030)
Benefits	101,421	101,421	-	88,481	(12,940)
Retirement Costs	229,851	229,851	-	225,268	(4,583)
<b>Total Personnel Expenses</b>	<b>\$ 1,393,897</b>	<b>\$ 1,393,897</b>	<b>\$ -</b>	<b>\$ 1,288,251</b>	<b>\$ (105,646)</b>
<b>Meeting Expenses</b>					
Meetings	\$ 18,600	\$ 18,600	\$ -	\$ 15,000	\$ (3,600)
Travel	202,000	202,000	-	197,000	(5,000)
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 220,600</b>	<b>\$ 220,600</b>	<b>\$ -</b>	<b>\$ 212,000</b>	<b>\$ (8,600)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 79,435	\$ 79,435	\$ -	\$ 72,000	\$ (7,435)
Office Rent	-	-	-	-	-
Office Costs	17,100	17,100	-	16,500	(600)
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 96,535</b>	<b>\$ 96,535</b>	<b>\$ -</b>	<b>\$ 88,500</b>	<b>\$ (8,035)</b>
<b>Total Direct Expenses</b>	<b>\$ 1,711,032</b>	<b>\$ 1,711,032</b>	<b>\$ -</b>	<b>\$ 1,588,751</b>	<b>\$ (122,281)</b>
<b>Indirect Expenses</b>	<b>\$ 977,445</b>	<b>\$ 977,445</b>	<b>\$ -</b>	<b>\$ 948,199</b>	<b>\$ (29,247)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 2,688,477</b>	<b>\$ 2,688,477</b>	<b>\$ -</b>	<b>\$ 2,536,950</b>	<b>\$ (151,528)</b>
<b>Change in Assets</b>	<b>\$ 70,268</b>	<b>\$ 70,268</b>	<b>\$ -</b>	<b>\$ (38,364)</b>	<b>\$ (108,632)</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 70,268	70,268	\$ -	(38,364)	\$ (108,632)
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ 70,268</b>	<b>\$ 70,268</b>	<b>\$ -</b>	<b>\$ (38,364)</b>	<b>\$ (108,632)</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 2,758,745</b>	<b>\$ 2,758,745</b>	<b>\$ -</b>	<b>\$ 2,498,586</b>	<b>\$ (260,160)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>FTEs</b>	<b>7.52</b>	<b>7.52</b>	<b>-</b>	<b>6.42</b>	<b>(1.10)</b>

**Table A-6. Reliability Assessment and Performance Analysis Budget Detail**

## Training and Education Program

The following table summarizes the budget for Training and Education.

Training and Education (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	1.34	1.35	0.01
Direct Expenses	\$ 302,163	\$ 398,278	\$ 96,115
Indirect Expenses	\$ 174,172	\$ 199,388	\$ 25,215
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ 12,521	\$ (8,067)	\$ (20,588)
Total Funding Requirement	\$ 488,858	\$ 589,598	\$ 100,742

**Table A-7. Training and Education Budget**

### Program Scope and Functional Description

The MRO Training and Education program provides education and training necessary to understand and operate the BPS. The program's target audience is BPS operating personnel, including system operations personnel, operations support personnel (engineering and information technology), supervisors and managers, and training personnel. The program also supports the MRO staff training and development initiative, and facilitates administering the records necessary to maintain MRO status as a NERC Continuing Education provider.

Maintaining the reliability of the BES requires informed and trained Regional and Registered Entity personnel. Education and training, or outreach, is one of the primary objectives of MRO. The education and training program specifically pertains to the implementation of the CMEP, the application of Reliability Standards, reviewing reliability assessments, performing quality event analysis, identifying lessons learned from event analysis, defining expectations and responsibilities for "fill in the blank" standards, and other related information pertinent to system reliability and compliance. The target audience for this program is Registered Entities.

MRO will provide outreach to Registered Entities through workshops, conferences, and presentation opportunities at industry meetings and by providing lessons learned in MRO's newsletter and other publications. MRO will continue to identify additional outreach opportunities for Registered Entities.

The objectives outlined in the key assumptions support the education and training of industry on CMEP implementation, the requirements and application of the Standards, lessons learned, and elements of an effective compliance program.

### 2017 Key Assumptions

The NERC and Regional Entity business plans and budgets reflect a set of common assumptions developed jointly by NERC and the Regional Entities as part of the annual business plan and budget process. NERC and the Regional Entities will also continue to work collaboratively to refine and revise procedures to eliminate duplication, increase operational efficiencies, enhance ERO-wide consistency, and achieve measurable reliability outcomes, consistent with their respective roles and responsibilities. The common assumptions for the Training and Education Program can be located in the Key Assumptions section of Exhibit A in NERC's 2017 Business Plan and Budget.

Registered Entities should have processes and procedures in place to ensure adherence to the Reliability Standards and address risks to reliability, which is why education and training is a key initiative for MRO. The MRO Compliance Committee assists and oversees the compliance and enforcement training and education initiatives for Registered Entities, including participation in CMEP workshops, stakeholder forums and group training initiatives. The MRO Standards Committee assists and oversees the Reliability Standards requirement and application training for Registered Entities. The Planning and Operating committees contribute to planning Reliability Conferences and other technical workshops as appropriate.

### **2017 Goals and Key Deliverables**

In addition to the MRO management team participating in, and presenting at, various forums (such as Transmission Forum, Generation Forum, MCCF, RTO/ISO, APDA, State Regulator meetings, etc.), MRO will provide workshops (one CMEP workshop, one Reliability Conference, and one Security Workshop). In addition, smaller workshops and/or webinars will be held for specific technical topics.

### **Resource Requirements**

For 2017, MRO will provide outreach to Registered Entities through workshops and other opportunities at industry meetings and by providing lessons learned in MRO's newsletter and other publications. MRO will continue to identify education options for Registered Entities in the MRO Region so that they can also accomplish the objectives of the NERC program through a third party.

### **Personnel Expenses**

MRO's FTEs remain flat in 2017

- No additional staff are added in 2017
- 3% salary increase plus promotions
- The 2017 medical premium reflects an additional 7% increase
- 2017 retirement costs increase
  - Cost of living adjustment in retirement plans
  - Postretirement medical plan expense increase reflecting the actuarial calculation prepared annually by a third party expert. The future obligation is a result of the discount rate, expected rate of return on the plan assets, and health care cost trend rate.
  - Average staff age increases from 43 to 45 and average staff years of service increases from 6 years to 7 years

FTEs in this particular program area remain fairly flat in 2017; however, the involvement of higher management in our outreach efforts is reflected in the increased personnel expenses. We are continuing to trend an increase in 2017 compared to the 2016 budget. The increase in this program area is accompanied by a reduction in other program areas.

### **Meeting Expenses**

Travel costs increased in 2017 to reflect the dollars associated with outreach to stakeholders and regulators that were previously in Legal in Regulatory, which in turn reflects the reduction.

## Training and Education Budget Detail

The following table shows funding sources and related expenses for the Training and Education section of the *2017 Business Plan and Budget*. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital					
2016 Budget & Projection, and 2017 Budget					
TRAINING and EDUCATION					
	2016	2016	Variance	2017	Variance
	Budget	Projection	2016 Projection v 2016 Budget Over(Under)	Budget	2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 483,241	\$ 483,241		\$ 582,435	\$ 99,194
Penalty Sanctions	5,616	5,616		7,164	1,548
<b>Total NERC Funding</b>	<b>\$ 488,857</b>	<b>\$ 488,857</b>		<b>\$ 589,598</b>	<b>\$ 100,742</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 488,857</b>	<b>\$ 488,857</b>		<b>\$ 589,598</b>	<b>\$ 100,742</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 180,187	\$ 180,187	\$ -	\$ 243,378	\$ 63,191
Payroll Taxes	9,800	9,800	-	12,985	3,185
Benefits	18,280	18,280	-	22,934	4,654
Retirement Costs	31,896	31,896	-	47,081	15,185
<b>Total Personnel Expenses</b>	<b>\$ 240,163</b>	<b>\$ 240,163</b>	<b>\$ -</b>	<b>\$ 326,378</b>	<b>\$ 86,215</b>
<b>Meeting Expenses</b>					
Meetings	\$ 28,800	\$ 28,800	\$ -	\$ 30,700	\$ 1,900
Travel	33,200	33,200	-	41,200	8,000
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 62,000</b>	<b>\$ 62,000</b>	<b>\$ -</b>	<b>\$ 71,900</b>	<b>\$ 9,900</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -
Office Rent	-	-	-	-	-
Office Costs	-	-	-	-	-
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Direct Expenses</b>	<b>\$ 302,163</b>	<b>\$ 302,163</b>	<b>\$ -</b>	<b>\$ 398,278</b>	<b>\$ 96,115</b>
<b>Indirect Expenses</b>	<b>\$ 174,172</b>	<b>\$ 174,172</b>	<b>\$ -</b>	<b>\$ 199,388</b>	<b>\$ 25,215</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 476,335</b>	<b>\$ 476,335</b>	<b>\$ -</b>	<b>\$ 597,666</b>	<b>\$ 121,330</b>
<b>Change in Assets</b>	<b>\$ 12,521</b>	<b>\$ 12,521</b>	<b>\$ -</b>	<b>\$ (8,067)</b>	<b>\$ (20,588)</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 12,521	12,521	-	(8,067)	(20,588)
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ 12,521</b>	<b>\$ 12,521</b>	<b>\$ -</b>	<b>\$ (8,067)</b>	<b>\$ (20,588)</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 488,857</b>	<b>\$ 488,857</b>	<b>\$ -</b>	<b>\$ 589,598</b>	<b>\$ 100,742</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>FTEs</b>	<b>1.34</b>	<b>1.34</b>	<b>-</b>	<b>1.35</b>	<b>0.01</b>

**Table A-8. Training and Education Budget Detail**

## Situation Awareness and Infrastructure Security Program

The following table lists the budget for Situation Awareness and Infrastructure Security.

<b>Situation Awareness and Infrastructure Security</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	0.28	0.49	0.21
Direct Expenses	\$ 86,512	\$ 121,550	\$ 35,038
Indirect Expenses	\$ 36,394	\$ 72,370	\$ 35,976
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ 2,616	\$ (2,928)	\$ (5,544)
Total Funding Requirement	\$ 125,523	\$ 190,992	\$ 65,470

**Table A-9. Situation Awareness and Infrastructure Security Budget**

### Situation Awareness Program Scope and Functional Description

NERC and the Regions shall, through Reliability Coordinators and available tools, monitor present conditions on the BES and provide leadership coordination, technical expertise, and assistance to the industry in responding to events as necessary.

### 2017 Key Assumptions

The NERC and Regional Entity business plans and budgets reflect a set of common assumptions developed jointly by NERC and the Regional Entities as part of the annual business plan and budget process. NERC and the Regional Entities will also continue to work collaboratively to refine and revise procedures to eliminate duplication, increase operational efficiencies, enhance ERO-wide consistency, and achieve measurable reliability outcomes, consistent with their respective roles and responsibilities. The common assumptions for the Situation Awareness and Infrastructure Security Program can be located in the Key Assumptions section of Exhibit A in NERC's 2017 Business Plan and Budget.

The Situation Awareness program includes costs and resources to review and respond to incidents and events that impact the reliability of the BES and respond to inquiries by NERC or others.

### 2017 Goals and Key Deliverables

The goal of the Situation Awareness program is to maintain awareness about the conditions of the BES and to respond to events by providing coordination assistance and communications between key parties. In 2017, staff will continue to fully utilize and improve the second version of the situation awareness tools and related processes.

### Infrastructure Security Program Scope and Functional Description

NERC and the Regions coordinate electric industry activities to promote critical infrastructure protection of the BES in North America by taking a leadership role in critical infrastructure

protection of the electricity sector to reduce vulnerabilities of the electricity sector's critical infrastructure.

### **2017 Key Assumptions**

The NERC and Regional Entity business plans and budgets reflect a set of common assumptions developed jointly by NERC and the Regional Entities as part of the annual business plan and budget process. The common assumptions for Critical Infrastructure Protection (CIP) can be located in the Key Assumptions section of NERC's 2017 Business Plan and Budget.

The Infrastructure Security Program is responsible for raising the awareness of security, promoting standard security practices, and aiding the Registered Entities in organizing and sharing security implementations specific to the electric utility sector.

The MRO Standards Committee will participate in the development of CIP standards and develop guidance on the application of standards. The committee is comprised of MRO sector representatives and facilitated by MRO staff.

The Operations group within MRO has Situation Awareness responsibilities, which are budgeted in their respective areas.

### **2017 Goals and Key Deliverables**

The goal is to provide effective communication, coordination and industry facilitation in all areas of security to ensure the region is prepared for cyber-related incidents.

### **Resource Requirements**

MRO staff has budgeted to participate in NERC CIPC meetings.

### **Personnel Expenses**

Personnel costs for 2017 increase, reflecting the increase in this program area's FTEs.

### **Consultants and Contracts**

N/A

## Situation Awareness and Infrastructure Security Budget Detail

The following table shows funding sources and related expenses for the Situation Awareness and Infrastructure Security section of the *2017 Business Plan and Budget*. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>SITUATION AWARENESS and INFRASTRUCTURE SECURITY</b>					
	2015 Budget	2015 Projection	Variance 2015 Projection v 2015 Budget Over(Under)	2016 Budget	Variance 2016 Budget v 2015 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 124,349	\$ 124,349	\$ -	\$ 188,392	\$ 64,043
Penalty Sanctions	1,173	1,173	-	2,600	1,427
<b>Total NERC Funding</b>	<b>\$ 125,523</b>	<b>\$ 125,523</b>	<b>-</b>	<b>\$ 190,992</b>	<b>\$ 65,470</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 125,523</b>	<b>\$ 125,523</b>	<b>-</b>	<b>\$ 190,992</b>	<b>\$ 65,470</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 41,582	\$ 41,582	\$ -	\$ 68,496	\$ 26,914
Payroll Taxes	2,763	2,763	-	4,642	1,879
Benefits	3,927	3,927	-	6,937	3,010
Retirement Costs	9,140	9,140	-	14,275	5,135
<b>Total Personnel Expenses</b>	<b>\$ 57,412</b>	<b>\$ 57,412</b>	<b>\$ -</b>	<b>\$ 94,350</b>	<b>\$ 36,938</b>
<b>Meeting Expenses</b>					
Meetings	\$ 200	\$ 200	\$ -	\$ 200	\$ -
Travel	22,000	22,000	-	20,500	(1,500)
Conference Calls	400	400	-	-	(400)
<b>Total Meeting Expenses</b>	<b>\$ 22,600</b>	<b>\$ 22,600</b>	<b>\$ -</b>	<b>\$ 20,700</b>	<b>\$ (1,900)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -
Office Rent	-	-	-	-	-
Office Costs	6,500	6,500	-	6,500	-
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 6,500</b>	<b>\$ 6,500</b>	<b>\$ -</b>	<b>\$ 6,500</b>	<b>\$ -</b>
<b>Total Direct Expenses</b>	<b>\$ 86,512</b>	<b>\$ 86,512</b>	<b>\$ -</b>	<b>\$ 121,550</b>	<b>\$ 35,038</b>
<b>Indirect Expenses</b>	<b>\$ 36,394</b>	<b>\$ 36,394</b>	<b>\$ -</b>	<b>\$ 72,370</b>	<b>\$ 35,976</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 122,906</b>	<b>\$ 122,906</b>	<b>\$ -</b>	<b>\$ 193,920</b>	<b>\$ 71,014</b>
<b>Change in Assets</b>	<b>\$ 2,616</b>	<b>\$ 2,616</b>	<b>\$ -</b>	<b>\$ (2,928)</b>	<b>\$ (5,544)</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 2,616	2,616	-	(2,928)	(5,544)
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>\$ 2,616</b>	<b>\$ 2,616</b>	<b>\$ -</b>	<b>\$ (2,928)</b>	<b>\$ (5,544)</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 125,523</b>	<b>\$ 125,523</b>	<b>\$ -</b>	<b>\$ 190,992</b>	<b>\$ 65,470</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>FTEs</b>	0.28	0.28	-	0.49	0.21

**Table A-10. Situation Awareness and Infrastructure Security Budget Detail**

## Administrative Services

The following table outlines the budget for Administrative Services.

Administrative Services (in whole dollars)						
	Direct Expenses and Fixed Assets			FTEs		
	2016 Budget	2017 Budget	Increase (Decrease)	2016 Budget	2017 Budget	Increase (Decrease)
General and Administrative	\$817,157.00	\$1,005,377.00	\$188,220.00	2.61	2.91	0.30
Legal and Regulatory	\$432,614.00	\$451,723.00	\$19,109.00	0.87	0.95	0.08
Information Technology	\$1,366,533.00	\$1,287,769.00	(\$78,764.00)	3.26	3.92	0.66
Human Resources, Finance and Accounting	\$1,913,106.00	\$1,695,182.00	(\$217,924.00)	3.75	3.89	0.14
Total Administrative Services	\$4,529,410.00	\$4,440,051.00	(\$89,359.00)	10.49	11.67	1.18

**Table A-11. Administrative Services Budget**

### Methodology for Allocation of Administrative Services Expenses to Programs

All expenses for the Administrative Services programs, referred to as indirect expenses, are allocated to the delegated program areas based on their respective number of FTEs. This allocation provides improved financial perspective for the delegated functions.

### Program Scope and Functional Description

MRO's Administrative Services area includes the business and administrative functions of the organization, including legal and regulatory, information technology, human resources, finance and accounting, and general expenses. Costs incurred for these services are allocated as an indirect expense across MRO's other program areas.



## General and Administrative

The following table lists the General and Administrative budget.

<b>General and Administrative</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	2.61	2.91	0.30
Total Direct Expenses	\$ 817,157	\$ 1,005,377	\$ 188,220
Inc(Dec) in Fixed Assets	\$ -	\$ -	\$ -
Working Capital Requirement	\$ (326,829)	\$ (566,073)	\$ (239,244)

**Table A-12. General and Administrative Budget**

### Program Scope and Functional Description

The MRO General and Administrative function provides executive management over the day-to-day operations of the corporation.

### Methodology for Allocation of Administrative Services Expenses to Programs

Expenses related to indirect programs are allocated proportionately to the direct programs for 2017 based on the number of FTEs in those programs.

### 2017 Key Assumptions

- Work related to NERC and Regional Entity initiatives may impact existing staff resources, training, and business travel costs
- MRO will continue to reimburse approved stakeholder travel costs for participation on NERC committees and working groups
- Any increase or decrease in assessments to achieve desired working capital reserve will be included in the General and Administrative area and will be allocated proportionately based on FTEs in the direct program areas

### 2017 Goals and Key Deliverables

The MRO General and Administrative function ensures that there is adequate attention to the day-to-day management of the corporation, including facilities and maintenance, board governance, policies and procedures to maintain and enhance operation of the corporation, proper record-keeping, and related responsibilities under applicable regulations as well as MRO's Delegation Agreement.

### Funding Sources and Requirements — Explanation of Increase (Decrease)

#### Assessments

The Board initially approved an Operating and Working Capital Reserves Policy on March 14, 2013 and has reviewed it on an annual basis. (See Section B for the current version.)

## Funding Sources

In 2017, the expenses related to the indirect program areas are being allocated entirely to the direct programs and therefore the indirect program areas have no ERO assessment revenue.

## Resource Requirements

The number of meetings and outreach efforts planned for 2017 has increased but meeting expenses are approximately the same as in the 2016 budget because of efficiencies and cost savings realized from hosting meetings at MRO's facility in Saint Paul, Minnesota. However, reimbursement for stakeholder participant travel-related expenses will increase.

## Personnel Expenses

MRO's FTEs remain flat in 2017

- No additional staff are added in 2017
- 3% salary increase plus promotions
- The 2017 medical premium reflects an additional 7% increase
- 2017 retirement costs increase
  - Cost of living adjustment in retirement plans
  - Postretirement medical plan expense increase reflecting the actuarial calculation prepared annually by a third party expert. The future obligation is a result of the discount rate, expected rate of return on the plan assets, and health care cost trend rate.
  - Average staff age increases from 43 to 45 and average staff years of service increases from 6 years to 7 years

Personnel expenses in this particular area increase because of an increase in FTEs and because there is more management involvement related to ERO executive activities and other working groups.

## General and Administrative Budget Detail

The following table shows funding sources and related expenses for the General and Administrative section of the *2017 Business Plan and Budget*. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>GENERAL and ADMINISTRATIVE</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ (326,829)	\$ (326,829)	\$ -	\$ (566,073)	\$ (239,244)
Penalty Sanctions	-	-	-	-	-
<b>Total NERC Funding</b>	<b>\$ (326,829)</b>	<b>\$ (326,829)</b>	<b>\$ -</b>	<b>\$ (566,073)</b>	<b>\$ (239,244)</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ (326,829)</b>	<b>\$ (326,829)</b>	<b>\$ -</b>	<b>\$ (566,073)</b>	<b>\$ (239,244)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 422,618	\$ 422,618	\$ -	\$ 573,621	\$ 151,003
Payroll Taxes	21,172	21,172	-	25,338	4,166
Benefits	35,341	35,341	-	43,745	8,404
Retirement Costs	89,526	89,526	-	109,173	19,647
<b>Total Personnel Expenses</b>	<b>\$ 568,657</b>	<b>\$ 568,657</b>	<b>\$ -</b>	<b>\$ 751,877</b>	<b>\$ 183,220</b>
<b>Meeting Expenses</b>					
Meetings	\$ 28,000	\$ 28,000	\$ -	\$ 30,000	\$ 2,000
Travel	113,000	113,000	-	113,000	-
Conference Calls	500	500	-	-	(500)
<b>Total Meeting Expenses</b>	<b>\$ 141,500</b>	<b>\$ 141,500</b>	<b>\$ -</b>	<b>\$ 143,000</b>	<b>\$ 1,500</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 75,000	\$ 75,000	\$ -	\$ 75,000	\$ -
Office Rent	-	-	-	-	-
Office Costs	32,000	32,000	-	35,500	3,500
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 107,000</b>	<b>\$ 107,000</b>	<b>\$ -</b>	<b>\$ 110,500</b>	<b>\$ 3,500</b>
<b>Total Direct Expenses</b>	<b>\$ 817,157</b>	<b>\$ 817,157</b>	<b>\$ -</b>	<b>\$ 1,005,377</b>	<b>\$ 188,220</b>
<b>Indirect Expenses</b>	<b>\$ (817,157)</b>	<b>\$ (817,157)</b>	<b>\$ -</b>	<b>\$ (1,005,377)</b>	<b>\$ (188,220)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Change in Assets</b>	<b>\$ (326,829)</b>	<b>\$ (326,829)</b>	<b>\$ -</b>	<b>\$ (566,073)</b>	<b>\$ (239,244)</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ -	\$ -	-	-	-
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (326,829)</b>	<b>\$ (326,829)</b>	<b>\$ -</b>	<b>\$ (566,073)</b>	<b>\$ (239,244)</b>
<b>FTEs</b>	<b>2.61</b>	<b>2.61</b>	<b>-</b>	<b>2.91</b>	<b>0.30</b>

**Table A-13. General and Administrative Budget Detail**

## Legal and Regulatory

The following table lists the Legal and Regulatory budget.

<b>Legal and Regulatory</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	0.87	0.95	0.08
Total Direct Expenses	\$ 432,614	\$ 451,723	\$ 19,109
Inc(Dec) in Fixed Assets	\$ -	\$ -	\$ -
Working Capital Requirement	\$ -	\$ -	\$ -

**Table A-14. Legal and Regulatory Budget**

### Program Scope and Functional Description

MRO has one internal corporate legal counsel to provide advice to the board, the President and CEO, and staff on legal and regulatory matters affecting MRO. MRO may use additional specialized legal resources on an as-needed basis, such as for tax matters, employee benefit plan issues, and significant policy or regulatory matters.

### 2017 Key Assumptions

In the 2017 Budget, as in the 2013 - 2016 budgets, there are no specific funds for hearings under CMEP Rules; therefore if there were a hearing, MRO would use its current budget resources and reserves to fund the expense.

### 2017 Goals and Key Deliverables

Legal and Regulatory functions are responsible for general corporate legal advice, legal training, and timely, accurate filings to Regulatory authorities. The staff member in this function also serves as the primary MRO staff person to the MRO Board Governance and Personnel Committee. External affairs and communications are also incorporated into this function including outreach to stakeholders and regulators (federal, state and provincial). Outside legal will be used exclusively for any hearings and to supplement internal resources as necessary due to the need for specialized advice or workflow volume.

Communications training is also part of the Legal and Regulatory budget. Communications training is provided as part of MRO's Crisis Communication function. Internal legal counsel serves as the communication coordinator of the MRO Crisis Communication Team and the Vice President of Regulatory Affairs and Enforcement serves as the legal advisor.

### Resource Requirements

#### Funding Sources

In 2017, the expenses related to the indirect program areas are allocated entirely to the direct programs and therefore have no ERO assessment revenue.

**Resource Requirements**

Resource requirements reflect continued engagement of members of the MRO Board of Directors' outreach to U.S. federal regulators and Canadian provincial regulators.

**Meeting Expenses**

Travel costs associated with outreach to stakeholders and regulators has been moved to Training and Education programs, causing a reduction in legal.

**Consultants and Contracts**

There is a decrease in communications training for 2017. The training was done in 2015 and is not held annually.

**Professional Services**

Overall legal and regulatory budgeted costs for outside counsel will decrease slightly. Independent MRO board member fees reflect a new schedule resulting in higher fees.

## Legal and Regulatory Budget Detail

The following table shows funding sources and related expenses for the Legal and Regulatory section of the *2017 Business Plan and Budget*. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>LEGAL and REGULATORY</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ -	\$ -	\$ -	\$ -	\$ -
Penalty Sanctions	-	-	-	-	-
<b>Total NERC Funding</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 193,551	\$ 193,551	\$ -	\$ 200,048	\$ 6,497
Payroll Taxes	9,185	9,185	-	9,439	254
Benefits	11,780	11,780	-	13,591	1,811
Retirement Costs	36,383	36,383	-	37,820	1,437
<b>Total Personnel Expenses</b>	<b>\$ 250,899</b>	<b>\$ 250,899</b>	<b>\$ -</b>	<b>\$ 260,898</b>	<b>\$ 9,999</b>
<b>Meeting Expenses</b>					
Meetings	\$ 150	\$ 150	\$ -	\$ -	\$ (150)
Travel	23,500	23,500	-	8,000	(15,500)
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 23,650</b>	<b>\$ 23,650</b>	<b>\$ -</b>	<b>\$ 8,000</b>	<b>\$ (15,650)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 10,000	\$ 10,000	\$ -	\$ -	\$ (10,000)
Office Rent	-	-	-	-	-
Office Costs	8,065	8,065	-	7,775	(290)
Professional Services	140,000	140,000	-	175,050	35,050
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 158,065</b>	<b>\$ 158,065</b>	<b>\$ -</b>	<b>\$ 182,825</b>	<b>\$ 24,760</b>
<b>Total Direct Expenses</b>	<b>\$ 432,614</b>	<b>\$ 432,614</b>	<b>\$ -</b>	<b>\$ 451,723</b>	<b>\$ 19,109</b>
<b>Indirect Expenses</b>	<b>\$ (432,614)</b>	<b>\$ (432,614)</b>	<b>\$ -</b>	<b>\$ (451,723)</b>	<b>\$ (19,109)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Change in Assets</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	-	\$ -	-	-	-
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>FTEs</b>	<b>0.87</b>	<b>0.87</b>	<b>-</b>	<b>0.95</b>	<b>0.08</b>

**Table A-15. Legal and Regulatory Budget Detail**

## Information Technology

The following table lists the Information Technology budget.

<b>Information Technology</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	3.26	3.92	0.66
Total Direct Expenses	\$ 1,529,755	\$ 1,618,099	\$ 88,344
Inc(Dec) in Fixed Assets	\$ (163,222)	\$ (330,330)	\$ (167,108)
Working Capital Requirement	\$ -	\$ -	\$ -

**Table A-16. Information Technology Budget**

### Program Scope and Functional Description

MRO's Information Technology ("IT") program responds to business needs by providing the technology and communications tools for staff to perform Regional Entity functions.

### 2017 Key Assumptions

IT deploys business systems and provides technical support and training for the technologies used at MRO. Systems include secure networks and databases, business applications, office equipment such as copiers, printers, labelers, servers to support connected and shared resources, personal computers, telephones, remote network access, internet access and conference AV solutions. In addition, IT is responsible for physical security systems for MRO offices.

IT has a keen focus on availability of networks and systems, maintenance of those systems, investigation of issues, and deployment of new tools. Managing IT is essential to staff productivity.

### 2017 Goals and Key Deliverables

The IT program's goal is to provide secure technology solutions that enable staff to have information and data to perform business functions, both locally and remotely, along with communications technologies to support interaction among staff, Registered Entities, and others.

IT resources will focus on reviewing business systems to look for opportunities to automate or improve efficiency. The SharePoint application will continue to grow in terms of functionality initially implemented by MRO, and staff will look for workflow automation opportunities.

Resources will continue to support and maintain a highly secure network and secure data storage and access systems. Back-up and disaster recovery systems will be maintained and verified.

## **Funding Sources**

In 2017, the expenses related to indirect program areas are being allocated entirely to the direct programs, and therefore the indirect program areas have no ERO assessment revenue.

## **Resource Requirements**

To continue building and implementing enterprise applications, resources will be required from NERC and the Regions. New ERO applications will be centralized in one location to maximize efficiency of technology hardware, resources and data security.

NERC will continue to fund the development and maintenance of Enterprise applications. Regional Entities may be required to allocate or augment business teams to help develop application business requirements and to test business functionality within the enterprise applications.

## **Consultants and Contracts**

MRO uses contractors and consultants for technical assistance on network and security related projects, for real time network monitoring and for complex implementation and upgrade projects. In 2017 reduced focus will be on implementation and upgrades and transition to maintenance performed by in-house personnel, resulting in reduced Consultants and Contracts expense for Information Technology.

## **Personnel Expenses**

Increase in 2017 is reflective of charging the time of the business system analyst to the IT program. The time requirement by the business system analyst by the other business applications is difficult to project but will be reflected in actuals.



## Information Technology Budget Detail

The following table shows funding sources and related expenses for the Information Technology section of the *2017 Business Plan and Budget*. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>INFORMATION TECHNOLOGY</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ -	\$ -	\$ -	\$ -	\$ -
Penalty Sanctions	-	-	-	-	-
<b>Total NERC Funding</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 334,488	\$ 334,488	\$ -	\$ 399,848	\$ 65,360
Payroll Taxes	24,454	24,454	-	29,685	5,231
Benefits	44,143	44,143	-	55,637	11,494
Retirement Costs	69,198	69,198	-	81,819	12,621
<b>Total Personnel Expenses</b>	<u>\$ 472,283</u>	<u>\$ 472,283</u>	<u>\$ -</u>	<u>\$ 566,989</u>	<u>\$ 94,706</u>
<b>Meeting Expenses</b>					
Meetings	\$ -	\$ -	\$ -	\$ -	\$ -
Travel	8,000	8,000	-	8,000	-
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<u>\$ 8,000</u>	<u>\$ 8,000</u>	<u>\$ -</u>	<u>\$ 8,000</u>	<u>\$ -</u>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 359,200	\$ 359,200	\$ -	\$ 329,110	\$ (30,090)
Office Rent	-	-	-	-	-
Office Costs	209,550	209,550	-	210,000	450
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	480,722	480,722	-	504,000	23,278
<b>Total Operating Expenses</b>	<u>\$ 1,049,472</u>	<u>\$ 1,049,472</u>	<u>\$ -</u>	<u>\$ 1,043,110</u>	<u>\$ (6,362)</u>
<b>Total Direct Expenses</b>	<u>\$ 1,529,755</u>	<u>\$ 1,529,755</u>	<u>\$ -</u>	<u>\$ 1,618,099</u>	<u>\$ 88,344</u>
<b>Indirect Expenses</b>	<u>(1,529,755)</u>	<u>(1,529,755)</u>	<u>\$ -</u>	<u>(1,618,099)</u>	<u>(88,344)</u>
<b>Other Non-Operating Expenses</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Total Expenses (B)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Change in Assets</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Fixed Assets</b>					
Depreciation	(480,722)	(480,722)	-	(504,000)	(23,278)
Computer & Software CapEx	317,500	317,500	-	173,670	(143,830)
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ 163,222	\$ 163,222	-	\$ 330,330	\$ 167,108
<b>Inc(Dec) in Fixed Assets (C)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>TOTAL BUDGET (=B + C)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>FTEs</b>	3.26	3.26	-	3.92	0.66

**Table A-17. Information Technology Budget Detail**

## Human Resources, Finance and Accounting

The following table lists the Human Resources, Finance and Accounting budget.

<b>Human Resources, Finance, and Accounting</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	3.75	3.89	0.14
Total Direct Expenses	\$ 1,446,106	\$ 1,552,071	\$ 105,965
Inc(Dec) in Fixed Assets	\$ 467,000	\$ 143,111	\$ (323,889)
Working Capital Requirement	\$ -	\$ -	\$ -

**Table A-18. Human Resources, Finance and Accounting Budget**

### Program Scope and Functional Description

#### Human Resources

The Human Resources function of MRO designs, plans, and implements Human Resource policies and procedures in adherence with applicable federal and state laws. The Human Resources function also organizes the recruitment efforts of the organization and coordinates onboarding, training, personnel development, and best practice employee retention initiatives.

MRO has developed a culture and talent management program that features an in-depth communication and training plan. New hire training initiatives and employee collaborations are planned to create an opportunity for peer-to-peer internal mentorship and team building. The program also facilitates MRO's enterprise-wide corporate compliance and ethics program. MRO reviewed and enhanced its employee engagement and culture enrichment activities in an effort to positively impact both the experience of new employees upon arrival at MRO, as well as the overall corporate culture to be an "employer of choice," and therefore support attraction and retention of qualified staff.

#### Finance and Accounting

The Finance and Accounting function directs the overall financial plans and accounting practices of the organization, oversees treasury, accounting, budget, tax, and audit activities, and oversees financial and accounting system controls and standards. The Finance and Accounting function also administrates employee benefit plans, and reports the overall outcome of MRO's annual activities to the MRO board.

#### 2017 Goals and Key Deliverables

- Forecasts and projections
- Payroll and expense administration
- Preparation of quarterly financial statements
- IRS reporting - Form 990
- Review and improve fiscal controls
- Annual independent audit initiated by the Regional Entity
- Enterprise-wide Corporate Compliance and Ethics Program
- Treasury functions with MRO board
- 401(k) and Retiree Medical Trust administration
- Finance and Accounting also coordinates all MRO internal and external meetings, workshops and events

**Funding Sources**

In 2017, the expenses related to indirect program areas are being allocated entirely to the direct programs and therefore have no ERO assessment revenue.

**Resource Requirements**

MRO's efforts include maintenance of core employee benefits, offsets to non-core benefits when necessary, analysis of office and other operational costs, improving efficiencies, and establishing uniformity in methodologies of cost allocation. MRO staff further explores improved cost effectiveness of routine expenses, and pursues early detection and quick resolution of budget concerns, lessening the impact of cost adjustments. It is our intent to continuously detect and address any risks.

**Buidling Rent and Facilities**

2017 costs include 12 months of facility costs in the expanded MRO office facility.

Total depreciation expense for all assets are reflected in the IT program budget, including depreciation of leasehold improvements.

## Human Resources, Finance, and Accounting Budget Detail

The following table shows funding sources and related expenses for the Human Resources, Finance, and Accounting section of the *2017 Business Plan and Budget*. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>HUMAN RESOURCES, FINANCE, and ACCOUNTING</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ -	\$ -	\$ -	\$ -	\$ -
Penalty Sanctions	-	-	-	-	-
<b>Total NERC Funding</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 388,330	\$ 388,330	\$ -	\$ 414,657	\$ 26,327
Payroll Taxes	26,176	26,176	-	27,026	850
Benefits	50,778	50,778	-	52,381	1,603
Retirement Costs	78,486	78,486	-	94,740	16,254
<b>Total Personnel Expenses</b>	<b>\$ 543,770</b>	<b>\$ 543,770</b>	<b>\$ -</b>	<b>\$ 588,804</b>	<b>\$ 45,034</b>
<b>Meeting Expenses</b>					
Meetings	\$ 500	\$ 500	\$ -	\$ 100	\$ (400)
Travel	6,030	6,030	-	5,000	(1,030)
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 6,530</b>	<b>\$ 6,530</b>	<b>\$ -</b>	<b>\$ 5,100</b>	<b>\$ (1,430)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 28,810	\$ 28,810	\$ -	\$ 28,967	\$ 157
Office Rent	648,946	648,946	-	701,900	52,954
Office Costs	164,550	164,550	-	173,800	9,250
Professional Services	53,500	53,500	-	53,500	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 895,806</b>	<b>\$ 895,806</b>	<b>\$ -</b>	<b>\$ 958,167</b>	<b>\$ 62,361</b>
<b>Total Direct Expenses</b>	<b>\$ 1,446,106</b>	<b>\$ 1,446,106</b>	<b>\$ -</b>	<b>\$ 1,552,071</b>	<b>\$ 105,965</b>
<b>Indirect Expenses</b>	<b>\$ (1,446,106)</b>	<b>\$ (1,446,106)</b>	<b>\$ -</b>	<b>\$ (1,552,071)</b>	<b>\$ (105,965)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Change in Assets</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	467,000	467,000	-	143,111	(323,889)
Allocation of Fixed Assets	\$ (467,000)	\$ (467,000)	-	(143,111)	323,889
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
FTEs	3.75	3.75	-	3.89	0.14

**Table A-19. Human Resources, Finance, and Accounting Budget Detail**

# Section B – Supplemental Financial Information

## 2017 Business Plan and Budget



## Section B – Supplemental Financial Information

### Reserve Balance

Table B-1 analyzes the working capital reserve for 2016 through 2017.

<b>Working Capital Reserve Analysis 2016-2017</b>	
<b>STATUTORY</b>	
<b>Beginning Working Capital Reserve (Deficit), December 31, 2015</b>	1,951,894
Plus: 2016 MRO Funding (from LSEs or designees)	10,891,562
Less: 2016 Projected expenses & capital expenditures	(11,354,641)
<b>Projected Working Capital Reserve (Deficit), December 31, 2016 <sup>1</sup></b>	<b>1,488,815</b>
<b>Targeted Working Capital Reserve, December 31, 2017 ((<math>\\$11,226,670 / 365</math> days) X 30 days)</b>	922,740
Less: Projected Working Capital Reserve, December 31, 2016	(1,488,815)
<b>Increase(decrease) in assessments to achieve targeted Working Capital Reserve</b>	<b>(566,075)</b>
2017 Expenses and Capital Expenditures	11,226,670
Less: Penalty Sanctions <sup>2</sup>	(166,250)
Less: Other Funding Sources	0
Adjustment to achieve targeted Working Capital Reserve	(566,075)
<b>2016 MRO Assessment</b>	<b>10,494,345</b>

<sup>1</sup> MRO's projected reserve December 31, 2016 assumes that there will not be a material difference between budgeted versus actual/projected results from 2016.

<sup>2</sup> Represents collections on or prior to June 30, 2016. See Table B-2 for full disclosure.

**Table B-1. Working Capital Reserve Analysis 2016 - 2017**

### Explanation of Changes in Reserve Policy from Prior Years

MRO's Finance and Audit Committee (FAC) resolved that 30 days of cash is sufficient based on MRO's cash flow risk, with the Board's approval in 2016 for working capital analysis 2016-2017. The certainty of MRO's funding stream supports that a 30-day reserve is reasonable for sustaining short-term contingencies. MRO resets its reserves at the beginning of each year to the approved policy.

## Breakdown by Statement of Activity Sections

Table B-2 lists all penalties, including date received and amount, received prior to June 30, 2016.

Penalty Sanctions	Date Received	Amount Received
<b>Penalties received between 7/1/2015 and 6/30/2016</b>		
	Dec-15	\$ 89,250
	Dec-15	59,000
	Mar-16	9,000
	Mar-16	9,000
		\$ 166,250
Penalties received prior to 6/30/2015, held in the assessment stabilization reserve		\$ -
<b>Total penalties available to offset assessments</b>		\$ 166,250
<b>Adjustments</b>		
Penalties held in assessment stabilization reserve		-
<b>Total Penalty Sanctions included in the 2017 Budget</b>		\$ 166,250

**Table B-2. Penalty Sanctions Received**

### Penalty Sanctions

Penalty monies received prior to June 30, 2016 are to be used to offset assessments in the 2017 Budget, as documented in the NERC Policy – Accounting, Financial Statement and Budgetary Treatment of Penalties Imposed and Received for Violations of Reliability Standards. Penalty monies received from July 1, 2016 through June 30, 2017 will be used to offset assessments in the 2018 Budget.

All penalties received prior to June 30, 2016 are listed above, including the amount and date received.

Allocation Method: Penalty sanctions received have been allocated to the following statutory programs to reduce assessments: Reliability Standards Organization Registration and Certification; Compliance Monitoring and Enforcement; Reliability Assessments and Performance Analysis; Training, Education and Operator Certification; and Situation Awareness and Infrastructure Security. Penalty sanctions are allocated based upon the number FTEs in the Program divided by the aggregate total FTEs in the Programs receive the allocation.

Table B-3 lists the budget for Supplemental Funding.

Outside Funding Breakdown By Program (Excluding Penalty Sanction)	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget
<b>Compliance Monitoring, Enforcement &amp; Org. Registration</b>				
	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Reliability Assessment and Performance Analysis</b>				
<b>Total</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Training and Education</b>				
Testing Fees and Certificate Renewals	\$ -	\$ -	\$ -	-
CEH Fees	-	-	-	-
Workshops	-	-	-	-
<b>Total</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Situation Awareness and Infrastructure Security</b>				
FIST Royalties	\$ -	\$ -	\$ -	-
TSIN Fees	-	-	-	-
<b>Total</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>General and Administrative</b>				
Interest Income	\$ -	\$ -	\$ -	-
<b>Total</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Total Outside Funding</b>	<u><u>\$ -</u></u>	<u><u>\$ -</u></u>	<u><u>\$ -</u></u>	<u><u>\$ -</u></u>

**Table B-3. Supplemental Funding**

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

MRO does not earn interest income. Our general banking account offsets the bank charges with any earned interest.



Table B-4 summarizes Personnel Expenses.

Personnel Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Total Salaries	\$ 5,682,871	\$ 5,682,871	\$ 5,874,689	\$ 191,818	3.4%
Total Payroll Taxes	361,827	361,827	366,600	4,773	1.3%
Total Benefits	582,253	582,253	608,751	26,498	4.6%
Total Retirement	1,094,515	1,094,515	1,195,387	100,872	9.2%
<b>Total Personnel Costs</b>	<b>\$ 7,721,466</b>	<b>\$ 7,721,466</b>	<b>\$ 8,045,427</b>	<b>\$ 323,961</b>	<b>4.2%</b>
FTEs	43.00	43.00	43.00	-	0.0%
Cost per FTE					
Salaries	\$ 132,160	\$ 132,160	\$ 136,621	4,461	3.4%
Payroll Taxes	8,415	8,415	8,526	111	1.3%
Benefits	13,541	13,541	14,157	616	4.6%
Retirement	25,454	25,454	27,800	2,346	9.2%
<b>Total Cost per FTE</b>	<b>\$ 179,569</b>	<b>\$ 179,569</b>	<b>\$ 187,103</b>	<b>\$ 7,534</b>	<b>4.2%</b>

**Table B-4. Personnel Expenses**

### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

#### FTEs remain flat in 2017

- No additional staff are added in 2017; 43 FTEs reflects the 2016 nose count at year-end 2016
- 3% salary increase plus promotions
- The 2017 medical premium reflects an additional 7% increase
- 2017 retirement costs increase
  - Cost of living adjustment in retirement plans
  - Postretirement medical plan expense increase reflecting the actuarial calculation prepared annually by a third party expert. The future obligation is a result of the discount rate, expected rate of return on the plan assets, and health care cost trend rate.
  - Average staff age increases from 43 to 45 and average staff years of service increases from 6 years to 7 years

Table B-5 lists the budget for Meeting Expenses.

Meeting Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Meeting Expenses	\$ 85,500	\$ 85,500	\$ 85,000	\$ (500)	-0.6%
Travel	680,330	680,330	635,000	(45,330)	-6.7%
Conference Calls	900	900	-	(900)	-100.0%
<b>Total Meeting Expenses</b>	<b>\$ 766,730</b>	<b>\$ 766,730</b>	<b>\$ 720,000</b>	<b>\$ (46,730)</b>	<b>-6.1%</b>

Table B-5. Meeting Expenses

### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

#### General and Administrative

There is an increase in the number of meetings and outreach efforts planned in 2017; however, budgeted meeting expenses are approximately the same as in the 2016 budget because of efficiencies and cost savings realized from hosting meetings at MRO. Reimbursement for stakeholder participant travel expenses will increase.

#### Compliance Monitoring and Enforcement Program

Reflects fewer on-site audits for 2017 and reduced number of working groups.

Table B-6 lists the budget for Consultants and Contracts.

Consultants	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
<b>Consultants</b>					
Reliability Standards and Organization Registration and Certification	\$ -	\$ -	\$ -	\$ -	
Compliance	31,000	31,000	77,000	46,000	148%
Reliability Assessment and Performance Analysis (Alert)	8,000	8,000	8,000	-	0%
Event Analysis	-	-	-	-	
Training and Education	-	-	-	-	
Situation Awareness and Infrastructure Security	-	-	-	-	
Committee and Member Forums	-	-	-	-	
General and Administrative	75,000	75,000	75,000	-	0%
Legal and Regulatory	10,000	10,000	-	(10,000)	-100%
Information Technology	227,500	227,500	241,000	13,500	6%
Human Resources	-	-	-	-	
Accounting and Finance	2,000	2,000	-	(2,000)	-1%
<b>Consultants Total</b>	<b>\$ 353,500</b>	<b>\$ 353,500</b>	<b>\$ 401,000</b>	<b>\$ 47,500</b>	<b>13%</b>
<b>Contracts</b>					
Outsource Standards Tracking Software Applications	\$ 13,236	\$ 13,236	\$ -	(13,236)	-100%
<b>Subtotal - Reliability Standards Contracts</b>	<b>\$ 13,236</b>	<b>\$ 13,236</b>	<b>\$ -</b>	<b>(13,236)</b>	<b>-100%</b>
Outsource Compliance Information Tracking Applications				-	
<b>Subtotal - Compliance and Organization Registration and Certification Contracts</b>	<b>\$ 83,000</b>	<b>\$ 83,000</b>	<b>\$ 92,000</b>	<b>9,000</b>	<b>11%</b>
	<b>\$ 83,000</b>	<b>\$ 83,000</b>	<b>\$ 92,000</b>	<b>9,000</b>	<b>11%</b>
Model Series Development (MRO's portion of expenses of the MMWG/ERAG)	\$ 28,235	\$ 28,235	\$ 30,100	1,865	7%
Model Building	20,000	20,000	-	(20,000)	-100%
PTI Software	23,200	23,200	16,300	(6,900)	-30%
Proposed Frequency Response Study	-	-	17,600	17,600	
<b>Subtotal - Reliability Assessments Contracts</b>	<b>\$ 71,435</b>	<b>\$ 71,435</b>	<b>\$ 64,000</b>	<b>\$ (7,435)</b>	<b>-10%</b>
Cisco	25,000	25,000	7,800	(17,200)	-69%
Barracuda	800	800	1,800	1,000	125%
EFT Maintenance	7,500	7,500	4,200	(3,300)	-44%
Symantec Antivirus	1,850	1,850	-	(1,850)	-100%
Varonis File Maintenance	8,500	8,500	8,500	-	0%
Lyris	4,050	4,050	1,400	(2,650)	-65%
VMWare Support	30,000	30,000	-	(30,000)	-100%
SmartPhone Maintenance	6,500	6,500	1,600	(4,900)	-75%
Server Support	7,000	7,000	10,000	3,000	43%
Great Plains	4,000	4,000	4,000	-	0%
Comodo-Certificates	1,000	1,000	-	(1,000)	-100%
Lync Monitoring	14,400	14,400	14,400	-	0%
NetApp Multistore-Security software for SAN	9,000	9,000	800	(8,200)	-91%
Load Balancer Support	5,500	5,500	-	(5,500)	-100%
Network Monitor	700	700	700	-	0%
Sonus HW Support	2,400	2,400	1,300	(1,100)	-46%
Anitspam Service	3,500	3,500	1,500	(2,000)	-57%
Imperva	-	-	2,500	2,500	
Multi factor	-	-	3,300	3,300	
Cisco Amp	-	-	3,000	3,000	
AV Maintenance	-	-	20,000	20,000	
Misc Items	-	-	1,310	1,310	
<b>Subtotal - Information Technology Contracts</b>	<b>\$ 131,700</b>	<b>\$ 131,700</b>	<b>\$ 88,110</b>	<b>\$ (73,700)</b>	<b>-33%</b>
401K / 457b, 457f 3rd Party Administrator	-	-	-	-	
FSA 3rd Party Administrator	1,800	1,800	2,707	907	50%
Transportation 3rd Party Administrator	2,100	2,100	3,125	1,025	49%
Benefits 3rd Party Administrator	3,910	3,910	4,135	225	6%
Payroll 3rd Party Administrator	19,000	19,000	19,000	-	0%
HR-Employment Costs	-	-	-	-	
<b>Subtotal - HR and Finance Contracts</b>	<b>\$ 26,810</b>	<b>\$ 26,810</b>	<b>\$ 28,967</b>	<b>2,157</b>	<b>8%</b>
<b>Contracts Total</b>	<b>\$ 326,181</b>	<b>\$ 326,181</b>	<b>\$ 273,077</b>	<b>\$ (83,214)</b>	<b>-16%</b>
<b>Total Consulting and Contracts</b>	<b>\$ 679,681</b>	<b>\$ 679,681</b>	<b>\$ 674,077</b>	<b>\$ (35,714)</b>	<b>-1%</b>

Table B-6. Consultants and Contracts

## **Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

### **Reliability Standards Program, Organization Registration and Certification Program**

2017 Consultants and Contracts decreased as result of eliminating third party vendor costs associated with a software application used to ballot regional standards. MRO's use of this software has been replaced with a manual process, due to the expectation that MRO will not need to develop any regional standards and can therefore rely upon a manual process.

### **Compliance Monitoring and Enforcement Program**

2017 Consultants and Contracts reflects an addition of a part-time CIP consultant.

### **Information Technology**

MRO uses contractors and consultants for technical assistance on network and security related projects, for real time network monitoring and for complex implementation and upgrade projects. In 2017 reduced focus will be on implementation and upgrades and transition to maintenance performed by in-house personnel, resulting in reduced Consultants and Contracts expense for Information Technology.

Table B-7 lists the budget for Office Rent.

Office Rent	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Office Rent	\$ 633,946	\$ 633,946	\$ 690,400	\$ 56,454	8.9%
Utilities	8,000	8,000	6,500	(1,500)	-18.8%
Maintenance	7,000	7,000	5,000	(2,000)	-28.6%
<b>Total Office Rent</b>	<b>\$ 648,946</b>	<b>\$ 648,946</b>	<b>\$ 701,900</b>	<b>\$ 52,954</b>	<b>8.16%</b>

**Table B-7. Office Rent**

### **Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

2017 annual lease cost has an increase of \$52,954 reflecting twelve full months of rent with new leased space.

Table B-8 lists the budget for Office Costs.

Office Costs	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Phone Service					
Data Circuit (qmo)	\$ 66,000	\$ 66,000	\$ 60,000	\$ (6,000)	-9.09%
Webex	-	-	6,300	6,300	
Voice Circuits	18,000	18,000	18,000	-	0.00%
Business Cable	2,000	2,000	2,000	-	0.00%
Disaster Recovery Site	19,000	19,000	19,000	-	0.00%
Internet/Cell	49,383	49,383	46,388	(2,995)	-6.06%
Office Supplies	24,450	24,450	31,450	7,000	28.63%
Employee Member Events	15,000	15,000	20,000	5,000	33.33%
Employee Related Expense (Drug Testing, Finder Fees Etc)	13,000	13,000	16,500	3,500	26.92%
Computer Supplies and Maintenance	67,000	67,000	68,500	1,500	2.24%
Publications & Subscriptions	6,700	6,700	5,225	(1,475)	-22.01%
Professional Dues	16,120	16,120	15,470	(650)	-4.03%
Postage	2,700	2,700	2,700	-	0.00%
Temporary Services	-	-	-	-	
Finance-Filing/Reg Fees	5,000	5,000	3,000	(2,000)	-40.00%
Equipment Repair/Service Contracts	14,050	14,050	13,500	(550)	-3.91%
Bank Charges	23,000	23,000	23,000	-	0.00%
Presentation & Publicity & Supplies Promotional	2,000	2,000	5,000	3,000	150.00%
Departmental Functional Training	134,415	134,415	126,900	(7,515)	-5.59%
Insurance Expense	57,000	57,000	57,000	-	0.00%
<b>Total Office Costs</b>	<b>\$ 534,818</b>	<b>\$ 534,818</b>	<b>\$ 539,933</b>	<b>\$ 5,115</b>	<b>0.96%</b>

**Table B-8. Office Costs**

### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

2017 office costs are relatively flat compared to the 2016 budget and there are no significant changes to individual line items.

Table B-9 lists the budget for Professional Services.

Professional Services	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Independent Trustee Fees	\$ 100,000	\$ 100,000	\$ 125,050	\$ 25,050	25.05%
Outside Legal	65,000	65,000	50,000	(15,000)	-23.08%
Accounting and Auditing Fees	28,500	28,500	28,500	-	0.00%
Actuarial Fees	25,000	25,000	25,000	-	0.00%
<b>Total Services</b>	<b>\$ 218,500</b>	<b>\$ 218,500</b>	<b>\$ 228,550</b>	<b>\$ 10,050</b>	<b>4.60%</b>

**Table B-9. Professional Services**

### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

#### Professional Services

2017 professional services budgeted in Legal and Regulatory increase because the independent MRO board member fees reflect higher fees, which were approved in 2016.

Table B-10 lists the budget for Miscellaneous.

Miscellaneous Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
	\$ -	\$ -	\$ -	\$ -	-
					-
					-
<b>Total Miscellaneous Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>100.00%</b>

**Table B-10. Miscellaneous**

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**



Table B-11 lists the budget for other Non-Operating Expenses.

Other Non-Operating Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Interest Expense	\$ -	\$ -	\$ -	\$ -	
Line of Credit Payment		-		-	
Office Relocation	-	-	-	-	
<b>Total Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>100.00%</b>

**Table B-11. Other Non-Operating Expenses**

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

Table B-12 lists the budget for Fixed Assets.

Fixed Assets	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Depreciation	\$ (480,722)	\$ (480,722)	\$ (504,000)	\$ (23,278)	4.8%
Computer Equipment	317,500	317,500	144,500	(173,000)	-54.5%
Capitalized Software	-	-	29,170	29,170	
Furniture and Equipment	-	-	-	-	
Leasehold Improvements	467,000	467,000	143,111	(323,889)	-69.4%
<b>Total Change in Fixed Assets</b>	<b>\$ 303,778</b>	<b>\$ 303,778</b>	<b>\$ (187,219)</b>	<b>\$ (490,997)</b>	<b>-161.6%</b>

Table B-12. Fixed Assets

### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

#### Depreciation/Computer Equipment/Capitalization Software

2017 costs increase as equipment purchases made in late 2015 and 2016 are now being depreciated.

#### Computer Equipment

MRO replaces the equipment that supports the virtual servers and storage area network every four to five years. This is the most expensive capital equipment we purchase – either to expand the system or replace major components, and it is configured in high availability at HQ and at the disaster recovery site so there are multiple sets of this equipment. There is no equipment due for upgrade in 2017, but there will be in 2018 so we can expect the capital budget to increase again in 2018.

#### Leasehold Improvements

MRO is reorganizing existing space to accommodate MRO's current and future needs. The one-time capital cost in 2017 is \$143k. This is a decrease from the 2016 budget, which included more significant expenditures on leasehold improvements due to the expansion of MRO's facilities.

Table B-13 compares the 2017 budget with projections for 2018-2019.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital 2018 and 2019 Projections							
	2017 Budget	2018 Projection	\$ Change 18 v 17	% Change 18 v 17	2019 Projection	\$ Change 19 v 18	% Change 19 v 18
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ 10,494,345	\$ 11,416,064		8.78%	\$ 11,758,546	\$ 342,482	2.9%
Penalty Sanctions	166,250	-		-100.00%	-	-	
<b>Total NERC Funding</b>	<b>\$ 10,660,595</b>	<b>\$ 11,416,064</b>	<b>\$ 755,469</b>	<b>7.1%</b>	<b>\$ 11,758,546</b>	<b>\$ 342,482</b>	<b>2.9%</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-
Workshops	-	-	-	-	-	-	-
Interest	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 10,660,595</b>	<b>\$ 11,416,064</b>	<b>\$ 755,469</b>	<b>7.1%</b>	<b>\$ 11,758,546</b>	<b>\$ 342,482</b>	<b>3.0%</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 5,874,689	\$ 6,050,930	\$ 176,241	3.0%	\$ 6,232,458	\$ 181,528	3.0%
Payroll Taxes	366,600	377,598	10,998	3.0%	388,926	11,328	3.0%
Benefits	608,751	627,014	18,263	3.0%	645,824	18,810	3.0%
Retirement Costs	1,195,387	1,231,249	35,862	3.0%	1,268,186	36,937	3.0%
<b>Total Personnel Expenses</b>	<b>\$ 8,045,427</b>	<b>\$ 8,286,790</b>	<b>\$ 241,363</b>	<b>3.0%</b>	<b>\$ 8,535,394</b>	<b>\$ 248,604</b>	<b>3.0%</b>
<b>Meeting Expenses</b>							
Meetings	\$ 85,000	\$ 87,550	\$ 2,550	3.0%	\$ 90,177	\$ 2,627	3.0%
Travel	635,000	654,050	19,050	3.0%	673,672	19,622	3.0%
Conference Calls	-	-	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 720,000</b>	<b>\$ 741,600</b>	<b>\$ 21,600</b>	<b>3.0%</b>	<b>\$ 763,848</b>	<b>\$ 22,248</b>	<b>3.0%</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 674,077	\$ 694,299	\$ 20,222	3.0%	\$ 715,128	\$ 20,829	3.0%
Office Rent	701,900	722,957	21,057	3.0%	744,646	21,689	3.0%
Office Costs	539,933	556,131	16,198	3.0%	572,815	16,684	3.0%
Professional Services	228,550	235,407	6,857	3.0%	242,469	7,062	3.0%
Miscellaneous	-	-	-	-	-	-	-
Depreciation	504,000	519,120	15,120	3.0%	534,694	15,574	3.0%
<b>Total Operating Expenses</b>	<b>\$ 2,648,460</b>	<b>\$ 2,727,914</b>	<b>\$ 79,454</b>	<b>3.0%</b>	<b>\$ 2,809,751</b>	<b>\$ 81,837</b>	<b>3.0%</b>
<b>Total Direct Expenses</b>	<b>\$ 11,413,887</b>	<b>\$ 11,756,304</b>	<b>\$ 342,417</b>	<b>3.0%</b>	<b>\$ 12,108,993</b>	<b>\$ 352,689</b>	<b>3.0%</b>
<b>Indirect Expenses</b>	\$ -	\$ -	\$ -		\$ -	\$ -	
<b>Other Non-Operating Expenses</b>	\$ -	\$ -	\$ -		\$ -	\$ -	
<b>Total Expenses (B)</b>	<b>\$ 11,413,887</b>	<b>\$ 11,756,304</b>	<b>\$ 342,417</b>	<b>3.0%</b>	<b>\$ 12,108,993</b>	<b>\$ 352,689</b>	<b>3.0%</b>
<b>Change in Assets</b>	<b>\$ (753,292)</b>	<b>\$ (340,240)</b>	<b>\$ 413,052</b>	<b>-54.8%</b>	<b>\$ (350,447)</b>	<b>\$ (10,207)</b>	<b>3.0%</b>
<b>Fixed Assets</b>							
Depreciation	\$ (504,000)	\$ (519,120)	\$ (15,120)	3.0%	\$ (534,694)	\$ (15,574)	3.0%
Computer & Software CapEx	173,670	178,880	5,210	3.0%	184,247	5,366	3.0%
Furniture & Fixtures CapEx	-	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-	-
Leasehold Improvements	143,111	-	(143,111)	-100.0%	-	-	-
Allocation of Fixed Assets							
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ (187,219)</b>	<b>\$ (340,240)</b>	<b>\$ (153,021)</b>	<b>81.7%</b>	<b>\$ (350,447)</b>	<b>\$ (10,207)</b>	<b>0.0%</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 11,226,668</b>	<b>\$ 11,416,064</b>	<b>\$ 189,396</b>	<b>1.7%</b>	<b>\$ 11,758,546</b>	<b>\$ 352,689</b>	<b>3.1%</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (566,073)</b>	<b>\$ 566,073</b>	<b>\$ -</b>	<b>-100.0%</b>	<b>\$ -</b>	<b>\$ -</b>	<b>30.6%</b>
<b>FTEs</b>	<b>43.00</b>	<b>43.00</b>	<b>-</b>		<b>43.00</b>	<b>-</b>	

**Table B-13. Budget 2017 Compared with 2018-2019 Projections**

### Explanation of 2017, 2018, 2019 Projections

At this time, MRO does not anticipate significant changes in program areas for the next 3 years.

- FTEs remain flat
- Three percent escalation rate applied to expense categories
- Total budget increase of \$330k in 2017

- Total budget increase of \$340k in 2018
- Zero penalties budgeted

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# Section C – Non-Statutory Activities

## 2017 Business Plan and Budget

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## **Section C – Non-Statutory Activities**

### **2017 Non-Statutory Business Plan and Budget**

MRO has no non-statutory activities.

# Section D – Additional Consolidated Financial Statements

## 2017 Business Plan and Budget



# Section D – Additional Consolidated Financial Statements

## 2017 Consolidated Statement of Activities by Program, Statutory and Non-Statutory

Statement of Activities and Capital Expenditures by Program 2017 Business Plan and Budget	2017 Business Plan and Budget			Functions in Delegation Agreement											
	Total	Statutory Total	Non-Statutory Total	Statutory Total	Reliability Standards and Organization Registration and Certification (Section 300 & 500)	Compliance (Section 400)	Reliability Assessment and Performance Analysis (Section 800)	Training and Education (Section 600&900)	Situation Awareness and Infrastructure Security (Section 1000)	Committee and Member Forums	General and Administrative	Legal and Regulatory	Information Technology	Human Resources	Accounting and Finance
<b>Funding</b>															
<b>ERO Funding</b>															
NERC Assessments	10,494,345	10,494,345	-	10,494,345	623,464	7,201,608	2,464,519	582,435	188,392		(566,073)				
Penalty Sanctions	166,250	166,250	-	166,250	10,401	112,018	34,067	7,164	2,600						
<b>Total NERC Funding</b>	<b>10,660,595</b>	<b>10,660,595</b>	-	<b>10,660,595</b>	<b>633,865</b>	<b>7,313,627</b>	<b>2,498,586</b>	<b>589,598</b>	<b>190,992</b>	-	<b>(566,073)</b>	-	-	-	-
Membership Dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Workshops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>10,660,595</b>	<b>10,660,595</b>	-	<b>10,660,595</b>	<b>633,865</b>	<b>7,313,627</b>	<b>2,498,586</b>	<b>589,598</b>	<b>190,992</b>	-	<b>(566,073)</b>	-	-	-	-
<b>Expenses</b>															
<b>Personnel Expenses</b>															
Salaries	5,874,689	5,874,689	-	5,874,689	214,962	2,842,052	917,627	243,378	68,496	-	573,621	200,048	399,848	-	414,657
Payroll Taxes	366,600	366,600	-	366,600	13,591	187,019	56,875	12,985	4,642	-	25,338	9,439	29,685	-	27,026
Benefits	608,751	608,751	-	608,751	26,474	298,571	88,481	22,934	6,937	-	43,745	13,591	55,637	-	52,381
Retirement Costs	1,195,387	1,195,387	-	1,195,387	50,081	535,130	225,268	47,081	14,275	-	109,173	37,820	81,819	-	94,740
<b>Total Personnel Expenses</b>	<b>8,045,427</b>	<b>8,045,427</b>	-	<b>8,045,427</b>	<b>305,108</b>	<b>3,862,772</b>	<b>1,288,251</b>	<b>326,378</b>	<b>94,350</b>	-	<b>751,877</b>	<b>260,898</b>	<b>566,989</b>	-	<b>588,804</b>
<b>Meeting Expenses</b>															
Meetings	85,000	85,000	-	85,000	2,500	6,500	15,000	30,700	200	-	30,000	-	-	-	100
Travel	635,000	635,000	-	635,000	42,400	199,900	197,000	41,200	20,500	-	113,000	8,000	8,000	-	5,000
Conference Calls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>720,000</b>	<b>720,000</b>	-	<b>720,000</b>	<b>44,900</b>	<b>206,400</b>	<b>212,000</b>	<b>71,900</b>	<b>20,700</b>	-	<b>143,000</b>	<b>8,000</b>	<b>8,000</b>	-	<b>5,100</b>
<b>Operating Expenses</b>															
Consultants & Contracts	674,077	674,077	-	674,077	-	169,000	72,000	-	-	-	75,000	-	329,110	-	28,967
Office Rent	701,900	701,900	-	701,900	-	-	-	-	-	-	-	-	-	-	701,900
Office Costs	539,933	539,933	-	539,933	6,088	83,770	16,500	-	6,500	-	35,500	7,775	210,000	-	173,800
Professional Services	228,550	228,550	-	228,550	-	-	-	-	-	-	-	175,050	-	-	53,500
Miscellaneous	504,000	504,000	-	504,000	-	-	-	-	-	-	-	-	-	-	-
Depreciation	504,000	504,000	-	504,000	-	-	-	-	-	-	-	-	504,000	-	-
<b>Total Operating Expenses</b>	<b>2,648,460</b>	<b>2,648,460</b>	-	<b>2,648,460</b>	<b>6,088</b>	<b>252,770</b>	<b>88,500</b>	-	<b>6,500</b>	-	<b>110,500</b>	<b>182,825</b>	<b>1,043,110</b>	-	<b>958,167</b>
<b>Total Direct Expenses</b>	<b>11,413,887</b>	<b>11,413,887</b>	-	<b>11,413,887</b>	<b>356,096</b>	<b>4,321,942</b>	<b>1,588,751</b>	<b>398,278</b>	<b>121,550</b>	-	<b>1,005,377</b>	<b>451,723</b>	<b>1,618,099</b>	-	<b>1,552,071</b>
<b>Indirect Expenses</b>	-	-	-	-	289,481	3,117,832	948,199	199,388	72,370	-	(1,005,377)	(451,723)	(1,618,099)	-	(1,552,071)
<b>Other Non-Operating Expenses</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Expenses (B)</b>	<b>11,413,887</b>	<b>11,413,887</b>	-	<b>11,413,887</b>	<b>645,577</b>	<b>7,439,774</b>	<b>2,536,950</b>	<b>597,666</b>	<b>193,920</b>	-	-	-	-	-	-
<b>Change in Assets</b>	<b>(753,292)</b>	<b>(753,292)</b>	-	<b>(753,292)</b>	<b>(11,712)</b>	<b>(126,147)</b>	<b>(38,364)</b>	<b>(8,067)</b>	<b>(2,928)</b>	-	<b>(566,073)</b>	-	-	-	-
<b>Fixed Assets</b>															
Depreciation	(504,000)	(504,000)	-	(504,000)	-	-	-	-	-	-	-	-	(504,000)	-	-
Computer & Software CapEx	173,670	173,670	-	173,670	-	-	-	-	-	-	-	-	173,670	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leasehold Improvements	143,111	143,111	-	143,111	-	-	-	-	-	-	-	-	-	-	143,111
Allocation of Fixed Assets	-	-	-	-	(11,712)	(126,147)	(38,364)	(8,067)	(2,928)	-	-	-	330,330	-	(143,111)
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>(187,219)</b>	<b>(187,219)</b>	-	<b>(187,219)</b>	<b>(11,712)</b>	<b>(126,147)</b>	<b>(38,364)</b>	<b>(8,067)</b>	<b>(2,928)</b>	-	-	-	-	-	-
<b>TOTAL BUDGET (=B + C)</b>	<b>11,226,668</b>	<b>11,226,668</b>	-	<b>11,226,668</b>	<b>633,865</b>	<b>7,313,627</b>	<b>2,498,586</b>	<b>589,598</b>	<b>190,992</b>	-	<b>(566,073)</b>	-	-	-	-
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>(566,073)</b>	<b>(566,073)</b>	-	<b>(566,073)</b>	<b>(0)</b>	<b>0</b>	<b>(0)</b>	<b>(0)</b>	<b>(0)</b>	-	<b>(566,073)</b>	-	-	-	-
<b>FTEs</b>	<b>43.00</b>	<b>43.00</b>	-	<b>43.00</b>	<b>1.96</b>	<b>21.11</b>	<b>6.42</b>	<b>1.35</b>	<b>0.49</b>	-	<b>2.91</b>	<b>0.95</b>	<b>3.92</b>	-	<b>3.89</b>

Table D-1. Consolidated Statement of Activities by Program, Statutory and Non-Statutory



## Statement of Financial Position

The following table provides MRO Statement of Financial Position as of these dates:

- As of December 31, 2015, per audit
- As of December 31, 2016, projected
- As of December 31, 2017, as budgeted

Statement of Financial Position			
2015 Audited, 2016 Projection, and 2017 Budget			
STATUTORY			
	(Per Audit)	Projected	Budget
	31-Dec-15	31-Dec-16	31-Dec-17
<b>ASSETS</b>			
Cash	3,630,789	3,607,738	3,004,446
Restricted Cash	136,275	166,250	18,000
Other Receivables	-	-	-
Prepaid expenses and other current assets	257,080	190,000	188,000
Security deposit	39,858	39,858	39,858
Restricted Cash - non-current	148,250	18,000	-
Property and equipment and capitalized software	1,507,456	1,811,234	2,024,015
Total Assets	<b>5,719,708</b>	<b>5,833,080</b>	<b>5,274,319</b>
<b>LIABILITIES AND NET ASSETS</b>			
Liabilities			
Accounts payable and accrued expenses	2,072,250	2,475,173	2,287,706
Postretirement medical benefit obligation	521,702	621,000	700,000
Deferred assessments - non-current	148,250	-	-
Deferred rent - non-current	437,394	500,325	575,437
Total Liabilities	<b>3,179,596</b>	<b>3,596,498</b>	<b>3,563,143</b>
Net Assets - unrestricted	2,540,112	2,236,582	1,711,176
Total Liabilities and Net Assets	<b>5,719,708</b>	<b>5,833,080</b>	<b>5,274,319</b>

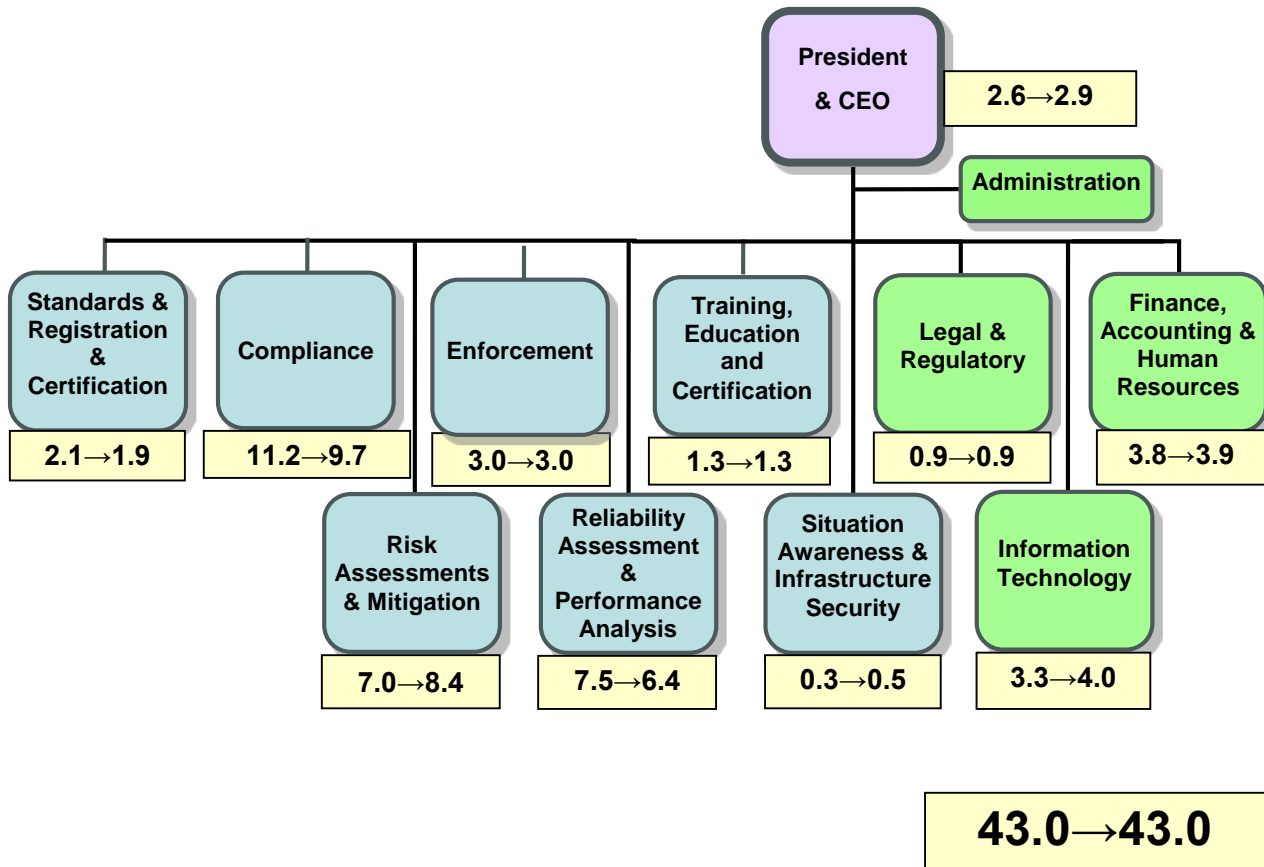
**Table D-2. Statement of Financial Position, Three-Year Comparison**

# Appendix A

## Organization Chart

The MRO Organization Chart is shown below.

### 2016 to 2017 Full Time Equivalent (FTE) Comparison Organization Chart



### FTE Trend from 2015 to 2019

2015	2016	2017	2018 Estimate	2019 Estimate
42.5	43.0	43.0	43.0	43.0

Figure 2. Organization Chart

## Appendix B

### Acronyms

This section lists acronyms used in this document.

Acronym	Definition
APDA	American Power Dispatchers Association
BA	Balancing Authority
BES	Bulk Electric System
BPS	Bulk Power System
CDMS	Compliance Data Management System
CFR	Coordinated Functional Registration
CI	Compliance Investigation
CIP	Critical Infrastructure Protection
CMEP	Compliance Monitoring and Enforcement Program
DIP	Days in Process
EMS	Energy Management System
ERAG	Eastern Interconnection Reliability Assessment Group
ERO	Electric Reliability Organization
FAC	Finance and Audit Committee
FERC	Federal Energy Regulatory Commission
FPA	Federal Power Act
FTE	Full-Time Equivalent
GMD	Geomagnetic Disturbance
IRA	Inherent Risk Assessment
ISO	Independent System Operator
IT	Information Technology
JRO	Joint Registration Organization
MC	Management Committee
MCCF	Mid-Continent Compliance Forum
MRO	Midwest Reliability Organization
NERC	North American Electric Reliability Corporation
OC	Operating Committee
PC	Planning Committee
PV	Possible Violation
RAI	Reliability Assurance Initiative
RAM	Risk Assessment and Mitigation

RAPA	Reliability Assessment and Performance Analysis
RC	Reliability Coordinator
RE	Regional Entity
RRO	Regional Reliability Organization
RTO	Regional Transmission Organization
SAR	Standards Authorization Request
SC	Standards Committee
SCADA	Supervisory Control and Data Acquisition
SME	Subject Matter Expert
TFE	Technical Feasibility Exception
TOP	Transmission Operator
VEBA	Voluntary Employee Beneficiary Association

## Appendix C

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**DOCKET NO. RR16-\_\_-000**

**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**2017 BUSINESS PLAN AND BUDGET FILING**

**ATTACHMENT 5**

**NORTHEAST POWER COORDINATING COUNCIL, INC.**

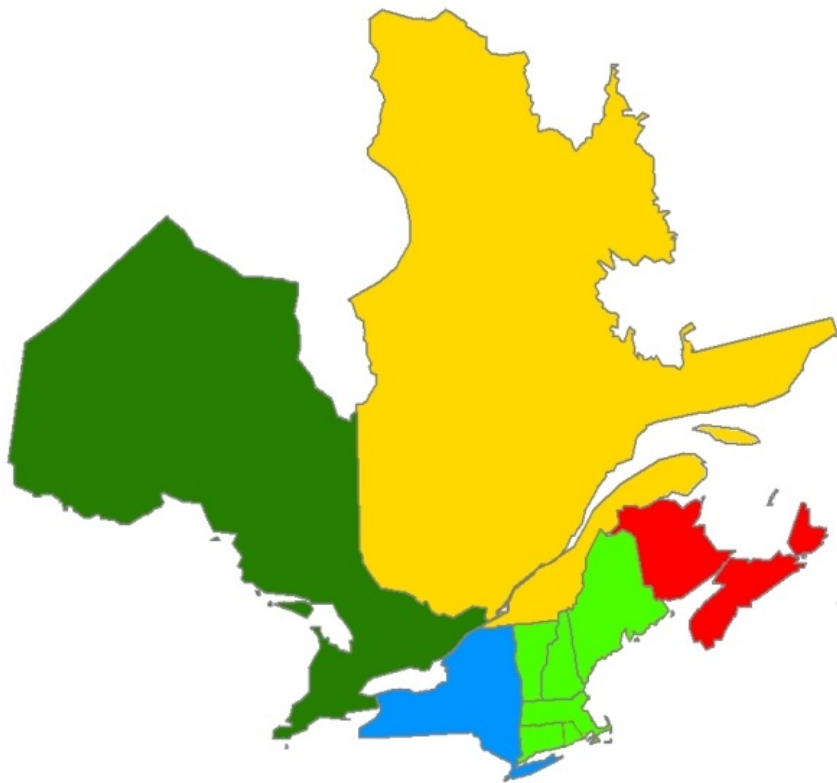
**PROPOSED 2017 BUSINESS PLAN AND BUDGET**



NORTHEAST POWER COORDINATING COUNCIL, INC.  
1040 AVE. OF THE AMERICAS, NEW YORK, NY 10018 (212) 840-1070 FAX (212) 302-2782

## **Northeast Power Coordinating Council, Inc. (NPCC)**

### **2017 Business Plan and Budget**



**Approved by the  
NPCC Board of Directors  
at its June 30, 2016 Meeting and  
Resubmitted to NERC July 25, 2016**

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## Introduction

<b>Total NPCC Resources</b>				
(in whole dollars)				
	2017 Budget	U.S.	Canada	Mexico
Regional Entity Division FTEs	36.86			
Criteria Services Division FTEs	2.14			
<b>Total FTEs</b>	<b>39.0</b>			
Regional Entity Division Expenses	\$15,121,054			
Criteria Services Division Expenses	\$1,036,896			
<b>Total Expenses</b>	<b>\$16,157,950</b>			
Regional Entity Division Inc(Dec) in Fixed Assets	\$26,000			
Criteria Services Division Inc(Dec) in Fixed Assets	(\$10,000)			
<b>Total Inc(Dec) in Fixed Assets</b>	<b>\$16,000</b>			
Regional Entity Division Working Capital Requirement**	(\$827,994)			
Criteria Services Division Working Capital Requirement***	\$78,971			
<b>Total Working Capital Requirement</b>	<b>(\$749,023)</b>			
Total Regional Entity Division Funding Requirement	\$14,319,061			
Total Criteria Services Division Funding Requirement	\$1,105,867			
<b>Total Funding Requirement</b>	<b>\$15,424,927</b>			
<b>Regional Entity Division Assessments</b>	<b>\$14,255,061</b>	<b>\$8,894,696</b>	<b>\$5,360,364</b>	
<b>Regional Entity Division Assessments Percentage</b>	<b>100.0%</b>	<b>62.4%</b>	<b>37.6%</b>	
<b>Criteria Services Division Membership Fees</b>	<b>\$1,105,867</b>	<b>\$502,200</b>	<b>\$603,666</b>	
<b>Total NPCC Assessments &amp; Membership Fees</b>	<b>\$15,360,927</b>	<b>\$9,396,896</b>	<b>\$5,964,031</b>	
NEL	635,349,000	288,527,000	346,822,000	
NEL %	100%	45.41%	54.59%	

\*\* Refer to Table B-1 on page 63 in Section B.

\*\*\* Refer to the Reserve Analysis on page 80 in Section C.

## 2017 Overview of Total NPCC Resource Requirements

Due to the international nature of NPCC, the total resource requirements including both Regional Entity division and Criteria Services division are identified above. The individual divisional explanations are contained in subsequent sections.

NPCC proposes to decrease its total budget and assessments by -0.3% comprising a Regional Entity total budget increase of 0.5% and a Criteria Services division total budget decrease of -11.3%. The proposed 2017 funding requirements will be satisfied by a Regional Entity division assessment of \$14,255,061 and Criteria Services division fees of \$1,105,867, for a total of \$15,360,927. This is an overall decrease of -0.3% compared to the 2016 total assessments and fees of \$15,409,738. NPCC believes that the Region remains an effective provider of Regional Entity and Criteria Services division functions. NPCC's corporate culture centers on consistent delivery of excellent results at a cost that is considerate of the longstanding tradition in the Northeast of affordable and reliable electricity.

## Organizational Overview

Northeast Power Coordinating Council, Inc. (NPCC) is a 501(c)(6) not-for-profit corporation in the state of New York responsible for promoting and improving the reliability of the international, interconnected bulk power systems in Northeastern North America through (i) the development of Regional Reliability Standards and compliance assessment and enforcement of

continent-wide and Regional Reliability Standards, coordination of system planning, design and operations, and assessment of reliability (collectively, Regional Entity activities), and (ii) the establishment of Regionally-specific criteria, and monitoring and enforcement of compliance with such criteria (collectively, criteria services activities). NPCC provides the functions and services for Northeastern North America of a cross-border Regional Entity through a Regional Entity division, as well as Regionally-specific criteria services for Northeastern North America through a criteria services division. NPCC's website is [www.npcc.org](http://www.npcc.org).

The NPCC Region covers nearly 1.2 million square miles and is populated by more than 56 million people. NPCC U.S. includes the six New England states and the state of New York. NPCC Canada includes the provinces of Ontario, Québec and the Maritime provinces of New Brunswick and Nova Scotia. In total, from a net energy for load perspective, NPCC is approximately 45% U.S. and 55% Canadian. With regard to Canada, approximately 70% of Canadian net energy for load is within the NPCC Region.

Effective January 1, 2016, NPCC executed an Amended and Restated Regional Delegation Agreement with the North American Electric Reliability Corporation (NERC) that delegates to NPCC certain responsibilities and authorities of a cross-border Regional Entity as defined by *Section 215* of the Federal Power Act in the U.S. In addition, NPCC has executed Memoranda of Understanding or Agreements with Canadian provincial regulatory and/or governmental authorities in Ontario, Québec, New Brunswick and Nova Scotia.

In this 2017 business plan, NPCC has included activities consistent with NERC initiatives including the enhancement of reliability assessments, risk-based registration, risk-based compliance monitoring and enforcement, expanded training for compliance auditing, and increased situation awareness.

It is imperative that NPCC maintain its ability to carry out delegated authorities and responsibilities. NPCC has a flat 2017 targeted staffing level of 39 power industry professionals and support personnel. Details of the 2017 business plans and budget for each program area are included in Section A for the Regional Entity division. The 2017 Regional Entity division schedules are shown in Section B. Section C details the 2017 criteria services division business plan and budget.

## Membership and Governance

NPCC monitors approximately 212 registered entities and some 426 functions in the Region for compliance with mandatory Reliability Standards. NPCC currently has approximately 77 members. There are two categories of membership, General and Full. The two categories distinguish between Regional Entity delegated services that are provided in support of the U.S. FERC and Canadian provincial MOUs or Agreements with regulatory and/or governmental authorities, and Criteria Services which FERC references as U.S. non-delegated activities.

General Membership is voluntary and is open to any person or entity, including any entity participating in the Registered Ballot Body of the Electric Reliability Organization (ERO) that has an interest in the reliable operation of the Northeastern North American bulk power system. General Members which are also registered entities within the NPCC Region are subject to compliance with Reliability Standards, consistent with their registration, and also receive additional services from the Regional Entity division of NPCC.

Full Membership is available to Members which are already General Members and participate in electricity markets in the Northeast. Independent system operators (ISOs), Regional transmission organizations (RTOs), Transcos and other organizations or entities that perform the Balancing Authority function operating in Northeastern North America are expected to be Full Members of NPCC. The New York State Reliability Council and any other sub-regional reliability councils which may be formed are also expected to be Full Members. Full Members are subject to compliance with Regionally-specific more stringent reliability criteria for their generation and transmission facilities on which faults or disturbances can have a significant adverse impact outside of the local area and which are identified utilizing a reliability impact-based methodology, in addition to Reliability Standards, and receive additional services from the Criteria Services division of NPCC, which is not funded through the ERO.

Since January 1, 2012 NPCC is governed by a Board of Directors consisting of seven stakeholder voting sectors consisting of a maximum of two directors per sector, an independent sector consisting of two independent directors, an independent Board Chair with voting rights to preclude board deadlocks, and the President and CEO. Within NPCC, no two sectors can control and no one sector can block action. The voting sectors on the NPCC Board of Directors include:

Sector 1) Transmission Owners

Sector 2) Reliability Coordinators

Sector 3) Transmission Dependent Utilities, Distribution Companies, Load Serving Entities

Sector 4) Generator Owners

Sector 5) Marketers, Brokers and Aggregators

Sector 6) Regulators

Sector 7) Sub-Regional Reliability Councils, Customers, other Regional Entities and Interested Entities

Sector 8) Independent

A Finance and Audit Committee (FAC), a Pension Committee (PC), a Corporate Governance and Nominating Committee (CGNC), and a Management Development and Compensation Committee (MDCC) advise the Board on finance, governance, compensation and human resource matters consistent with their approved charters. The Board endorses a non-employee, Certified Public Accountant for election by the NPCC Members as Treasurer of the corporation. The Treasurer chairs the FAC and works with the Chief Operating Officer who provides oversight of the finances of the corporation. The Treasurer reports to the Board on the corporation's financial position, on FAC activities, on tax code requirements, and on independent annual audit results and accounting practices.

The Regional Standards Committee (RSC), the Compliance Committee (CC), the Reliability Coordinating Committee (RCC), and the Public Information Committee, consistent with their approved scopes, are responsible for various reliability issues. The RSC, CC and RCC also provide technical policy recommendations to the Board. All General and Full Members are eligible for representation on the technical committees.

Industry technical experts from within the membership provide valuable input to the Board through various working groups and task forces as well as the committees. The *Amended and Restated Bylaws* establishes NPCC's independence from users, owners and operators of the bulk power system through the enhanced governance structure while providing fair stakeholder representation in the election of the Board of Directors and officers. The members, from each of the seven stakeholder voting sectors, vote to elect directors in their respective sector. The

*Amended and Restated Bylaws* establish criteria for board service for both stakeholder and independent directors. Independent Directors are drawn from diverse backgrounds and possess a broad range of industry expertise, perspectives, experiences, skill sets and knowledge to contribute to the effective functioning of a hybrid board structure.

Compliance and enforcement activities are carried out by the NPCC compliance staff and are independent of all users, owners and operators of the international bulk electric system. Compliance activities are governed in the United States by the *Amended and Restated Regional Delegation Agreement* between NERC and NPCC, delegating portions of NERC's authority as the ERO to NPCC. NPCC compliance activities in Canada are governed by an individual provincial Memorandum of Understanding (MOU) or Agreements with each province providing the unique parameters for compliance and enforcement activities for each of the provinces. A MOU between the Independent Electricity System Operator in Ontario (IESO), NERC and NPCC establishes roles and responsibilities with regard to that province. NPCC, NERC and the New Brunswick Energy and Utilities Board are parties to a MOU that sets forth reliability activities for New Brunswick. The Régie de l'énergie, NERC and NPCC executed an Agreement regarding the implementation of the Québec reliability standards compliance monitoring and enforcement program. NPCC, NERC and Nova Scotia executed a MOU that sets forth the mutual understanding of the parties in relation to the approval and implementation of NERC Reliability Standards and NPCC Regional reliability criteria for the province of Nova Scotia.

## International Foundation

The Regional Entity functions and services differ according to particular regulatory backstop:

a) U.S. Foundation

The Federal Energy Regulatory Commission (FERC) certified NERC as the Electric Reliability Organization (ERO) on July 20, 2006. The ERO is responsible for developing and enforcing reliability standards within the United States. In executing part of its responsibilities, NERC delegates authority to the Regional Entities to perform certain functions through delegation agreements. Ensuring the reliability of the bulk power system in the State of New York and the six New England States was delegated from NERC to NPCC through the Amended and Restated Regional Delegation Agreement.

b) Ontario

On February 5, 2010, NERC, NPCC and the IESO amended and restated their earlier MOU, dated November 29, 2006, setting forth their mutual understanding as regards NERC's and NPCC's status in Ontario with respect to standard and criteria development, compliance enforcement, and other related matters. The IESO, whose statutory responsibilities include making and enforcing reliability standards, and making and enforcing Ontario market rules that govern the IESO-controlled grid and the wholesale electricity market, was established April 1, 1999 as the Independent Electricity Market Operator in Ontario under the *Electricity Act, 1998* (Ontario). The IESO is subject to the regulatory oversight of the Ontario Energy Board (OEB).

Among other things, the MOU recognizes that NERC and NPCC are standards authorities under the *Electricity Act, 1998* (Ontario). Additionally, under the authority of that same legislation, and as memorialized in the MOU, the NERC reliability standards and NPCC reliability criteria have effect in Ontario. However a 2008 amendment to the *Electricity Act, 1998* (Ontario) allows the OEB to review these standards and criteria and issue orders preventing their implementation and remanding them back to NERC and NPCC.

The IESO is subject to compliance monitoring and enforcement by NPCC. The IESO is also subject to compliance monitoring and enforcement of the Ontario market rules by the IESO's Market Assessment and Compliance Division (MACD) that operates at arm's length from the IESO's business units. The MOU notes that where MACD, NERC, and NPCC engage in investigations pursuant to their respective mandates regarding compliance, MACD can request to take the lead. Moreover, of the three, MACD is the only entity that can assess financial penalties for any Ontario market participant's or the IESO's non-compliance with Ontario market rules, which includes non-compliance with NERC standards and NPCC criteria.

The MOU provides for a peer review process to promote the common compliance and enforcement objectives of NERC/NPCC and MACD. From the perspective of NPCC and NERC, this process, in part, is meant to assure registered entities outside of Ontario that the MACD program is rigorous, thorough and reliable.

The IESO is subject to NPCC assessments of compliance, including audits, as well as NPCC remedial action directives to correct non-compliance. In the event that the IESO disagrees with NPCC's finding of a violation or associated assessment of sanctions in connection with standards and criteria, the IESO has a right to a compliance hearing with NPCC.

c) Québec

The Régie de l'énergie, NERC and NPCC are parties to the May 8, 2009 *Agreement on the Development of Electric Power Transmission Reliability Standards and of Procedures and a Program for the Monitoring of the Application of These Standards for Québec* (the 2009 Agreement). Under the terms of the 2009 Agreement, the Régie de l'énergie, which is charged with ensuring the reliability of the electric transmission in Québec, retained NPCC and NERC as experts to develop reliability standards and monitoring program procedures for the Province.

The Régie de l'énergie, NERC and NPCC are parties to the September 24, 2014, *Agreement on the Implementation of the Québec Reliability Standards Compliance Monitoring and Enforcement Program* (the 2014 Agreement). Through the 2014 Agreement, the Régie de l'énergie retains the services of NPCC to monitor and assess the compliance of registered entities in Québec with the reliability standards adopted by the Régie with respect to electric power transmission in Québec.

On April 1, 2015, the Québec Reliability Standards Compliance Monitoring and Enforcement Program ("QCMEP"), which was developed jointly by the Régie de l'énergie, NPCC and NERC, came into effect. Together, the 2014 Agreement and the QCMEP detail the procedures and program for monitoring and enforcing mandatory electric power transmission reliability standards in Québec.

The Régie de l'énergie is a public body established by the *Act respecting the Régie de l'énergie* (the Act). Pursuant to its authority under the Act, the Régie de l'énergie, through a series of decisions in 2007, designated Hydro-Québec Contrôle des mouvements d'énergie (HQCME), a division of Hydro-Québec TransÉnergie, as the Reliability Coordinator for Québec. In accordance with its mandate and as recognized in the 2009 Agreement, it is this entity that is responsible for the filing with the Régie de l'énergie for approval of reliability standards in Québec. HQCME has filed for the approval of certain reliability standards and the Régie de l'énergie has made certain reliability standards mandatory in Québec and is continuing proceedings to make additional reliability standards mandatory in Québec.

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The Hydro-Québec companies, including Hydro-Québec TransÉnergie and Hydro-Québec Production have been subject to voluntarily compliance monitoring and enforcement, including comprehensive audits by NPCC. NPCC plans to continue to these voluntary compliance monitoring and enforcement activities for any standards that have not yet been declared in effect by the Régie de l'énergie. Additionally, NPCC has and continues to proceed with its reliability assurance activities within Québec, including but not limited to events analysis, Reliability Assessment and Performance Analysis and compliance investigations, consistent with the NPCC *Amended and Restated Bylaws*.

d) New Brunswick

The New Brunswick Energy and Utilities Board (“NBEUB”) and NPCC entered into a Service Contract dated October 1, 2013, whereby NPCC provides services for the NBEUB. The NBEUB is an independent, quasi-judicial board that regulates New Brunswick’s electricity sector. The NBEUB has the responsibility under the Electricity Act to adopt and enforce reliability standards in New Brunswick.

Effective October 1, 2013, the Electricity Act (NB) and implementing regulations (together, “NB Electricity Act”) amended how Reliability Standards are approved, monitored, and enforced in the province of New Brunswick. The NB Electricity Act designates NPCC as a compliance body and NERC as a standards body within the meaning of the NB Electricity Act. The October 1, 2013 Agreement between NPCC and the NBEUB is intended to be the preliminary step with respect to the implementation of the NB Electricity Act for reliability standards.

With respect to the approval of reliability standards, the NB Electricity Act provides that all of the NERC Reliability Standards that were effective in New Brunswick prior to October 1, 2013 continue to be effective in New Brunswick after October 1, 2013. Additionally, the New Brunswick Power Corporation (“NB Power”) is required to file for approval, modification, or retirement of NERC Reliability Standards 60 days after a NERC Reliability Standard is approved, modified, or retired by the Federal Energy Regulatory Commission (“FERC”). The NBEUB rules on the filed Reliability Standard after considering (a) the potential impact on the reliability of the bulk power system, (b) the potential cost and benefits (c) the public interest, and (d) any other factors that the NBUEB considers relevant. The Electricity Act requires the NBEUB to notify NPCC and NERC of an application by NB Power with respect to reliability standards and provide for a 60 day comment period. The NBEUB is required to approve the reliability standards if there are not substantive modifications proposed from the FERC approved NERC Reliability Standard and there were no substantive comments filed. Amendments to the reliability standard to make them compatible with New Brunswick or Canadian law are considered non-substantive. The approval of reliability standards may be subject to a hearing for several reasons, including substantive comments from NPCC or NERC.

With respect to the monitoring and enforcement of the Reliability Standards in New Brunswick, the NB Electricity Act provides for NPCC to identify entities that must register with the NBEUB in the New Brunswick specific registry. Additionally, NPCC may carry out the compliance monitoring and assessment for the NBEUB and assist and advise the enforcement for the NBEUB, including financial penalties. NPCC is also permitted to carry out or exercise any power in the implementing regulations that is specific to the NBEUB, as provided for in the Service Contract. Additionally, NPCC has the powers of an inspector, which permits NPCC to audit and spot check entities within New Brunswick.

e) Nova Scotia

Nova Scotia Power Incorporated (NSPI), NPCC and NERC are parties to a May 11, 2010 Memorandum of Understanding regarding the approval and implementation of mandatory NERC reliability standards and NPCC Regional reliability criteria. Pursuant to the MOU's terms, NERC and NPCC filed standards and criteria with the Nova Scotia Utility and Review Board (NSUARB) for approval on June 30, 2010 and June 29, 2010, respectively. A decision from the NSUARB on both NERC and NPCC filings was rendered on July 20, 2011. Hence, the standards and criteria are mandatory in Nova Scotia and NSPI will be subject to the NERC compliance monitoring and enforcement program, as implemented by NPCC.

NPCC will conduct compliance and enforcement activities with respect to the standards and forward any non-compliance information and recommendations to the NSUARB. The NSUARB maintains the final authority with respect to enforcement in Nova Scotia and based on the recommendations from NPCC, may determine whether a violation has occurred and, if so, what remedial measures or non-monetary penalties should be imposed.

## **Regional Entity Division Functional Scope**

NPCC's Regional Entity division functions in support of the ERO include:

- Active participation in the development of North American Reliability Standards for the bulk electric system, and as needed development of Reliability Standards applicable within the NPCC cross-border Regional Entity
- Monitoring and enforcement of approved Reliability Standards, including the registration of responsible entities, and as needed certification of such entities
- Assessment of the present and future reliability of the bulk power system
- Operational coordination and situation awareness support
- Event analysis and identifying lessons learned to improve reliability
- Effective training and education of reliability personnel
- Promoting the protection of critical electric infrastructure

In recognition of the delegated compliance role of Regional Entities as an important means to enhancing reliability, NPCC has designated a significant percentage of its staff resources to compliance monitoring and enforcement. NPCC has also developed and deployed a robust set of online tools for gathering data, analysis, and tracking of compliance information to support its ability to carry out its responsibilities in a cost effective manner.

NPCC has organized the remaining staff into program areas consistent with EPOA 2005 to address the other functions listed above. These experts in operations, planning and reliability analysis assist registered entities in assessing and improving reliability. It is in support of these areas that NPCC engages the majority of industry experts on its technical committees.

## **2017 Key Assumptions and 2017 Goals and Key Deliverables**

NERC and the eight Regional Entities collaborated in the development of a common operating model with complementary roles and responsibilities, an ERO Enterprise Strategic Plan, and a set of business planning assumptions, goals, metrics and key deliverables for the 2016 through 2019 period. The results from that collaboration, which incorporated risks identified by the Reliability Issues Steering Committee, are included as a set of Shared Business Plan and Budget

Assumptions that will be contained in Exhibit A to the NERC 2017 Business Plan and Budget and may be referenced by the users of this document. NPCC activities that support ERO Enterprise Goals are detailed in each of the following program area sections.

### **2017 Overview of Regional Entity Division Cost Impacts**

The proposed Regional Entity division assessment of \$14,255,061 to support the budget is a decrease of 0.7% compared to the 2016 assessment of \$14,349,196.

### **2016 Projections**

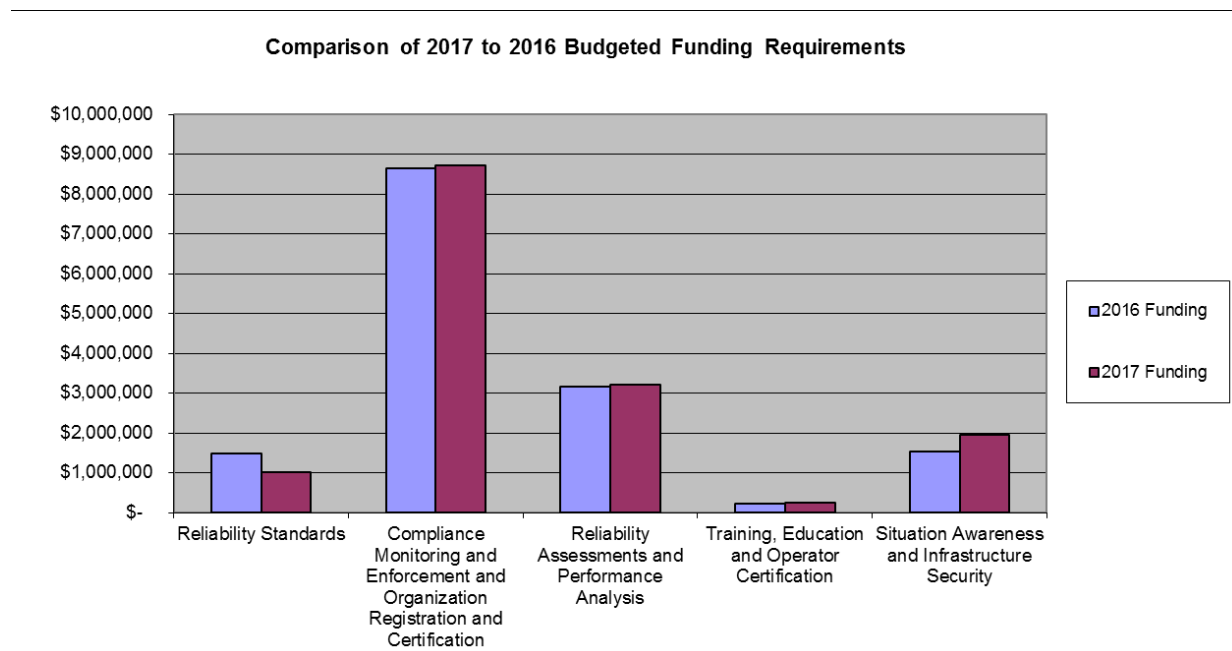
Current year projections are taken into consideration in development of the budget. Expenses are currently projected to be on budget in all areas or slightly under budget. 2016 Projections reflect expectations based on the first quarter variance report. It is anticipated that projections could change throughout 2016 and would be reflected in each subsequent quarter's variance report.



### Summary by Program

Program	Budget 2016	Projection 2016	Budget 2017	Variance	
				2017 Budget v 2016 Budget	Variance %
Reliability Standards	\$ 1,487,419	\$ 1,292,419	\$ 1,022,328	\$ (465,091)	-31.3%
Compliance Monitoring and Enforcement and Organization Registration and Certification	\$ 8,650,196	\$ 8,650,196	\$ 8,726,049	\$ 75,853	0.9%
Reliability Assessments and Performance Analysis	\$ 3,171,574	\$ 3,276,574	\$ 3,206,966	\$ 35,392	1.1%
Training, Education and Operator Certification	\$ 219,956	\$ 219,956	\$ 248,658	\$ 28,702	13.0%
Situation Awareness and Infrastructure Security	\$ 1,543,852	\$ 1,543,852	\$ 1,943,053	\$ 399,201	25.9%
<b>Total</b>	<b>\$ 15,072,998</b>	<b>\$ 14,982,998</b>	<b>\$ 15,147,054</b>	<b>\$ 74,057</b>	<b>0.5%</b>

This chart does not include allocation of working capital requirements among the Program Areas.



This chart does not include allocation of working capital requirements among the Program Areas.

## Personnel Analysis

Total FTE's by Program Area	Budget 2016	Projection 2016	Direct FTEs 2017 Budget	Shared FTEs <sup>1</sup> 2017 Budget	Total FTEs 2017 Budget	Change from 2016 Budget
<b>REGIONAL ENTITY DIVISION</b>						
<b>Operational Programs</b>						
Reliability Standards	2.93	1.93	1.00	0.93	1.93	-1.00
Compliance Monitoring and Enforcement and Organization Registration and Certification	16.00	17.00	17.00	0.00	17.00	1.00
Training, Education, and Operator Certification	0.10	0.10	0.10	0.00	0.10	0.00
Reliability Assessment and Performance Analysis	5.83	5.83	4.90	0.93	5.83	0.00
Situation Awareness and Infrastructure Security	3.00	4.00	4.00	0.00	4.00	1.00
<b>Total FTEs Operational Programs</b>	<b>27.86</b>	<b>28.86</b>	<b>27.00</b>	<b>1.86</b>	<b>28.86</b>	<b>1.00</b>
<b>Administrative Programs</b>						
Technical Committees and Member Forums	0.50	0.50	0.50	0.00	0.50	0.00
General and Administrative	2.50	2.50	2.50	0.00	2.50	0.00
Information Technology	3.00	2.00	2.00	0.00	2.00	-1.00
Legal and Regulatory	1.00	1.00	1.00	0.00	1.00	0.00
Human Resources	1.00	1.00	1.00	0.00	1.00	0.00
Accounting and Finance	1.00	1.00	1.00	0.00	1.00	0.00
<b>Total FTEs Administrative Programs</b>	<b>9.00</b>	<b>8.00</b>	<b>8.00</b>	<b>0.00</b>	<b>8.00</b>	<b>-1.00</b>
<b>Total FTEs</b>	<b>36.86</b>	<b>36.86</b>	<b>35.00</b>	<b>1.86</b>	<b>36.86</b>	<b>0.00</b>

<sup>1</sup>A shared FTE is defined as an employee who performs both Regional Entity and Criteria Services division functions.

## 2016 Budget and Projection and 2017 Budget Comparisons

<b>Statement of Activities and Capital Expenditures</b>						
<b>2016 Budget &amp; Projection, and 2017 Budget</b>						
<b>REGIONAL ENTITY DIVISION</b>						
				Variance <sup>(2)</sup>		Variance
	2016	2016	2016 Projection	v 2016 Budget	2017	v 2016 Budget
	Budget	Projection	Over(Under)	Budget	Over(Under)	Over(Under)
<b>Funding</b>						
<b>ERO Funding</b>						
ERO Assessments	\$ 14,349,196	\$ 14,349,196	\$ -	\$ 14,255,061	\$ (94,136)	
Penalty Sanctions <sup>(1)</sup>	67,000	67,000	-	-	(67,000)	
<b>Total ERO Funding</b>	<b>\$ 14,416,196</b>	<b>\$ 14,416,196</b>	<b>\$ -</b>	<b>\$ 14,255,061</b>	<b>\$ (161,136)</b>	
Membership Dues	-	-	-	-	-	
Testing Fees	-	-	-	-	-	
Services & Software	-	-	-	-	-	
Workshops	64,000	64,000	-	64,000	-	
Interest	-	-	-	-	-	
Miscellaneous	-	-	-	-	-	
<b>Total Funding (A)</b>	<b>\$ 14,480,196</b>	<b>\$ 14,480,196</b>	<b>\$ -</b>	<b>\$ 14,319,061</b>	<b>\$ (161,136)</b>	
<b>Expenses</b>						
<b>Personnel Expenses</b>						
Salaries	\$ 6,561,470	\$ 6,561,470	\$ -	\$ 6,758,926	\$ 197,456	
Payroll Taxes	399,057	399,057	(0)	404,319	5,262	
Benefits	1,364,799	1,364,799	0	1,415,603	50,804	
Retirement Costs	833,118	833,118	-	847,223	14,105	
<b>Total Personnel Expenses</b>	<b>\$ 9,158,445</b>	<b>\$ 9,158,445</b>	<b>\$ 0</b>	<b>\$ 9,426,071</b>	<b>\$ 267,627</b>	
<b>Meeting Expenses</b>						
Meetings	\$ 394,000	\$ 394,000	\$ -	\$ 377,100	\$ (16,900)	
Travel	907,100	907,100	-	855,232	(51,868)	
Conference Calls	47,000	47,000	-	37,000	(10,000)	
<b>Total Meeting Expenses</b>	<b>\$ 1,348,100</b>	<b>\$ 1,348,100</b>	<b>\$ -</b>	<b>\$ 1,269,332</b>	<b>\$ (78,768)</b>	
<b>Operating Expenses</b>						
Consultants & Contracts	\$ 2,223,500	\$ 2,223,500	\$ -	\$ 2,009,000	\$ (214,500)	
Office Rent	802,500	802,500	-	809,700	7,200	
Office Costs	639,500	639,500	-	679,100	39,600	
Professional Services	1,011,000	1,011,000	-	1,041,000	30,000	
Computer & Equipment Leases	-	-	-	-	-	
Miscellaneous	41,000	41,000	-	50,000	9,000	
Depreciation	231,821	231,821	-	250,000	18,179	
<b>Total Operating Expenses</b>	<b>\$ 4,949,321</b>	<b>\$ 4,949,321</b>	<b>\$ -</b>	<b>\$ 4,838,800</b>	<b>\$ (110,521)</b>	
<b>Total Direct Expenses</b>	<b>\$ 15,455,866</b>	<b>\$ 15,455,866</b>	<b>\$ 0</b>	<b>\$ 15,534,203</b>	<b>\$ 78,338</b>	
<b>Indirect Expenses</b>	<b>\$ (427,047)</b>	<b>\$ (427,047)</b>	<b>\$ -</b>	<b>\$ (413,149)</b>	<b>\$ 13,898</b>	
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Total Expenses (B)</b>	<b>\$ 15,028,819</b>	<b>\$ 15,028,819</b>	<b>\$ 0</b>	<b>\$ 15,121,054</b>	<b>\$ 92,236</b>	
<b>Change in Assets</b>	<b>\$ (548,622)</b>	<b>\$ (548,622)</b>	<b>\$ (0)</b>	<b>\$ (801,994)</b>	<b>\$ (253,371)</b>	
<b>Fixed Assets</b>						
Depreciation	\$ (231,821)	\$ (231,821)	\$ -	\$ (250,000)	\$ (18,179)	
Computer & Software CapEx	276,000	276,000	-	276,000	-	
Furniture & Fixtures CapEx	-	-	-	-	-	
Equipment CapEx	-	-	-	-	-	
Leasehold Improvements	-	-	-	-	-	
Allocation of Fixed Assets	-	-	-	0	-	
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>44,179</b>	<b>44,179</b>	<b>-</b>	<b>26,000</b>	<b>(18,179)</b>	
<b>TOTAL BUDGET (=B+C)</b>	<b>\$ 15,072,998</b>	<b>\$ 15,072,998</b>	<b>\$ 0</b>	<b>\$ 15,147,054</b>	<b>\$ 74,057</b>	
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (592,801)</b>	<b>\$ (592,801)</b>	<b>\$ (0)</b>	<b>\$ (827,994)</b>	<b>\$ (235,192)</b>	

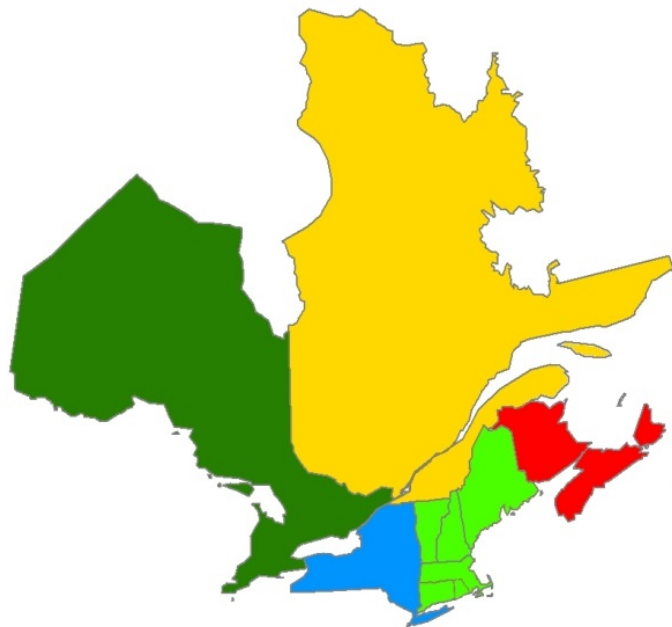
<sup>(1)</sup> \$0 of penalty sanctions collected to date and prior to June 30, 2016.

<sup>(2)</sup> 2016 Projections reflect expectations based on the 1st quarter statement of activities. It is anticipated that projections could change throughout 2016 and would be reflected in each subsequent quarter's statement of activities.

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## Section A – Regional Entity Division 2017 Business Plan and Budget

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## Section A — 2017 Regional Entity Division Business Plan and Budget

### Reliability Standards Program

<b>Reliability Standards Program Resources</b>			
(in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	2.93	1.93	-1.00
Direct Expenses	\$913,958	\$658,082	(\$255,877)
Indirect Expenses	\$584,695	\$372,606	(\$212,089)
Other Non-Operating Expenses	\$0	\$0	\$0
Inc(Dec) in Fixed Assets	(\$11,234)	(\$8,359)	\$2,875
Total Funding Requirement	\$1,487,419	\$1,022,328	(\$465,091)

### Program Scope and Functional Description

The NPCC Reliability Standards Program Area operates in accordance with NPCC’s filed and approved Delegation Agreement and NERC Rules of Procedure Section 300. The program supports the ERO standards program area roles and responsibilities, the 2017 ERO Enterprise Strategic Plan and 2017-2019 Shared Business Plan and Budget Assumptions. NPCC’s Reliability Standards Program Area provides supporting activities for stakeholders and the ERO for the development of reliability standards which are clear, responsive to reliability and security risks, practical to implement, “results based”, and are cost effective. The primary objectives of NPCC’s Reliability Standards Program Area is to support the development of ERO standards which establishes “results-based” requirements for addressing reliability risks with due consideration given to cost effectiveness. NPCC supports the ERO efforts to develop reliability standards in a timely and efficient manner and which are responsive to FERC Directives and industry risk. The standards must ensure the bulk electric system is planned, operated, and maintained in a manner that minimizes risks of cascading failures, avoids damage to major equipment, is responsive to risks, or limits interruptions of bulk power supply.

At a Regional level, the standards program develops, and maintains NPCC Regional Reliability Standards, ERO Standards Variances for the northeast as required, and ensures that NPCC’s Regional reliability criteria, contained in the form of Directories, are “not inconsistent with” any applicable NERC and Regional Reliability Standards, in accordance with the NERC Rules of Procedure.

The NPCC Reliability Standards Program Area supports and participates in the development, revision, and maintenance of NERC ERO Reliability Standards, initiates new continent-wide reliability standards through the NERC Standards Authorization Request (SAR) process when necessary, and provides a forum for the comprehensive review and improvement of existing and developing reliability standards. NPCC also supports the NERC Enhanced Periodic Review process to review existing NERC standards and participates directly in the activities of the NERC Standing Periodic Review Team to grade existing standards. The NPCC Regional Standards Program Area also facilitates and assists stakeholders with initiating SARs and Requests for Interpretation of ERO standards for those entities within the NPCC footprint. In 2016 NPCC developed feedback mechanisms from the Compliance, Event Analysis, RAPA and

Criteria Services program area which will provide a process to identify and improve standards. The standards program area will receive input from these other program areas and take appropriate action to support the revision, retirement, or development of new standards to improve the ERO set of reliability standards and improve reliability of the Bulk Electric System. To ensure transparency and stakeholder input, many of the activities of the NPCC Reliability Standards Program Area are conducted with oversight and participation from the NPCC Regional Standards Committee (RSC).

The NPCC Reliability Standards Program Area supports the reliability of the bulk electric system by:

- Facilitating active participation of NPCC Regional industry stakeholders in all NERC Reliability Standards activities to promote the development of results-based, cost effective, clear and concise quality standards in a timely and efficient manner.
- Providing selective support for standard development activities as outlined in the NERC 2017-2019 Reliability Standards Development Plan
- Participating in the Enhanced Periodic Review Standing Team for NERC reliability standards which will evaluate the need to revise existing standards
- Providing a forum for all NPCC representatives on the NERC drafting teams to raise issues, socialize concepts, and receive feedback on the standards during the development process to enhance efficiency and timeliness of standards development
- Assisting NERC with the evaluation of the standards from a “cost effectiveness” perspective
- Promoting awareness by holding Regional workshops to provide outreach and conducting Regional Standards Committee meetings to inform and educate stakeholders on standards being developed, modified or maintained.
- Utilizing feedback mechanisms from Compliance, Event Analysis and RAPA to identify and initiate improvements to NERC standards.
- Actively participate and review the work of the NERC Reliability Issues Steering Committee (RISC) which identifies emerging risks to the BES.
- Coordinating and sharing activities with Standards Program Areas from other Regions.
- Developing and maintaining Regional Standards as necessary to address Regional reliability related issues or risks and ensure those standards are “not inconsistent with” the NERC continent wide standards.
- Pursuing retirement of Regional Standards through promoting the reliability objectives of those Regional Standards into the NERC Continent-wide standards and developing Variances to the NERC standards where possible to capture the reliability objectives of the Regional Standards.
- Maintaining and abiding by the NPCC Regional Standard Processes Manual assuring compliance with all FERC filed documents with respect to standards development.

### **2017 Key Assumptions**

- Facilitate stakeholder review, comment on, and develop ballot recommendations or list of Regional issues, for all NERC Reliability Standards Projects under development or revision prior to the end of ballots
- Participate in the northeast stakeholder efforts to develop Standards Authorization Requests (SARs) and Regional SARs to further improve standards in response to any potential inadequacies in reliability or to improve or correct standards.

- Continually review reliability requirements of ERO and NPCC Regional Standards, NPCC Criteria and ensure consistency and alignment, remove redundancies, and adopt revised Functional Model language when appropriate.
- Review all FERC orders and provincial regulations as they relate to the standards, their revision and adoption
- Conduct and support regulatory and/or governmental provincial filings on a periodic basis based on individual provincial laws and requirements outlined in the Memorandum of Understandings for each province.
- Enhance NPCC standards website pages to provide uniform and clear information to the stakeholders while also providing the historical and archived information to support NERC and FERC approvals and expanding requirements

## 2017 Goals and Key Deliverables

The Reliability Standards program goals and objectives for 2017 are grouped into six categories:

### 1) Participate in the ERO Results-Based Standards Development

- Participate in the development and revision of the NERC three year Reliability Standards Development Plan through review, commenting, and other RSC activities
- Participate in the NERC Standards Committee strategic initiatives to measure the effectiveness and quality of standards, participate in standards EPR activities, and address any outstanding FERC Directives.
- Support Cost of Risk Reduction Analysis (CRRRA), timely development, and quality of content attributes of new standards
- Participate in the development of ERO Reliability Standards within NERC’s three-year standards work plan with the emphasis placed on reducing the amount of new FERC Directives issues by closer coordination with the Commission staff
- Conduct thorough reviews of all NERC standards being developed or revised and coordinate comments for Northeastern North America driving consensus to the extent possible through the Enhance Periodic Review Standing team and processes
- Assist NERC’s review of all industry “Requests for Interpretations” of standards
- NPCC staff, along with NPCC solicited regional drafting team volunteers, will participate in the drafting of ERO standards affecting or potentially affecting reliability in the Eastern Interconnection and provide support for review and development of comments and propose improvements
- NPCC and its members will review and coordinate potential member’s comments on FERC staff informal assessments as appropriate
- Participate in pre-ballot reviews of ERO standards and provide consensus recommendations of the NPCC Members to the NERC Standards Drafting Team (SDT) and provide a list of any unaddressed issues to allow the Members to cast a ballot based on regional concerns
- Review and identify issues on FERC NOPRs and NOIs for any and all standards related issues as appropriate
- Coordinate and evaluate proposed standards utilizing NPCC’s technical task forces, working groups and committees
- Educate and notify stakeholders and regulators about issues related to standards development through various means such as webinars and workshops
- Provide outreach to industry trade groups such as the North American Generator Forum and North American Transmission Forum

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- Provide a forum for NPCC review of proposed and posted standards related documents from the NERC Critical Infrastructure Protection Committee (CIPC) and NPCC Task Force on Infrastructure Security and Technology (TFIST) such as but not limited to whitepapers and technical guidelines
  - Participate in NERC’s Standards Committee prioritization process, to identify immediate standards needs and prioritize standards projects based on need
  - Participate in the NERC RISC by providing a regional point of contact for all potential reliability related risks and gaps within the Northeast or as noted by NPCC stakeholders
  - Participate in and provide support to critical standards, such as CIP, Balancing Authority Controls, Voltage and Reactive Control, Real Time Tools, Frequency Response, etc.
  - Identify and initiate regional Variances to the NERC Reliability Standards as soon as possible, allowing incorporation into the continent wide standard at its inception
  - Identify potential drivers for standards revisions based on revisions to the BES to a bright line criteria and any document revisions required as a result of consideration of the “Exception Process”.
  - Provide continued insights to NERC, based on NPCC experiences, regarding strategy for developing cost effectiveness analysis for standards and support activities to identify “benefits” for the draft standards.
  - Provide support and assistance to the ERO, as needed, for conducting Quality Review activities on NERC continent-wide standards
  - Continue to develop new and innovative processes to better utilize the limited internal and external resources in the Region to enable sufficient technical review of posted standards and related materials
  - Support the ERO and the relationships with FERC and applicable provincial governmental authorities for standards development activities as necessary to accomplish the ERO’s strategic goals and objectives
  - Participate in the improvement of NERC standards through lessons learned and various regional feedback mechanisms with Compliance, RAPA, Event Analysis, etc.
  - Provide support to the Compliance Guidance Policy activities.

## 2) Regional Standards Development

- NPCC does not plan on developing further Regional Standards but reserves the right to do so if a reliability issue exists that is not appropriate for continent-wide development and also will perform clarifications as needed to existing approved Regional Standards
- Conduct reviews for opportunities to include Regional Standards as Variances into the associated NERC continent wide standards as they individually undergo Enhanced Periodic Reviews
- Conduct reviews of regional standards as necessitated by the revision and approval of any associated Continent-wide NERC reliability standards

## 3) Standards Improvement

- Achieve NPCC Northeastern North American reliability goals and objectives by initiating, participating in, and efficiently completing standards related activities
- Leverage internet and web based tools functionality to ensure inter-Regional consistency and quality of Regional Reliability Standards
- Support long-term strategy for standards improvement and initiate implementation
- Continually identify additional future Regional Standard opportunities if continent-wide standards are not an appropriate solution



- Ensure the topics addressed by the Reliability Standards parallel changing industry needs
- Participate in reliability metrics activities to identify potential measures for benchmarking of reliability to determine if an adequate level of reliability is being achieved through the Enhanced Periodic Review Standing Team activities
- Support and develop cost-effectiveness CRRA analysis activities to determine if any potential incremental increases in costs of implementing a standard have sufficient enough reliability benefit to implement that standard
- Identify any emerging interconnection wide reliability issues which may need standards solutions and forward to the NERC Reliability Issues Steering Committee.
- Identify opportunities to increase reliability through the revision of standards and their associated requirements

#### 4) Business Practices Interface

- Coordinate the review of standards through NPCC RSC, staff, and other members participating in activities of the North American Electric Standards Review Board (NAESB)
- Identify potential market related issues for Regional Standards through NPCC RSC coordination and reviews

#### 5) Opportunities for Process Improvement

- Review the NERC Standards Development Process for possible revisions to consider efficient and effective standards development and CRRA while maintaining the ANSI accreditation for standards development
- Refine the records retention programs to ensure sufficient documentation exists for regulatory approvals
- Develop and implement document management systems to allow the efficient and effective revisions of documents, control of authorship and security of documents
- Identify improvements in process for feedback loops to ensure that event analysis, investigation lessons learned, and compliance issues involving violations are fed into the standards program area, as appropriate for review and potential consideration when revising standards
- Support the Functional Model Advisory Group activities to refine functions, tasks and responsibilities of applicable entities as needed
- Solicit and provide outreach to FERC in future revisions to the Regional Standard Processes Manual

#### 6) Communications

- Improve the notifications process to assure awareness of dates and proceedings of all standard development activities
- Strengthen the relationship with the industry's technical committees to ensure adequate input to standards development, such as the North American Generator Forum.
- Participate in NPCC and NERC workshops as necessary, to provided outreach, promote awareness and educate the industry on standards related activities
- Participate in consensus building activities and notification process(es) to engage stakeholders and provide notification to NPCC's subject matter experts for the need to review standards. Provide the associated coordination for this review utilizing subject matter experts, both internal and external to the Regional Entity staff

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- Promote the requirements and reliability objectives of the NERC standards as appropriate to the NPCC members of the NERC Registered Ballot Body in order to achieve consensus and support of beneficial standards and to promote the ERO Enterprise.

Based on the portion of professional/technical staff time and other resources devoted to Reliability Standards development, NPCC estimates that it will expend approximately 7% of its resources on this activity.

## **Resource Requirements**

### **Personnel**

- Reallocation of staff during 2016 resulted in a decrease of one full time employee in the Reliability Standards program. NPCC anticipates no need to hire additional personnel in this program area in 2017.

### **Consultants and contracts**

- Consultant and contractor costs are expected to remain at 2016 levels due to a full complement of staff and internal subject matter expertise to evaluate standards and criteria and fulfill all ERO delegated functions assigned to the Reliability Standards Program Area.

## Reliability Standards Program

Funding sources and related expenses for the Reliability Standards section of the 2017 business plan are shown in the table below. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

Statement of Activities and Capital Expenditures 2016 Budget & Projection, and 2017 Budget						
Reliability Standards						
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)	
<b>Funding</b>						
<b>ERO Funding</b>						
ERO Assessments	\$ 1,480,373	\$ 1,480,373	\$ -	\$ 1,022,328	\$ (458,045)	
Penalty Sanctions	7,046	7,046	-	-	(7,046)	
<b>Total ERO Funding</b>	<b>\$ 1,487,419</b>	<b>\$ 1,487,419</b>	<b>\$ -</b>	<b>\$ 1,022,328</b>	<b>\$ (465,091)</b>	
Membership Dues	-	-	-	-	-	
Testing Fees	-	-	-	-	-	
Services & Software	-	-	-	-	-	
Workshops	-	-	-	-	-	
Interest	-	-	-	-	-	
Miscellaneous	-	-	-	-	-	
<b>Total Funding (A)</b>	<b>\$ 1,487,419</b>	<b>\$ 1,487,419</b>	<b>\$ -</b>	<b>\$ 1,022,328</b>	<b>\$ (465,091)</b>	
<b>Expenses</b>						
<b>Personnel Expenses</b>						
Salaries	\$ 548,639	\$ 410,639	\$ (138,000)	\$ 370,220	\$ (178,419)	
Payroll Taxes	32,229	22,229	(10,000)	21,273	(10,956)	
Benefits	116,140	99,140	(17,000)	97,411	(18,729)	
Retirement Costs	61,950	46,950	(15,000)	43,020	(18,929)	
<b>Total Personnel Expenses</b>	<b>\$ 758,958</b>	<b>\$ 578,958</b>	<b>\$ (180,000)</b>	<b>\$ 531,925</b>	<b>\$ (227,034)</b>	
<b>Meeting Expenses</b>						
Meetings	\$ 20,000	\$ 20,000	\$ -	\$ 13,000	\$ (7,000)	
Travel	125,000	110,000	(15,000)	103,157	(21,843)	
Conference Calls	-	-	-	-	-	
<b>Total Meeting Expenses</b>	<b>\$ 145,000</b>	<b>\$ 130,000</b>	<b>\$ (15,000)</b>	<b>\$ 116,157</b>	<b>\$ (28,843)</b>	
<b>Operating Expenses</b>						
Consultants & Contracts	\$ 10,000	\$ 10,000	\$ -	\$ 10,000	\$ -	
Office Rent	-	-	-	-	-	
Office Costs	-	-	-	-	-	
Professional Services	-	-	-	-	-	
Computer & Equipment Leases	-	-	-	-	-	
Miscellaneous	-	-	-	-	-	
Depreciation	-	-	-	-	-	
<b>Total Operating Expenses</b>	<b>\$ 10,000</b>	<b>\$ 10,000</b>	<b>\$ -</b>	<b>\$ 10,000</b>	<b>\$ -</b>	
<b>Total Direct Expenses</b>	<b>\$ 913,958</b>	<b>\$ 718,958</b>	<b>\$ (195,000)</b>	<b>\$ 658,082</b>	<b>\$ (255,877)</b>	
<b>Indirect Expenses</b>	<b>\$ 584,695</b>	<b>\$ 584,695</b>	<b>\$ -</b>	<b>\$ 372,606</b>	<b>\$ (212,089)</b>	
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Total Expenses (B)</b>	<b>\$ 1,498,654</b>	<b>\$ 1,303,654</b>	<b>\$ (195,000)</b>	<b>\$ 1,030,688</b>	<b>\$ (467,966)</b>	
<b>Change in Assets</b>	<b>\$ (11,234)</b>	<b>\$ 183,766</b>	<b>\$ 195,000</b>	<b>\$ (8,359)</b>	<b>\$ 2,875</b>	
<b>Fixed Assets</b>						
Depreciation	\$ -	-	\$ -	-	\$ -	
Computer & Software CapEx	-	-	-	-	-	
Furniture & Fixtures CapEx	-	-	-	-	-	
Equipment CapEx	-	-	-	-	-	
Leasehold Improvements	-	-	-	-	-	
Allocation of Fixed Assets	(11,234)	(11,234)	-	(8,359)	2,875	
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>(11,234)</b>	<b>(11,234)</b>	<b>-</b>	<b>(8,359)</b>	<b>2,875</b>	
<b>TOTAL BUDGET (=B+C)</b>	<b>\$ 1,487,419</b>	<b>\$ 1,292,419</b>	<b>\$ (195,000)</b>	<b>\$ 1,022,328</b>	<b>\$ (465,091)</b>	
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ 0</b>	<b>\$ 195,000</b>	<b>\$ 195,000</b>	<b>\$ 0</b>	<b>\$ 0</b>	

## Compliance Monitoring and Enforcement and Organization Registration and Certification Program

<b>Compliance Monitoring and Enforcement and Organization Registration and Certification Program Resources</b>			
(in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	16.00	17.00	1.00
Direct Expenses	\$5,367,667	\$5,366,656	(\$1,011)
Indirect Expenses	\$3,192,876	\$3,282,024	\$89,148
Other Non-Operating Expenses	\$0	\$0	\$0
Inc(Dec) in Fixed Assets	\$89,653	\$77,369	(\$12,284)
Total Funding Requirement	\$8,650,196	\$8,726,049	\$75,853

### Program Scope and Functional Description

The Compliance Monitoring and Enforcement and Organization Registration and Certification Program (CORC) Program scope covers: 1) the identification, registration and certification of those entities responsible for meeting the NERC Reliability Standards and any approved Regional Standards; 2) the implementation of the risk-based NERC Compliance Monitoring and Enforcement Program (CMEP) in the United States, including the compliance monitoring, assessment and enforcement of NERC Reliability Standards and Regional Reliability Standards. and 3) the implementation of compliance monitoring, assessment and enforcement recommendations in accordance with individual executed MOUs or Agreements in the Canadian Provinces of Ontario, Québec, New Brunswick and Nova Scotia.

The NPCC Compliance Committee (CC) is charged with providing objective stakeholder policy input to NPCC's implementation of the CMEP in the U.S. and compliance related activities under the above mentioned MOUs in the NPCC portion of Canada. With regard to NERC Reliability Standards and Regional Reliability Standards, the CC provides an oversight role of the independent NPCC compliance staff's implementation of the CMEP. In this oversight role the CC will review and endorse the processes used by the NPCC compliance staff in the conduct of the CMEP.

The NPCC compliance staff makes the initial and final determination of alleged violations and determines appropriate penalties and sanctions in accordance with the NERC *Sanction Guidelines*. To accomplish this objective, NPCC's compliance staff is further divided into four sub- program areas: Compliance Implementation and Registration; Compliance Entity Risk Assessment, Compliance Monitoring; Compliance Enforcement; and Compliance Investigation:

***Compliance Implementation, Registration and Certification***

The Compliance Implementation and Registration sub-program is responsible for:

- a) Using the risk-based registration model to maintain an accurate registry assuring that all entities that are required to meet the NERC and Regional Reliability Standards have been identified.
- b) Engaging with those registered entities who are requesting that a reduced number of requirements be applicable to them based on registration materiality and other considerations;
- c) Representing NPCC on the NERC –led Review Panel whose role is to make decisions related to resolving any identified registration issues;
- d) Development and maintenance of all CMEP Compliance Procedures, Compliance Instructions and all other CMEP related documentation;
- e) Development and maintenance of Performance Metrics that are used to measure the quality and effectiveness of CMEP Implementation and its impact on the reliability of the Bulk Electric System;
- f) Coordinating the implementation of NPCC Compliance Staff responsibilities as they pertain to the executed MOU with each of the Canadian Provinces in the NPCC Region.
- g) Day-to-day implementation of the CMEP;
- h) Development of annual CMEP Implementation Plan;
- i) Monitoring and assessment of guided self-certification, self-report, exception reporting, periodic data and complaint submittals;
- j) Development and maintenance of CMEP Data Administration Application (CDAA);
- k) Development and maintenance of compliance website.
- l) Continue to support the anticipated expansion of the number of registered entities in NPCC due to the implementation of the FERC Order related to the definition of Bulk Electric System
- m) Conduct certification(s) of newly identified Transmission Operators (TOPs) and the re-certification of entity modifications, as needed.
- n) Maintain database of BES assets subject to NERC and NPCC Reliability Standards
- o) Participation on various NERC and NPCC working groups to influence changes to Compliance processes, and support commonality of registration, monitoring, auditing, and enforcement approaches.

***Compliance Monitoring Program***

The Compliance Monitoring Program is charged with conducting both on-site and off-site compliance audits, spot checks, and guided self-certifications of NERC Reliability Standards in accordance with the NERC Rules of Procedure and associated NPCC procedures developed under the NPCC Compliance Implementation Program. NPCC's Compliance Monitoring Area provides supporting activities by implementation of the risk-based Compliance Monitoring and Enforcement Program (CMEP); and by use of consistent compliance monitoring practices focused on higher reliability risks. NPCC uses risk profiles from the IRAs (inherent risk assessments) as a baseline evaluation of reliability risks of an entity. NPCC also uses IRA summaries to guide its efforts to identifying key focus areas and evolving reliability risks. The result is a list of reliability requirements that merit a continued level of focus.

NPCC also supports the ERO Enterprise learning effort, as well as NERC oversight of program implementation. In collaboration with NERC, NPCC supports outreach programs in new CIP

versions and in implementation of CIP-014 with anticipated expansion in the number of registered entities that require guidance. Compliance engagements are performed on the basis of risk to the BES and take into account the ERO reliability risk priorities. The Reliability Assessment (RA) group performs an Inherent Risk Assessment (IRA) of all registered entities and forwards results to the manager of compliance to develop a schedule. Previous performed IRAs are amended and updated based on identified triggers. The yearly schedule is produced consistent with Risk Assessment of registered entities and the desired frequency of CMEP engagements. The schedule is posted annually on NERC and NPCC public websites.

Flexibility may be used in the predefined frequency based on the risk assessment and performance based assessment of each entity scheduled for an audit, and changes requiring certification. NPCC compliance monitoring is focused on the most significant risks to the BES. CMEP engagement may be in the form of an audit, spot check or guided self-certification and are led by qualified senior NPCC Staff. Compliance Oversight Plans are developed for registered entities to address the relevant risks. NPCC also conducts outreach, training, and education as necessary to support the implementation of new Reliability Standards.

Findings include the identification of any possible violations. Contents and processing of audit and spot check reports are in accordance with NERC directives for reporting. Specific lessons learned are factored into the program to promote continuous improvement and are presented at workshops. An annual comprehensive guided self-certification program is established based on the NERC and NPCC Risk Elements. Spot checks are based on NPCC's assessment of follow-ups on entities that have previously violated a Reliability Standard, follow-up on entities that have been involved in a significant system event, and other requirements which at the discretion of NPCC could pose a higher risk to reliability if not followed properly.

Resources from the Compliance Audit Program are also used to implement the Certification process for entities intending to register as new TOPs, BAs or RCs, as well as certification reviews of changes made by existing TOPs, BAs and RCs that meet the threshold requiring same. These actions are performed in support of the Compliance Registration Program which encompasses the Certification process. Resources for this activity, which is independent of the audit process, depend on the scope, function, and location of the entity being certified.

#### ***Compliance Entity Risk Assessment***

The Entity Risk Assessment group conducts activity that is the basis for CMEP engagement scoping. They conduct an entity's Inherent Risk Assessment prior to scoping the compliance engagement to determine which CMEP tool will be used.

Entity risk also includes an assessment of an entity's Internal Controls which is used for further reducing requirements of the engagement. Internal Controls Evaluation (ICE) is voluntary and must be agreed to by the entity.

#### ***Compliance Investigation***

A Compliance Investigation (CI) may be initiated at any time by NPCC in response to a system disturbance, complaint, or possible violation of a Reliability Standard identified by any other means. The CI process requires the establishment of an investigation team that coordinates with NERC and FERC as necessary; and also coordinates with the Situation Awareness Program Area.

### ***Compliance Enforcement***

In processing identified violations NPCC Compliance Enforcement will strive to promote both timeliness and transparency of compliance results utilizing a risk-based compliance enforcement approach, including those efforts associated with meeting the enforcement metrics described below. In addition NPCC will promote the use of self-identification of non-compliance and implementation of discretion, including increased utilization of streamlined tracks such as FFT and discretion as shown below.

Compliance Enforcement responsibilities:

- a) Issuing all applicable notices including the Notice of Preliminary Screen; Notice of Compliance Exception; Notice of Possible Violation (NOPV), Notice of Find, Fix and Track (FFT) Treatment; Notice of Alleged Violation (NOAV), and the Notice of Confirmed Violation (NOCV);
- b) Conducting comprehensive enforcement investigations based on the facts and circumstances related to all possible violations of Reliability Standards, whether identified in an audit, a self-report, complaint, or other source, and determining whether further action is warranted;
- c) Reviewing, approving, submitting to NERC and tracking the progress of all mitigation plans /mitigating activities associated with confirmed violations;
- d) Coordinating settlement activities once they have been initiated and submitting settlement agreements to NERC for approval;
- d) Identifying and processing applicable moderate violations for the FFT Process;
- e) Administer both the compliance exception process and the self-logging process for identified minimal violations;
- f) Coordinate the identification of possible NERC Reliability Standards revisions and submit issue for proper implementation. Revisions will be based on experiences observed from compliance monitoring activities, enforcement investigations, and event analysis. Work closely with NPCC Reliability Stands Program Area
- g) Follow up on verifying that proposed Reliability Standards have been implemented and are effective in improving the standards.
- h) Participating in the Hearing Process by representing NPCC before the Hearing Body. Compliance Hearings would be conducted at NPCC under the supervision of a qualified, independent hearing officer contracted by NPCC;
- i) Issuing Remedial Action Directives when appropriate; and
- j) Implementing the risk-based compliance enforcement model including :
  - a. Notifying the registered entity, within 60 days on average, whether a non-compliance will proceed through enforcement, be treated as a compliance exception or additional information is needed (“Triage”);
- k) Develop and monitor a set of enforcement metrics that support NERC’s Strategic Plan and Oversight Program

## 2017 Key Assumptions and Cost Impacts

2016	Projected 2017
4 Large On-Site Audits	4 On-Site O&P Audits
9 On-Site CIP Audits	5 On-Site CIP Audits
5 Large Off-Site Audits	30 Off-Site O&P Audits
15 Medium Off-Site Audits	
10 Small Off-Site Audits	
24 Off-Site CIP Audits	25 Off-Site CIP Audits
150 Spot Checks	15 Spot Checks
	25 Guided self-certifications
	35 Inherent Risk Assessments
	10 On-site Internal Control Evaluations
4 TFE Part B reviews	4 On-Site TFE Reviews
100 Violations (Estimated)	100 Violations (Estimated)
Settlements Covering 50 Violations	Settlements Covering 50 Violations
2 Hearings (Unbudgeted)	2 Hearings (Unbudgeted)
1 CI (Estimated)	1 CI (Estimated)
2 Entity Certifications	4 Entity Certifications

- Regarding the Compliance Audit Program, Technical Feasibility Exception (TFE) reviews are conducted both on-site at the entity's facility and at the NPCC offices when possible. TFE's continue to be requested as entities replace and install new equipment/devices/components that meet the criteria set forth in Rules of Procedure Appendix 4D. Compliance estimates four on-site reviews will be performed in 2017.
- Decrease in audit costs reflects Risk Assessment activity that is the basis for entity engagement scoping. The Risk Assessment includes an assessment of an entity's Internal Controls which is used for future reduction in engagement scoping and frequency of engagements.
- Potential increases due to the newly identified role related to implementing the QCMEP in Quebec and the continuing role of implementing the NB CMEP in New Brunswick.
- The 2017 Business Plan projects no increases in Enforcement Processing activities over the 2016 Budget.
- The 2017 Business Plan projects the need for 1 Compliance Investigation. These Compliance Investigations are manpower intensive for NPCC staff (requiring allocation of more resources and potentially higher than normal costs)

## 2017 Goals and Key Deliverables

- Conduct 2017 CMEP consistent with a risk-based compliance monitoring and enforcement model, assessing Inherent Risk Assessment; conducting voluntary Internal Control Evaluation; and expanding the use of compliance exceptions and the self-logging program for disposition of minimal violations. The CMEP would monitor and enforce all applicable NERC Reliability Standards and applicable Regional Reliability Standards.
  - Continue to process identified violations as effectively as possible, including the timely identification of a violation and its disposition method (e.g. compliance



- exceptions; FFT; etc.), and the timely issuance of appropriate notification to the registered entity and NERC;
- Continue to implement settlement process when applicable and send proper notifications to NERC and FERC and continue to enhance the settlement process by modifying existing practices and adopting new practices to reduce the duration of settlement negotiations without sacrificing the rigor and quality of the negotiated settlements;
- Develop and analyze appropriate performance metrics that track settlement process duration and utilize results of analysis to further enhance process.
- Conduct necessary Hearings related to resolution of outstanding disputes regarding violations and/or sanctions. Send results of hearings to NERC and FERC.
- Identify potential issues related to NERC Reliability Standards as a result of compliance monitoring, enforcement and event analysis activities.
- Implement proposed changes to NERC Reliability Standards utilizing existing mechanisms.
- Verify effectiveness of proposed changes to reliability standards.
- Provide detailed response to NERC Annual FFT/Compliance Exception Survey;
- Implement compliance responsibilities identified in the approved Canadian MOUs;
- Annual report to NERC and Régie on NPCC implementation of QCMEP
- Annual report to NERC and New Brunswick Electric Utility Board (NBEUB) on NPCC implementation of NB CMEP.
- Review and revise NPCC Compliance Registry based on FERC approved risk-based approach;
- Evaluate CMEP and Canadian entity compliance program implementation with the objective of establishing a long-term strategy for compliance improvement, and initiate the implementation of the long term strategy;
- Provide NPCC Regional Entity input, through participation in appropriate NERC compliance committees, on policy and implementation issues related to compliance and enforcement including the development of compliance elements for all new or revised NERC Reliability Standards;
- Provide required information to NERC on a timely basis including reporting of alleged violations and confirmed violations
- Track the progress of, report status of, and approve mitigation plans and mitigating activities;
- Conduct 2017 Compliance Engagement Schedule based on risk to the BES and number of registered entities and promote RAI initiatives by:
  - Utilizing the Audit Checklist and Auditor’s Handbook for all on-site and off-site audits
  - Preparing an Inherent Risk Assessment for all scheduled engagements and Internal Control Assessment for all entities that volunteer for one;
- On-site CIP audits may be combined with scheduled 2017 on-site audits;
- Assure that NPCC Staff is trained to conduct Entity Risk Assessment and CMEP engagements including CIP Compliance Audit training;
- Assure that NPCC Staff is trained to conduct Certification of entities intending to Register as BA, RC or TOP for the first time, or Certification Reviews of changes by existing BAs, RCs or TOPs that meet the criteria requiring a Certification Review;

- Continue to implement compliance reform consistent with a risk-based approach by being an integral participant in committees and workgroups that are involved in the development of polices related to the implementation of a risk-based compliance and enforcement model;
- Continue to expand the utilization of compliance exception and self-logging, as it relates to the processing of minimal violations;
- NPCC will collaborate with NERC to promote better coordination, planning, delivery and management of training efforts across the enterprise through a unified learning management system (LMS), without adversely impacting region-specific training requirements;
- Continue to implement physical security outreach and cyber security outreach by visiting registered entity sites to perform an assessment of their physical security, evaluate their cyber security and supply recommendations for improvements;
- Enhance the CDAA to expand its capabilities from both the registered entity perspective and the NPCC Compliance staff perspective;
- Conduct 2017 Compliance Workshops and interim information sessions for registered entities as necessary as a part of Training and Education program area.
- Continue to promote practices to enhance the benefits of the self-reporting of violations by the registered entity. This could include the emphasis on the benefits of a registered entity improving its internal processes used for identifying and submitting self-reports, improvement in the way Regional Entities process self-reports, and the streamlining and standardizing of the amount and type of data needed to evaluate a self-report.

Based on the portion of professional/technical staff time and other resources devoted to Compliance monitoring and enforcement and organizational registration and certification, NPCC estimates that it will expend 57% of its resources on this activity.

## Resource Requirements

### Personnel

- There is an increase of one FTE in 2017 from the 2016 budget. This is the result of reprioritization during 2016 based on the increased activity in the Compliance area related to risk based initiatives and the ongoing effort to reduce consulting and contractor expenses.

### Consultants and contracts

- In 2017, contractor costs will continue to decrease due to the implementation of the risk-based approach in 2015. With a risk and performance based assessment of each registered entity, compliance engagements will transition to a periodicity more reflective of the risk profile of the entity such that some will result in audits which are more in-depth while others may have a reduced scope which will result in spot checks or guided self-certifications.

## Compliance Monitoring and Enforcement and Organization Registration and Certification Program

Funding sources and related expenses for the compliance enforcement and organization registration and certification section of the 2017 business plan are shown in the table below. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

<b>Statement of Activities and Capital Expenditures</b>						
<b>2016 Budget &amp; Projection, and 2017 Budget</b>						
<b>Compliance Monitoring and Enforcement and Organization Registration and Certification</b>						
	2016	2016	Variance	2017	Variance	
	Budget	Projection	2016 Projection v 2016 Budget Over(Under)	Budget	2017 Budget v 2016 Budget Over(Under)	
<b>Funding</b>						
<b>ERO Funding</b>						
ERO Assessments	\$ 8,611,718	\$ 8,611,718	\$ -	\$ 8,084,046	\$ (527,672)	
Penalty Sanctions	38,478	38,478	-	-	(38,478)	
<b>Total ERO Funding</b>	<b>\$ 8,650,196</b>	<b>\$ 8,650,196</b>	<b>\$ -</b>	<b>\$ 8,084,046</b>	<b>\$ (566,150)</b>	
Membership Dues	-	-	-	-	-	
Testing Fees	-	-	-	-	-	
Services & Software	-	-	-	-	-	
Workshops	-	-	-	-	-	
Interest	-	-	-	-	-	
Miscellaneous	-	-	-	-	-	
<b>Total Funding (A)</b>	<b>\$ 8,650,196</b>	<b>\$ 8,650,196</b>	<b>\$ -</b>	<b>\$ 8,084,046</b>	<b>\$ (566,150)</b>	
<b>Expenses</b>						
<b>Personnel Expenses</b>						
Salaries	\$ 2,494,251	\$ 2,632,251	\$ 138,000	\$ 2,749,908	\$ 255,657	
Payroll Taxes	166,018	176,018	10,000	179,504	13,487	
Benefits	491,904	508,904	17,000	519,457	27,553	
Retirement Costs	268,494	283,494	15,000	290,486	21,992	
<b>Total Personnel Expenses</b>	<b>\$ 3,420,667</b>	<b>\$ 3,600,667</b>	<b>\$ 180,000</b>	<b>\$ 3,739,356</b>	<b>\$ 318,689</b>	
<b>Meeting Expenses</b>						
Meetings	\$ 32,000	\$ 32,000	\$ -	\$ 23,800	\$ (8,200)	
Travel	355,000	370,000	15,000	329,500	(25,500)	
Conference Calls	-	-	-	-	-	
<b>Total Meeting Expenses</b>	<b>\$ 387,000</b>	<b>\$ 402,000</b>	<b>\$ 15,000</b>	<b>\$ 353,300</b>	<b>\$ (33,700)</b>	
<b>Operating Expenses</b>						
Consultants & Contracts	\$ 1,560,000	\$ 1,365,000	\$ (195,000)	\$ 1,274,000	\$ (286,000)	
Office Rent	-	-	-	-	-	
Office Costs	-	-	-	-	-	
Professional Services	-	-	-	-	-	
Computer & Equipment Leases	-	-	-	-	-	
Miscellaneous	-	-	-	-	-	
Depreciation	-	-	-	-	-	
<b>Total Operating Expenses</b>	<b>\$ 1,560,000</b>	<b>\$ 1,365,000</b>	<b>\$ (195,000)</b>	<b>\$ 1,274,000</b>	<b>\$ (286,000)</b>	
<b>Total Direct Expenses</b>	<b>\$ 5,367,667</b>	<b>\$ 5,367,667</b>	<b>\$ -</b>	<b>\$ 5,366,656</b>	<b>\$ (1,011)</b>	
<b>Indirect Expenses</b>	<b>\$ 3,192,876</b>	<b>\$ 3,192,876</b>	<b>\$ -</b>	<b>\$ 3,282,024</b>	<b>\$ 89,148</b>	
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Total Expenses (B)</b>	<b>\$ 8,560,543</b>	<b>\$ 8,560,543</b>	<b>\$ -</b>	<b>\$ 8,648,680</b>	<b>\$ 88,137</b>	
<b>Change in Assets</b>	<b>\$ 89,653</b>	<b>\$ 89,653</b>	<b>\$ -</b>	<b>\$ (564,634)</b>	<b>\$ (654,287)</b>	
<b>Fixed Assets</b>						
Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	
Computer & Software CapEx	151,000	151,000	-	151,000	-	
Furniture & Fixtures CapEx	-	-	-	-	-	
Equipment CapEx	-	-	-	-	-	
Leasehold Improvements	-	-	-	-	-	
Allocation of Fixed Assets	(61,347)	(61,347)	-	(73,631)	(12,284)	
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>89,653</b>	<b>89,653</b>	<b>-</b>	<b>77,369</b>	<b>(12,284)</b>	
<b>TOTAL BUDGET (=B+C)</b>	<b>\$ 8,650,196</b>	<b>\$ 8,650,196</b>	<b>\$ -</b>	<b>\$ 8,726,049</b>	<b>\$ 75,853</b>	
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (642,003)</b>	<b>\$ (642,003)</b>	

## Reliability Assessment and Performance Analysis Program

<b>Reliability Assessment and Performance Analysis Program Resources</b>			
(in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	5.83	5.83	0.00
Direct Expenses	\$2,030,523	\$2,106,675	\$76,152
Indirect Expenses	\$1,163,404	\$1,125,541	(\$37,863)
Other Non-Operating Expenses	\$0	\$0	\$0
Inc(Dec) in Fixed Assets	(\$22,353)	(\$25,251)	(\$2,898)
Total Funding Requirement	\$3,171,574	\$3,206,966	\$35,392

### Program Scope and Functional Description

NPCC, through its top technical committee, the Reliability Coordinating Committee (RCC), integrates the deliverables of its Task Force's and Working Group's Reliability Assessment and Performance Analysis related activities. Consistent with the applicable NERC Reliability Standards, these efforts include:

- Reviewing the adequacy of the NPCC systems to supply load considering forecast demand, installed and planned supply and demand resources and required reserves; and,
- Assessing the impact of planned transmission and resource additions or modifications on NPCC system reliability.

Seasonal assessments of the overall NPCC resource adequacy assessments are performed and possible actions to mitigate any potential problems are identified. NPCC reviews operations and disturbances both internal and external to the Region in order to identify any lessons to be learned and recommends any necessary follow-up actions.

If appropriate, enhancements to Regional Standards or NPCC's more stringent, Regionally-specific reliability requirements are also recommended. NPCC promotes and conducts both inter-Area and inter-Regional studies to enhance reliability and operational effectiveness, and provides a forum for the discussion and coordination of operating issues within the NPCC Region and with other Regions.

### 2017 Key Focus Areas

In collaboration with NERC, Key Focus area activities for 2017 include:

- ✓ Integration of RAPA information systems for assessments and associated data requirements, including expanded and enhanced enterprise-wide data collection and analysis systems and capabilities for performance analyses, with a focus on independent and technically sound reliability assessments supporting delivery of high quality reports (e.g., Long-Term Reliability Assessment, short-term special assessments, probabilistic scenario assessments, and the State of Reliability Report).
- ✓ Development of assessment and performance analysis techniques as well as resource capabilities and tools, including probabilistic and scenario evaluations, which address the impacts of new technologies, changing resource or demand resource composition, and environmental related regulations or legislation; support for ERO activities to identify

key reliability risks and appropriate risk control projects designed to enhance reliability or mitigate risks.

- Developing and tracking of metrics associated with Essential Reliability Services;
  - Developing of appropriately tailored analysis and overall assessment, including guidance for registered entities, of high impact, low frequency BES risks, including physical security and geomagnetic disturbance (GMD) vulnerability;
  - Providing technical resources to support up to four short-term special reliability assessments (6-18 month horizon replacing the current summer and winter assessments), which focus on specific reliability issue risk areas and geographic areas with specific reliability concerns, while also allowing for regional assessments;
  - Supporting the common approach developed for NERC reliability assessments to ensure consistent treatment of resource and reliability evaluations;
  - Advancing analytical capabilities for identifying and determining reliability risks and conducting various reliability assessments by:
    - Integrating the analysis and measures of the identified essential reliability services into the NERC 2017 Long-Term Reliability Assessment;
    - Requiring advanced powerflow and stability analysis tools and objective expert input for transmission/deliverability assessments and studies;
    - Maturing and developing interconnection-wide analysis groups to support the assessment of interconnection-wide risks, such as frequency response;
    - Providing technical resources and reliability leadership for the advancement of probabilistic analyses supporting the Long-Term Reliability Assessment;
    - Enhancing the capability for post event analysis, including ensuring the timely and accurate compilation and creation of steady state and dynamic simulation model cases for use in the investigation and analysis of major power system disturbance events.
- ✓ NPCC supports, through the Eastern Interconnection base case designee agreement, the development of long-term sustainable interconnection-wide powerflow and dynamics model cases under Reliability Standards MOD-032 and MOD-033 that exhibit the accuracy and fidelity reflecting actual BES reliability performance and dynamic conditions.
- ✓ Provision of technical resources to support the effective and continuous improvement of the models that incorporate recognition of reliability behavior of loads and generation associated with the changing resource mix.

### **Eastern Interconnection Reliability Assessment Group**

The primary function of the Eastern Interconnection Reliability Assessment Group (ERAG) is to support reliability of the bulk-power system in the Eastern Interconnection through periodic reviews of generation and transmission expansion. These assessments are conducted by the ERAG Steering Committees. The assessment-related activities indicated for the ERAG Management and Steering Committees below, are done in support of ERO Goal 3a. (“3a. “Risks to Reliability are identified and prioritized based on reliability impacts, cost and practicality of assessments, projected resources, and emerging issues.”) In addition, ERAG has the responsibility to facilitate the development of the annual set of seasonal and future steady state and dynamic simulation base cases for use by the Regional Entities and other industry groups in the Eastern Interconnection. This is done through the ERAG Multi-Regional Modeling Working

Group (MMWG). The base case compilation and development-related activities indicated for the ERAG Management and MMWG below are done in support of ERO Goal 3d. (“3d. Reliability models and data accurately represent system behavior and are shared among stakeholders.”) NPCC participates in the ERAG activities as one of the six Eastern Interconnection Regional Entities.

NPCC supports maintenance of the BESnet application and the processing of the Regional BES Exception Requests (ERs), including technical validation of the definition and exception requests periodic reviews of network changes affecting BES determinations, as well as requests for registration and certification reviews. Processing of requests for BES Exceptions are not expected to significantly impact resources requirements in this program area for 2017.

NPCC RAPA staff participates with the ERAG Management Committee, ERAG Steering Committee and ERAG Working Group and acts as the liaison between the ERAG MMWG and the NPCC SS-37 Working Group; activities include:

#### **ERAG Management Committee Activities**

- ✓ Oversee the steady state and dynamic simulation base case data compilation and development;
- ✓ Oversee ERAG Multi-Regional Modeling Working Group (MMWG) changes to the dynamics base cases;
- ✓ Oversee MMWG effort to make necessary changes to the modeling of governor-turbine control systems to achieve frequency response that more closely reflects actual response during system frequency deviation events;
- ✓ Oversee the ERAG assessments of anticipated inter-Regional, inter-Balancing Authority transfer limit conditions and sensitivities. ERAG is considering different assessment approaches to enhance the way assessments are conducted to provide more industry value from the assessment results. Coordinate the effort with NERC Assessment Program staff;
- ✓ Develop ERAG Strategic Direction (i.e. anticipated new developments in MMWG process and system assessments); Resolve any issues with application of the ERAG MMWG non-disclosure agreement process so that base cases and assessments have sufficient protections in place for use and transmittal of confidential data and information; and
- ✓ Develop and approve the ERAG activity budgets.

#### **Multi-Regional Modeling Working Group Items**

- ✓ Facilitate the completion of the steady state and dynamic simulation base case data compilation and development for the 2017 series of cases. This will include 12 steady state base cases and 8 dynamic simulation base cases;
- ✓ Check and confirm that the dynamic model data passes all applicable checks and acceptance criteria. Include 60 second steady state simulation of each case to detect numerical errors;
- ✓ Apply changes to the MMWG dynamics case so they are available for interconnection dynamics studies.
- ✓ Incorporate dispatch information into the future and seasonal ERAG MMWG base cases so that the dispatches are more closely aligned with economic dispatch practices;
- ✓ Apply the web-based System Dynamics Data Base program during the development of the 2017 series of dynamics base cases;

- ✓ Continue to improve the representations of the governor-turbine plant control models at most generators. Recommend the necessary changes in the models for specific generators;
- ✓ Apply MMWG base case non-disclosure agreement process so that MMWG cases continue to have sufficient protections in place for use and transmittal of confidential data and information;
- ✓ Verify that procedures in the MMWG manual are followed.

### **System Assessments**

- ✓ Conduct the 2017 ERAG Assessments and prepare the ERAG Assessment Reports, including, the assessments of anticipated inter-Regional, inter-Balancing Authority transfer limit conditions and sensitivities;
- ✓ Consider different assessment approaches to enhance the way assessments are conducted; and,
- ✓ Coordinate Assessment efforts with the NERC Reliability Assessment and System Analysis (RASA) Program staff to incorporate any risk-based or other approaches to supplement NERC Assessments.

### **NERC Activities**

NPCC will provide the Regional perspective with judicious NPCC RAPA staff participation on selective NERC Planning and Operating Committees and key related NERC Subcommittees, Task Forces and Working Groups which could include:

- ✓ Essential Reliability Services Working Group (ERSWG);
- ✓ Distributed Energy Resources Task Force (DERTF);
- ✓ Load Modeling Task Force (LMTF);
- ✓ Protection System Mis-operations Task Force (PSMTF);
- ✓ Spare Equipment Working Group (SEWG);
- ✓ Demand Response Availability Data System Working Group (DADSWG);
- ✓ Generating Availability Data System Working Group (GADSWG);
- ✓ Transmission Availability Data System Working Group (TADSWG);
- ✓ Modeling Working Group (MWG);
- ✓ Reliability Assessment Subcommittee (RAS);
- ✓ System Analysis and Modeling Subcommittee (SAMS);
- ✓ Performance Analysis Subcommittee (PAS);
- ✓ Misoperation Information Data Analysis System (MIDAS); and,
- ✓ Incorporating any probabilistic reliability metrics required for the 2017 NERC Long-Term Reliability Assessment through the NPCC 2017 Long Range Adequacy Overview.

### **ERO – Executive Management Group (EMG) Activities**

Provide analytic support for the ERO-EMG

- ✓ Bulk Electric System Exception Process Working Group (BEPWG);
- ✓ ERO-RAPA Group; and,
- ✓ Other activities as directed by the ERO-Executive Management Group.

## **2017 Goals and Key Deliverables**

### **Task Force on Coordination of Planning**

The primary mission of the NPCC Task Force on Coordination of Planning (TFCP) is to promote reliability through the coordination of NPCC Area and NERC planning processes and activities.

In addition, the TFCP provides technical support regarding operating expertise to the NPCC Regional Standards Committee and the NPCC Compliance Committee as requested, and provides support and technical input for related BES risks identified by the NERC Reliability Issues Steering Committee (RISC) and the NERC Essential Reliability Services Task Force.

**Key TFCP Reliability Assessment and Performance Analysis Deliverables:**

- Coordinate NPCC responses to NERC Essential Reliability Services Task Force recommendations with the Task Force on Coordination of Operation and the Task Force on System Studies to ensure that developments in the NERC PC and its Subcommittees are addressed;
- Coordinate the development of additional Criteria as necessary, and track any new and developing standards through the Regional Standards Committee (RSC);
- Monitor the development of Bulk Power System (BPS) Regional Standard;
- Monitor the actions of the NERC Systems Analysis and Modeling Subcommittee (SAMS) in the areas of resource adequacy, system protection and system control;
- Oversee the Directory No. 1 Implementation Plan (Dated: September 30, 2015);
- Conduct the annual NPCC Interregional Long Range Adequacy Overview and associated NERC ProbA
- Lead the NPCC Task Forces in reviewing and revising the *A10 Criteria*– NPCC Classification of Bulk Power System Elements;
- Evaluate and approve Area Transmission Reviews;
- Evaluate and approve Area Reviews of Resource Adequacy;
- Coordinate, monitor, review, and make recommendations on the retirement of existing in-service Special Protection Systems (SPS); and the implementation of proposed new or modified Special Protection Systems;
- Review the practice within the NPCC for the use of an SPS with input from the other task force groups;
- Support related reliability activities, including consideration of any requests for sub-regional assessments or NPCC’s identification of the necessity for such assessments consistent with NERC Rules of Procedure section 805, associated with implementation of the U.S. EPA Clean Power Plan;
- Monitor industry practices and make recommendations to NPCC on transmission adequacy standards related to intermittent generation such as wind or solar-photovoltaic and demand-side resources;
- Coordinate to ensure that further UVLS analysis beyond the initial feasibility/screening study is completed according to schedules set by the RCC and the NERC PC;
- Conduct a review of NPCC Interconnection Assistance Reliability Benefits;
- Monitor the actions of applicable NERC Subcommittees in the areas of resource adequacy, system protection and system control;
- Review the load shape assumption used in NPCC Multi-Area Probabilistic Reliability Assessments;
- Review and comment on the development of NERC Standards through the RSC;
- Monitor the developments in fuel supply, demand resources, energy efficiency, and conservation methods including all intermittent renewable resources, including embedded distributed resources.
- Support the NPCC Regional Standards Committee (RSC) as required;
- Keep informed on studies and developments with neighboring systems which might impact NPCC;



- Monitor the process for the annual review and updating of the NPCC Electric System Regional Map and the NPCC Load, Capacity, Energy, Fuel and Transmission Report (LCEF&T);
- Facilitate Wide-Area Planning through participation in regional activities and coordinate inter-Area reliability analysis;
- Keep informed of the NERC Planning Committee and other subcommittee activities to determine their impact on the NPCC and any potential adjustments to NPCC Criteria;
- Coordinate with NERC regarding the development of standards for dynamic system controls;
- Review Events Analysis Lessons Learned using the Events Analysis discussion/review template.

### **Task Force on System Studies**

The primary mission of the NPCC Task Force on System Studies (TFSS) is to provide active overall coordination of system studies of the reliability of the interconnected bulk power systems and for the review of certain NPCC documents. In addition, the TFSS provides technical support regarding operating expertise to the NPCC Regional Standards Committee and the NPCC Compliance Committee, and provides support and technical input for related BES risks identified by the NERC Reliability Issues Steering Committee (RISC) and the NERC Essential Reliability Services Task Force.

#### **Key TFSS Reliability Assessment and Performance Analysis Deliverables:**

- ✓ Review and recommend approval of Area Transmission Reviews, in accordance with the “Guidelines and Procedures for NPCC Area Transmission Reviews” (Appendix B of Directory No. 1), based on material presented by the Areas. These reviews assess the impact of planned transmission and resource additions or modifications on system reliability, and determine the Area’s conformance with the Basic Criteria. Through the Area Transmission Reviews, re-evaluate the performance and classification of existing SPSs and Dynamic Control Systems, as appropriate;
- ✓ Review and classify new and modified Special Protection Systems, in accordance with the Appendix B, Procedure for the Review of a Special Protection Systems, of NPCC Directory No. 7, “*Special Protection Systems*”;
- ✓ Review and Implement the NPCC A-10 Criteria:
  - Coordinate with TFCP a review and revision of the A-10 document in 2016.
  - Review and recommend approval of changes to the NPCC list of bulk power system elements, in accordance with the “*Classification of Bulk Power System Elements*” (Document A-10); and,
  - Update the NPCC BPS List.
- ✓ Review and process Multiple Circuit Tower exclusions in accordance with NPCC Directory No. 1, Appendix E;
- ✓ Update the Multiple Circuit Tower Exclusion List;
- ✓ Perform bi-annual review and update of the Major Project List;
- ✓ Participate in the development and submission of NPCC comments/inputs into the development of regional and/or continent-wide reliability standards that address the NERC Reliability Standards.
- ✓ As RCC directs, provide support and technical input, for Task Force related BES risks as identified by the NERC Reliability Issues Steering Committee (RISC);
- ✓ Update the NPCC Electric System Map.

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Through the SS-37 Working Group - Annually develop a library of power flow base cases and associated dynamic cases . The NPCC cases will also be used to support the development of the library of power flow and dynamic cases for the Eastern Interconnection; in addition:

- ✓ On an as needed basis, update SS-37 Procedure Manual and other SS-37 documents including the Master Tieline Data and Interchange Schedule;
- ✓ provide mid-term updates to the ten-year-out cases in the NPCC Library;
- ✓ Coordinate with SS-38 to support the performance of event replication by benchmarking against actual system performance;
- ✓ Review existing regional criteria and procedures for validation of data used in power flow and dynamic simulations and if the existing criteria or procedures are found to be deficient, propose changes to provide for adequate data validation.
- ✓ Coordinate management of governor models used in studies with the SS-38 Working Group.

Through the SS-38 Working Group:

- ✓ Complete examination of the impact of distributed generation;
- ✓ Consider the development of a uniform approach, as requested by TFSP, for identifying BES Elements that meet one or more of the Criteria in R1 of PRC-026-1;
- ✓ Review and develop comment on draft NERC standards, as needed;
- ✓ Work with software vendors and NERC Modeling Working Group (MWG) to enhance the capability for dynamic simulations;
- ✓ Coordinate with SS-37 to perform event replication by benchmarking against actual system performance.

Through the SS-38 Load Modeling Working Group:

- ✓ Continue to investigate the use of dynamic load models for transient stability studies;
  - Investigate the use of load monitoring equipment to aid in the benchmarking of dynamic load models used in transient stability studies.

### **Task Force on System Protection (TFSP)**

The purpose of the NPCC Task Force on System Protection (TFSP) is to promote the reliable and efficient operation of the interconnected bulk power systems in Northeastern North America through the establishment of directories, criteria, guidelines, and procedures and coordination of design, relative to the protection associated with the bulk power systems. In addition, the TFSP provides technical support regarding operating expertise to the NPCC Regional Standards Committee and the NPCC Compliance Committee, and provides support and technical input for related BES risks identified by the NERC Reliability Issues Steering Committee (RISC) and the NERC Essential Reliability Services Task Force.

#### **Key TFSP Reliability Assessment and Performance Analysis Deliverables:**

- ✓ Assess proposed protection systems and special protection systems for compliance with Directory No. 4 and Directory No. 7 ;
- ✓ Participate or serve as lead Task Force in the implementation of applicable Regional NERC Reliability Standards;
- ✓ Conduct review/development of the following Documents:
  - Document C-45 - Procedure for Analysis and Reporting of Protection System Misoperations. Update will incorporate new procedure associated with NERC Section 1600 Data Request;

- Develop a new Directory (Directory No. 11) for Disturbance Monitoring to house more specific NPCC criteria, guides, and procedures;
- Serve as lead Task Force working in conjunction with TFCP and TFSS on Directory No. 7 – NPCC Special Protection Systems revisions required to ensure consistency with the development of the new NERC standard on Remedial Action Schemes.
- Develop a New Guideline for Tele-protection Communication Reliability
- ✓ Review and respond to Questions, Requests for Interpretations and/or Clarifications related to NPCC Standards, Directories, and Criteria, as needed;
- ✓ Participate in the ongoing development and submission of NPCC inputs/comments into the development of protection related NERC Reliability Standards;
- ✓ Review NPCC misoperations of protection systems and Special Protection System (aka Remedial Action Schemes) and participate in providing the NPCC input for NERC Metric ALR4-1 on Protection Misoperations;
- ✓ Review and analyze the performance of protection systems of power system disturbances, lessons learned, and events inside as well as outside NPCC;
- ✓ Support NERC in its effort through the ERO-RAPA group to continue relay misoperations performance analysis to reduce protection system misoperations, inform the RCC on relay misoperations trends, and share good practices;
- ✓ Review mitigations and/or progress reports for BPS Risk Reduction Implementation and annually report to the RCC on the status of this implementation;
- ✓ Provide support and technical input for Task Force related BES risks as identified by the NERC Reliability Issues Steering Committee (RISC). Conduct a thorough review, provide comments as necessary and act on posted materials as directed. Task Force assessments and recommendations will be forwarded to the RCC for approval and submittal to NERC via the NERC Risk Control Process;
- ✓ Collaborate with System Studies on development of disturbance monitoring recommendation for load transformers as part of effort to develop Directory No. 11; and,
- ✓ Maintain ongoing log of protection relay failures.

### **Task Force on Coordination of Operation**

The NPCC Task Force on Coordination of Operation (TFCO) facilitates the coordination of operations among the NPCC Reliability Coordinator areas and adjacent NERC Regions to enhance the reliability of the bulk power system. In addition, the TFCO provides technical support regarding operating expertise to the NPCC Regional Standards Committee and the NPCC Compliance Committee, and provides support and technical input for related BES risks identified by the NERC Reliability Issues Steering Committee (RISC) and the NERC Essential Reliability Services Task Force.

#### **Key TFCO Reliability Assessment and Performance Analysis Deliverables:**

- ✓ Review and analyze the performance of Simultaneous Activation of Reserve (SAR) implementation following an event to enhance the SAR process;
- ✓ Provide recommendations to enhance the programs of the annual spring and autumn NPCC System Operator Seminars;
- ✓ Share lessons learned among training staff from the NPCC RCs and utilize to make training program enhancements;
- ✓ Develop and securely disseminate the annual compilation of “Facilities for Notification.”
- ✓ Present to the TFCO an annual summary of operating tool failures and lessons learned for the preceding year;

- ✓ Perform a voluntary Critical Operating Tool Analysis Survey accompanied with the previous surveys recommendation to disseminate and assess the implementation of best practices and recommendations;
- ✓ Complete a triennial review of the RC area restoration plans;
- ✓ Support an annual enhanced, wide area restoration drill among the Reliability Coordinator areas of NPCC and their neighboring Reliability Coordinators incorporating the annual review of the NPCC regional restoration plan;
- ✓ Conduct pre-seasonal NPCC Reliability Assessments incorporating multi-area probabilistic reliability simulation results in each assessment. Coordinate the NPCC input for the annual data for the NERC Reliability Assessment Subcommittee.
- ✓ Conduct reviews of applicable NPCC Directories, Criteria, Guides and Procedures in accordance with their applicable review dates:
  - Directory No. 2 – “*Emergency Operations*”
  - Directory No. 5 – “*Reserve*”
- ✓ Assess the dependency of successful system operations on current telecommunication systems.

### **NPCC Regulatory/Governmental Affairs Advisory Group**

The purpose of the NPCC Regulatory/Governmental Affairs Advisory Group is to promote NPCC interaction and coordination with Federal/State/Provincial governmental and/or regulatory agencies on a coordinated Regional basis, and identify and develop policy input for NPCC and Northeast Regional governmental and/or regulatory bodies.

The NPCC Governmental/Regulatory Affairs Advisory Group provides a forum where industry and governmental and/or regulatory representatives can exchange views and strive to develop consensus policy recommendations on reliability issues specific to the NPCC Region (Northeastern United States and Eastern Canada) and share actionable information among NPCC, NERC and other related governmental and/or regulatory agencies related to Regional energy and reliability matters.

Activities for 2017 include continued outreach to NPCC’s state electricity and environmental regulators stressing the importance of understanding the reliability considerations, such as the identified Essential Reliability Services when formulating State Implementation Plans for the EPA Clean Power Plan compliance. This includes focus on issues concerning regional planning, the characteristics of distributed energy resources, the timing of new generation resources and transmission infrastructure projects and use of the rule’s Reliability Safety Valve.

Based on the portion of professional/technical staff time and other resources devoted to Reliability Assessment and Performance Analysis, NPCC estimates that it will expend 21% of its resources on these activities.

### **Resource Requirements**

#### **Personnel**

- NPCC anticipates no need to hire additional personnel in this program area in 2017.

#### **Consultants and contracts**

- Increase in RAPA consulting and contracts expense is associated with an anticipated increase in emerging risk reliability studies.

## Reliability Assessment and Performance Analysis Program

Funding sources and related expenses for the Reliability Assessment and Performance Analysis section of the 2017 business plan are shown in the table below. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

Statement of Activities and Capital Expenditures						
2016 Budget & Projection, and 2017 Budget						
Reliability Assessment and Performance Analysis						
	2016	2016	Variance	2017	Variance	
	Budget	Projection	2016 Projection	Budget	2017 Budget	
			v 2016 Budget		v 2016 Budget	
			Over(Under)		Over(Under)	
<b>Funding</b>						
<b>ERO Funding</b>						
ERO Assessments	\$ 3,157,554	\$ 3,157,554	\$ -	\$ 3,206,966	\$ 49,412	
Penalty Sanctions	14,020	14,020	-	-	(14,020)	
<b>Total ERO Funding</b>	<b>\$ 3,171,574</b>	<b>\$ 3,171,574</b>	<b>\$ -</b>	<b>\$ 3,206,966</b>	<b>\$ 35,392</b>	
Membership Dues	-	-	-	-	-	
Testing Fees	-	-	-	-	-	
Services & Software	-	-	-	-	-	
Workshops	-	-	-	-	-	
Interest	-	-	-	-	-	
Miscellaneous	-	-	-	-	-	
<b>Total Funding (A)</b>	<b>\$ 3,171,574</b>	<b>\$ 3,171,574</b>	<b>\$ -</b>	<b>\$ 3,206,966</b>	<b>\$ 35,392</b>	
<b>Expenses</b>						
<b>Personnel Expenses</b>						
Salaries	\$ 1,031,149	\$ 1,031,149	\$ -	\$ 1,084,994	\$ 53,845	
Payroll Taxes	64,284	64,284	-	65,373	1,089	
Benefits	212,345	212,345	-	214,688	2,343	
Retirement Costs	116,395	116,395	-	121,271	4,876	
<b>Total Personnel Expenses</b>	<b>\$ 1,424,173</b>	<b>\$ 1,424,173</b>	<b>\$ -</b>	<b>\$ 1,486,325</b>	<b>\$ 62,152</b>	
<b>Meeting Expenses</b>						
Meetings	\$ 45,000	\$ 45,000	\$ -	\$ 20,500	\$ (24,500)	
Travel	186,850	186,850	-	186,850	-	
Conference Calls	-	-	-	-	-	
<b>Total Meeting Expenses</b>	<b>\$ 231,850</b>	<b>\$ 231,850</b>	<b>\$ -</b>	<b>\$ 207,350</b>	<b>\$ (24,500)</b>	
<b>Operating Expenses</b>						
Consultants & Contracts	\$ 374,500	\$ 479,500	\$ 105,000	\$ 413,000	\$ 38,500	
Office Rent	-	-	-	-	-	
Office Costs	-	-	-	-	-	
Professional Services	-	-	-	-	-	
Computer & Equipment Leases	-	-	-	-	-	
Miscellaneous	-	-	-	-	-	
Depreciation	-	-	-	-	-	
<b>Total Operating Expenses</b>	<b>\$ 374,500</b>	<b>\$ 479,500</b>	<b>\$ 105,000</b>	<b>\$ 413,000</b>	<b>\$ 38,500</b>	
<b>Total Direct Expenses</b>	<b>\$ 2,030,523</b>	<b>\$ 2,135,523</b>	<b>\$ 105,000</b>	<b>\$ 2,106,675</b>	<b>\$ 76,152</b>	
<b>Indirect Expenses</b>	<b>\$ 1,163,404</b>	<b>\$ 1,163,404</b>	<b>\$ -</b>	<b>\$ 1,125,541</b>	<b>\$ (37,863)</b>	
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Total Expenses (B)</b>	<b>\$ 3,193,927</b>	<b>\$ 3,298,927</b>	<b>\$ 105,000</b>	<b>\$ 3,232,217</b>	<b>\$ 38,289</b>	
<b>Change in Assets</b>	<b>\$ (22,353)</b>	<b>\$ (127,353)</b>	<b>\$ (105,000)</b>	<b>\$ (25,251)</b>	<b>\$ (2,898)</b>	
<b>Fixed Assets</b>						
Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	
Computer & Software CapEx	-	-	-	-	-	
Furniture & Fixtures CapEx	-	-	-	-	-	
Equipment CapEx	-	-	-	-	-	
Leasehold Improvements	-	-	-	-	-	
Allocation of Fixed Assets	(22,353)	(22,353)	-	(25,251)	(2,898)	
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>(22,353)</b>	<b>(22,353)</b>	<b>-</b>	<b>(25,251)</b>	<b>(2,898)</b>	
<b>TOTAL BUDGET (=B+C)</b>	<b>3,171,574</b>	<b>3,276,574</b>	<b>105,000</b>	<b>3,206,966</b>	<b>35,392</b>	
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ 0</b>	<b>\$ (105,000)</b>	<b>\$ (105,000)</b>	<b>\$ 0</b>	<b>\$ 0</b>	

## Training, Education, and Operator Certification Program

<b>Training, Education, and Operator Certification Program Resources</b>			
(in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	0.10	0.10	0.00
Direct Expenses	\$200,384	\$229,785	\$29,401
Indirect Expenses	\$19,955	\$19,306	(\$649)
Other Non-Operating Expenses	\$0	\$0	\$0
Inc(Dec) in Fixed Assets	(\$383)	(\$433)	(\$50)
Total Funding Requirement	\$219,956	\$248,658	\$28,702

### Program Scope and Functional Description

The NPCC Training, Education, and Operator Certification program supports NERC Rules of Procedure Section 900. The program provides education and training necessary to understand and operate the bulk electric system. The target audience of the program is bulk power system operating personnel - including system operations personnel, operations support personnel (engineering and information technology), supervisors and managers, and training personnel. NPCC staff training and development is incorporated within each respective program area.

### Training Program Background and Description

This NPCC Program establishes and coordinates training for system operators relating to inter-Reliability Coordinator area matters, criteria, terminology, standards and operating procedures and instructions. It includes development and execution training seminars, held twice yearly, at which: 1) potential operational problems for the coming season are discussed, 2) the implementation of NPCC Directories and NERC Standards are discussed, 3) major industry issues that are important for system operators are discussed, 4) significant disturbances are reviewed for lessons learned and 5) table-top drills and communication and coordination exercises are conducted. The seminars promote camaraderie and better communication among system operators from the NPCC Reliability Coordinator (RC) areas and the Nova Scotia Balancing Authority (BA) area.

This Program also provides for: 1) sharing of existing training techniques and methods, 2) evaluation of new techniques and training aids as they become available; 3) opportunities to consolidate training among the NPCC RCs and BAs, which includes opportunities to share training material and training sessions and 4) exchange of information on internal methods of system operator selection and training. The training activities indicated below are done in support of ERG Goal 5b. (“5b. The ERO Enterprise acquires, engages, and retains highly qualified talent suited to the mission.”)

### Funding Drivers and Reliability Benefits

- Provide two high-quality continuing education seminars for system operators
  - System operators participating in the Seminars: 1) get exposure to NPCC issues and current industry operations topics, 2) review recent NPCC or major external disturbances, 3) review key operations-related content in NPCC Directories and NERC Standards, and 4) participate in hands on “table top exercises” pertaining

- to system operation practices. PJM system operators and trainers are also invited to and normally attend and participate in these seminars.
- Seminar attendees also receive Continuing Education Hours (CEHs) (normally 3.5 to 4 CEHs) and operator trainers from each RC / BA area can utilize the seminar content by including it in their internal training programs to provide CEHs to all system operators
  - The seminars help to improve system operation coordination through better contact among operators
  - Continually review and revise the curriculum of the training seminars to better emphasize NERC standards, Regional Standards and business practices, NPCC wide-area operations and Regionally-specific criteria and procedures.
  - Enhance the system operator's awareness and knowledge of the standards, criteria and procedures they apply in real time operation.
  - Provide more sharing of new training approaches, exchange of information on internal methods of system operator selection, training material and training sessions.
    - Enhance efficiency and cost savings in the training programs in the NPCC RC / BA areas
  - Provide a forum among NPCC RC/BA areas for sharing of approaches to meet the requirements of the NERC PER standards. The sharing of approaches used by some NPCC Areas to address any changes needed to existing system operator training programs due to PER-005-2 requirements is valuable to CO-2 Working Group members.
  - Implement changes needed for the NPCC Reliability Coordinator / Balancing Authority Areas to meet proposed expanded Systematic Approach to Training (SAT) requirement for operations support staff in PER-005-2.
  - NPCC will conduct two Standards and Compliance workshops in 2017, for NPCC Stakeholders, for the express purpose of providing the most current and applicable information related to the development of NERC and Regional Reliability Standards and the implementation of the Compliance Monitoring and Enforcement Program (CMEP).

### **2017 Key Assumptions**

NPCC regularly conducts seminars as well as Spring and Fall Standards and Compliance workshops specifically designed, primarily through the conduct of targeted breakout class room sessions and presentations on current industry related activities, to provide for the most efficient exchange of information between the NPCC Compliance and Standards Staff and the NPCC Stakeholders. Presentations in the past have been conducted by FERC, NERC and Stakeholder representatives in addition to NPCC Staff members. To supplement these workshops, NPCC is also considering expanding the use of on-line webinars. These webinars will focus on a specific topic pertinent to developments related to compliance program implementation, standards development or technical topics.

NPCC also regularly conducts spring and fall System Operator Seminars. These seminars involve system operators from the NPCC RC/BA Areas and PJM. These will be held in early May and early November.

### **2017 Goals and Key Deliverables**

- Prepare and conduct the 2017 Spring and Fall NPCC System Operator Seminars.
- Implement the PER-005-2 expanded SAT training requirements within the NPCC RC/BA Area programs.

- Expand the content of the Reliability Coordinator training programs, to meet the requirements generated by PER-005-2, as necessary.
- Continue collaboration and sharing of the intended RC/BA approaches, experiences and materials to task identification and training development associated with NERC Standard PER-005-2. Create and expand the restricted-access NPCC repository of training resources and learning verification activities addressing fundamental power system topics, training methods and operation procedure training exercises, which may be shared as elements of operator training in compliance with NERC Standard PER-005, “System Personnel Training”.
- Participate in NERC Staff Training Group activities and provide NPCC input to the development of training policies by this group.

Based on the portion of professional/technical staff time and other resources devoted to training, education, and operator certification, NPCC estimates that it will expend 2% of its resources on this activity.

### **Resource Requirements**

#### **Personnel**

- NPCC anticipates no need to hire additional personnel in this program area in 2017.



## Training, Education, and Operator Certification Program

Funding sources and related expenses for the training, education, and operator certification section of the 2017 business plan are shown in the table below. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

Statement of Activities and Capital Expenditures						
2016 Budget & Projection, and 2017 Budget						
Training, Education, and Operator Certification						
	2016	2016	Variance	2017	Variance	
	Budget	Projection	2016 Projection	Budget	2017 Budget	
			v 2016 Budget		v 2016 Budget	
			Over(Under)		Over(Under)	
<b>Funding</b>						
<b>ERO Funding</b>						
ERO Assessments	\$ 155,715	\$ 155,715	\$ -	\$ 184,658	\$ 28,943	
Penalty Sanctions	240	240	-	-	(240)	
<b>Total ERO Funding</b>	<b>\$ 155,956</b>	<b>\$ 155,956</b>	<b>\$ -</b>	<b>\$ 184,658</b>	<b>\$ 28,702</b>	
Membership Dues	-	-	-	-	-	
Testing Fees	-	-	-	-	-	
Services & Software	-	-	-	-	-	
Workshops	64,000	64,000	-	64,000	-	
Interest	-	-	-	-	-	
Miscellaneous	-	-	-	-	-	
<b>Total Funding (A)</b>	<b>\$ 219,956</b>	<b>\$ 219,956</b>	<b>\$ -</b>	<b>\$ 248,658</b>	<b>\$ 28,702</b>	
<b>Expenses</b>						
<b>Personnel Expenses</b>						
Salaries	\$ 19,073	\$ 19,073	\$ -	\$ 21,012	\$ 1,939	
Payroll Taxes	1,311	1,311	-	1,396	85	
Benefits	5,452	5,452	-	4,801	(651)	
Retirement Costs	2,397	2,397	-	2,641	244	
<b>Total Personnel Expenses</b>	<b>\$ 28,234</b>	<b>\$ 28,234</b>	<b>\$ -</b>	<b>\$ 29,850</b>	<b>\$ 1,616</b>	
<b>Meeting Expenses</b>						
Meetings	\$ 157,000	\$ 157,000	\$ -	\$ 186,300	\$ 29,300	
Travel	15,150	15,150	-	13,635	(1,515)	
Conference Calls	-	-	-	-	-	
<b>Total Meeting Expenses</b>	<b>\$ 172,150</b>	<b>\$ 172,150</b>	<b>\$ -</b>	<b>\$ 199,935</b>	<b>\$ 27,785</b>	
<b>Operating Expenses</b>						
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -	
Office Rent	-	-	-	-	-	
Office Costs	-	-	-	-	-	
Professional Services	-	-	-	-	-	
Computer & Equipment Leases	-	-	-	-	-	
Miscellaneous	-	-	-	-	-	
Depreciation	-	-	-	-	-	
<b>Total Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Total Direct Expenses</b>	<b>\$ 200,384</b>	<b>\$ 200,384</b>	<b>\$ -</b>	<b>\$ 229,785</b>	<b>\$ 29,401</b>	
<b>Indirect Expenses</b>	<b>\$ 19,955</b>	<b>\$ 19,955</b>	<b>\$ -</b>	<b>\$ 19,306</b>	<b>\$ (649)</b>	
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Total Expenses (B)</b>	<b>\$ 220,339</b>	<b>\$ 220,339</b>	<b>\$ -</b>	<b>\$ 249,091</b>	<b>\$ 28,752</b>	
<b>Change in Assets</b>	<b>\$ (383)</b>	<b>\$ (383)</b>	<b>\$ -</b>	<b>\$ (433)</b>	<b>\$ (50)</b>	
<b>Fixed Assets</b>						
Depreciation	\$ -	-	\$ -	\$ -	\$ -	
Computer & Software CapEx	-	-	-	-	-	
Furniture & Fixtures CapEx	-	-	-	-	-	
Equipment CapEx	-	-	-	-	-	
Leasehold Improvements	-	-	-	-	-	
Allocation of Fixed Assets	(383)	(383)	-	(433)	(50)	
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>(383)</b>	<b>(383)</b>	<b>-</b>	<b>(433)</b>	<b>(50)</b>	
<b>TOTAL BUDGET (=B+C)</b>	<b>219,956</b>	<b>219,956</b>	<b>-</b>	<b>248,658</b>	<b>28,702</b>	
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ -</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	

## Situation Awareness and Infrastructure Security Program

<b>Situation Awareness and Infrastructure Security Program Resources</b>			
(in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	3.00	4.00	1.00
Direct Expenses	\$956,690	\$1,188,137	\$231,447
Indirect Expenses	\$598,664	\$772,241	\$173,577
Other Non-Operating Expenses	\$0	\$0	\$0
Inc(Dec) in Fixed Assets	(\$11,503)	(\$17,325)	(\$5,822)
Total Funding Requirement	\$1,543,852	\$1,943,053	\$399,201

### Program Scope and Functional Description

The Situation Awareness and Infrastructure Security Program is the combination of near real time awareness of conditions on the bulk power system with the programs necessary to increase the physical and cyber security of the electricity infrastructure, including the operation and maintenance of tools and other support services for the benefit of Reliability Coordinators and the system operators within the registered entities. Maintaining the real-time awareness of conditions on the interconnected bulk power systems by the NPCC Reliability Coordinator is critical to maintaining reliable operation within NPCC, including the communication of information concerning system conditions and abnormal events among the neighboring system operators responsible for the reliable operation of the bulk power systems. When a disturbance does occur, it is critical to use the event as a learning opportunity and provide a forum for the active coordination of reliability and operation among the NPCC Reliability Coordinator areas and neighboring NERC Regions to enhance the reliability of the interconnected bulk power system through the lessons to be learned which can be gleaned from such an event.

### Event Analysis Program

NERC and the industry follow three avenues in the analysis of a disturbance: the identification of lessons to be learned, a formal cause code analysis and a review of applicable standards.

The Event Analysis Program recognizes that many events which occur on the bulk power system beyond those identified through NERC Reliability Standard EOP-004-2, "Event Reporting," can have varying levels of significance to the electric system, providing otherwise unrealized lessons to be learned from these events and the trending of such events to identify possible reliability concerns. By integrating a "bottom-up" approach to a disturbance review within the framework of the NERC Event Analysis Program, consistency, comparability, flexibility and timeliness in the event analysis process will be promoted by NPCC, the registered entities and NERC in a collaborative initiative. Upon the identification of an event, the goal of the Event Analysis Program is to:

- identify what transpired;
- categorize the event within the NERC Event Analysis Program;
- establish the sequence of events;
- understand the essential root causes of the event;
- identify recommendations or corrective actions; and

- develop and disseminate to the industry lessons to be learned so that the operational reliability of the bulk power system can be further enhanced.

In assessing any system event, it is recognized that, if the timely dissemination of lessons learned from an event or disturbance is to be realized, any potential compliance implications associated with an event must be addressed and dismissed. Throughout an event analysis effort, to make this process successful and complete, and to solidify the “bottom-up” approach, registered entities are encouraged to establish a liaison between the event analysis and compliance functions internal to the registered entity during the event analysis process. This serves to facilitate the development of a registered entity compliance self-assessment report which will perform a sufficiency review of the reliability standards deemed applicable to the event, assisting in the self-reporting of possible violations should any be discovered.

To complete this effort, the entity, the Region and NERC staff will collaborate to assess the NERC Event Analysis Report and perform a formal cause code analysis, identifying a root cause and publish any pertinent lessons learned gathered from the disturbance.

The adoption by NERC of the Event Analysis Program brings clarity and certainty about what system events are relevant to analyze and to what level of detail, targeting potential risks to the reliability of the bulk power system for detailed and in depth analysis; only concise and succinct reviews are desired for more minor events. It also delineates the expectations of roles and responsibilities of the registered entities, NPCC and NERC in a uniform review of system disturbances by the industry, and, ultimately, the program promotes the timely development and dissemination of valuable lessons learned to the industry. The identification and tracking of emerging common risks through the assessment of events will further distinguish trends which may be of concern to reliability. By rigorously pursuing the lesser events on the system and learning from these disturbances, larger events can be avoided or mitigated.

NPCC Staff works step-by-step with the registered entity in the total event analysis process, permitting the entity to assume the primary role in the development of the initial analysis, lessons learned which may benefit the industry and the Standards sufficiency review and cause coding for trending and reporting. NPCC staff, throughout the process, guides, supports and stands as an advocate of the registered entity as they continue to develop an improved culture of reliability and compliance.

### Situational Awareness

#### Operational Status

On an ongoing, but non-real time basis, NPCC monitors the operational status of the bulk power system and coordinates normal and pre-emergency communication, awareness and assistance in addition to the same during an emergency among the Reliability Coordinators within NPCC: the New Brunswick Power Corporation, Hydro-Québec Contrôle de mouvements d'énergie (HQCME, a division of Hydro-Québec TransÉnergie), the ISO New England, Inc., the New York ISO and the Independent Electricity System Operator in Ontario; and its neighboring RCs: the Midcontinent ISO and PJM. The industry is notified of significant bulk power system events that have occurred in one Reliability Coordinator Area, and which have the potential to impact reliability in other NPCC Reliability Coordinator Areas or Regions external to NPCC. These events include contingencies on the bulk power system, potential shortfalls of operating reserve, operating problems, potential security threats and potential threats or disruptions to the cyber systems.

The “NPCC Emergency Preparedness Conference Call Procedures” provide a mechanism that enables the Reliability Coordinator in NPCC, and, as circumstances may require, their counterparts in neighboring Regions, to rapidly communicate the status of current operating conditions, to facilitate the procurement of assistance during emergency conditions and to identify potential physical or cyber threats to the system.

Items of particular concern that can be discussed during the calls may include, but are not limited to, the following: anticipated weather conditions critical to the system or systems experiencing or projecting resource deficiencies; load forecast; largest first and second contingencies; potential need for emergency transfers; operating reserve requirements and expected available operating reserve capacity deficiencies; potential fuel shortages or potential fuel supply disruptions which could lead to energy shortfalls; identified or projected voltage conditions; status of short term transactions; additional capability available within four hours and additional capability available within twelve hours; generator outages; significant transmission outages; expected transfer limits and limiting elements; anticipated implementation of NERC Transmission Loading Relief (TLR); changes in the status of relay protection systems; arming of special protection systems not normally armed; and/or the application of abnormal operating procedures.

NPCC has also established a daily conference call to serve as a complement to the NPCC Emergency Preparedness Conference Call. The participants of the call are the Reliability Coordinators within NPCC and its neighboring RCs, the Midcontinent ISO and PJM. The conference call is implemented through a bridge, the initiation of the call quickly ringing all pre-selected telephones simultaneously. The goal of the call is to alert all Reliability Coordinators of emerging problems. If no system difficulties are anticipated for the day, no unnecessary information is to be discussed. Subjects for discussion are limited to credible events which could impact the ability of an entity to serve its load and meet its operating reserve obligations or would impose a burden to the interconnection, including the following: Projected Load; Adverse Weather; Operating Reserve; Generation; Transmission; and Sabotage. If conditions worsen in the course of the day, the NPCC Emergency Preparedness Conference Call will be implemented.

NPCC also monitors the status of the bulk power system through the NERC Situational Awareness-FERC, NERC, Regions (SAFNR) initiative, a near real-time operating display for the United States portion of the Reliability Coordinators footprints of North America. Transmission voltage levels of 230 kV and above are displayed, and the tool provides the ability to “drill down” to detailed bus information, including generation outputs and bus voltages.

To ensure the capability for continued voice communications among NPCC and its Reliability Coordinators, a satellite telephone network was also established, and it is tested on a monthly basis. This back-up communications system will function in the event of a collapse of the Public Switched Telephone Network (PSTN), permitting continued cross-border voice communications among the Canadian Reliability Coordinators of NPCC, the Reliability Coordinators in the United States as well as NPCC Situation Awareness (SA) staff.

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**Critical Infrastructure Objectives**

NPCC's critical infrastructure objectives are defined within the scope of the NPCC Task Force on Infrastructure Security & Technology, (TFIST) and include, but are not confined to:

- Providing a forum for NPCC review of proposed and posted documents from the NERC Critical Infrastructure Protection Committee (CIPC)
- Representing and advocating NPCC's position in the activities of NERC groups involved in the development and/or implementation of physical and cyber security

NPCC's 2017 critical infrastructure goals and objectives, supporting ERO Goal 3.c:

- Monitor the Homeland Security Information Network (HSIN), E- ISAC, NERC Alerts and Canadian Information Sharing and share information with NPCC's CO-8 System Operations Managers Working Group
- Review and submit comments on NERC proposed Reliability Standards, modified Reliability Standards, proposed Guidelines and modified Guidelines related to Infrastructure Security and Technology
- Keep current on all governmental agencies' and others applicable security recommendations and requirements, and keep the RCC and its committees appropriately informed, e.g. Sector Specific Plan.
- Review infrastructure security & technologies and provide recommendations to RCC to enhance physical and cyber security in compliance with NERC guidelines/standards
- Provide recommendations to RCC to enhance physical and cyber security, in compliance with NERC standards, based on assessments of available and emerging infrastructure security technologies, methodologies, and best practices.
- Sponsor periodic workshop presentations to address timely issues and update NPCC Members associated with infrastructure security and technology.
- Since RCC approved the Cross Border Emergency Telecommunications recommendation, insure that suggested annual testing happens and each Area can communicate with each other. [IST-2]
- As RCC directs, provide support and technical input, for Task Force related BES risks as identified by the NERC Reliability Issues Steering Committee (RISC). The Task Force will conduct a thorough review, provide comments as necessary and act on posted materials as directed. Task Force assessments and recommendations will be forwarded to the RCC for approval and submittal to NERC via NPCC Staff and the NERC Risk Control Process

**System Operations Security Objectives**

NPCC's system operations security objectives are defined within the scope of the NPCC Task Force on Coordination of Operation (TFCO) and include, but are not confined to:

- Coordinating inter-Regional pre-emergency actions in the event of a threat to the security of the Northeastern North American bulk power supply system
- Assisting in the development of real time operating tools assuring cyber security concerns are addressed

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## 2017 Key Assumptions

- The monitoring of Lessons Learned will continue to be a major focus of NERC in 2017. This will include an added aspect of the voluntary Event Analysis Program, in response to a recommendation of the AC Substation Equipment Task Force (ACSETF), to solicit and collect detailed information on station equipment failures, for applicable, qualifying events to aid in future analysis of station equipment failures to identify trends that may be a threat to the reliability of the BES.
- Critical infrastructure protection will fully integrate the requirements of version 5 of the Cyber Standards in 2017.
- NERC will post updates to the critical infrastructure protection (CIP) Standards to address the three FERC Directives and the four industry concerns that were not satisfactorily responded to by the version 5 Transition Advisory Group.

## 2017 Goals and Key Deliverables

- Monitor the reliable implementation of version 5 of the Cyber Standards.
- Work directly with applicable NPCC Task Forces to provide an in depth assessment of Lessons Learned unique to the NPCC members and NPCC criteria.
- Promote NPCC's Event Analysis group's established process for sharing and dissemination of the detailed Event Analysis Report information among industry participants (registered entities).
- Take part in the planning of, preparation for and participation in the bi-annual GridEx IV exercise, incorporating the Lessons Learned generated by the GridEx III wide-area exercise.
- Utilize the NPCC's "what if" methodology to examine an event's potential impact under a different set of system conditions, to evaluate the proximity of a particular event to being a significant BPS requiring appropriate level of analysis with due weight to risk and impact.
- Establish a process/procedure for data capture and transfer aspects for post-disturbance (major disturbance and/or blackout events) system analysis, including requirements for regularly scheduled (annual) testing of the procedure implementation.

Based on the portion of professional/technical staff time and other resources devoted to situation awareness and infrastructure security, NPCC estimates that it will expend 13% of its resources on this activity.

## Resource Requirements

### Personnel

- Reallocation of staff during 2016 resulted in an increase of one full time employee in the Situation Awareness and Infrastructure Security program to support increased workload in this area.
- NPCC anticipates no need to hire additional personnel in this program area in 2017.

## Situation Awareness and Infrastructure Security Program

Funding sources and related expenses for the situation awareness and infrastructure security section of the 2017 business plan are shown in the table below. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

Statement of Activities and Capital Expenditures 2016 Budget & Projection, and 2017 Budget						
Situation Awareness and Infrastructure Security						
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)	
<b>Funding</b>						
<b>ERO Funding</b>						
ERO Assessments	\$ 1,536,637	\$ 1,536,637	\$ -	\$ 1,943,053	\$ 406,416	
Penalty Sanctions	7,215	7,215	-	-	(7,215)	
<b>Total ERO Funding</b>	<b>\$ 1,543,852</b>	<b>\$ 1,543,852</b>	<b>\$ -</b>	<b>\$ 1,943,053</b>	<b>\$ 399,201</b>	
Membership Dues	-	-	-	-	-	
Testing Fees	-	-	-	-	-	
Services & Software	-	-	-	-	-	
Workshops	-	-	-	-	-	
Interest	-	-	-	-	-	
Miscellaneous	-	-	-	-	-	
<b>Total Funding (A)</b>	<b>\$ 1,543,852</b>	<b>\$ 1,543,852</b>	<b>\$ -</b>	<b>\$ 1,943,053</b>	<b>\$ 399,201</b>	
<b>Expenses</b>						
<b>Personnel Expenses</b>						
Salaries	\$ 516,951	\$ 654,951	\$ 138,000	\$ 660,213	\$ 143,262	
Payroll Taxes	32,630	42,630	10,000	42,778	10,148	
Benefits	116,230	133,230	17,000	160,814	44,584	
Retirement Costs	53,880	68,880	15,000	72,333	18,453	
<b>Total Personnel Expenses</b>	<b>\$ 719,690</b>	<b>\$ 899,690</b>	<b>\$ 180,000</b>	<b>\$ 936,137</b>	<b>\$ 216,447</b>	
<b>Meeting Expenses</b>						
Meetings	\$ 15,000	\$ 15,000	\$ -	\$ 13,500	\$ (1,500)	
Travel	65,000	80,000	15,000	78,500	13,500	
Conference Calls	-	-	-	-	-	
<b>Total Meeting Expenses</b>	<b>\$ 80,000</b>	<b>\$ 95,000</b>	<b>\$ 15,000</b>	<b>\$ 92,000</b>	<b>\$ 12,000</b>	
<b>Operating Expenses</b>						
Consultants & Contracts	\$ 157,000	\$ 247,000	\$ 90,000	\$ 160,000	\$ 3,000	
Office Rent	-	-	-	-	-	
Office Costs	-	-	-	-	-	
Professional Services	-	-	-	-	-	
Computer & Equipment Leases	-	-	-	-	-	
Miscellaneous	-	-	-	-	-	
Depreciation	-	-	-	-	-	
<b>Total Operating Expenses</b>	<b>\$ 157,000</b>	<b>\$ 247,000</b>	<b>\$ 90,000</b>	<b>\$ 160,000</b>	<b>\$ 3,000</b>	
<b>Total Direct Expenses</b>	<b>\$ 956,690</b>	<b>\$ 956,690</b>	<b>\$ 285,000</b>	<b>\$ 1,188,137</b>	<b>\$ 231,447</b>	
<b>Indirect Expenses</b>	<b>\$ 598,664</b>	<b>\$ 598,664</b>	<b>\$ -</b>	<b>\$ 772,241</b>	<b>\$ 173,577</b>	
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Total Expenses (B)</b>	<b>\$ 1,555,355</b>	<b>\$ 1,555,355</b>	<b>\$ 285,000</b>	<b>\$ 1,960,378</b>	<b>\$ 405,023</b>	
<b>Change in Assets</b>	<b>\$ (11,503)</b>	<b>\$ (11,503)</b>	<b>\$ (285,000)</b>	<b>\$ (17,325)</b>	<b>\$ (5,822)</b>	
<b>Fixed Assets</b>						
Depreciation	\$ -	-	\$ -	\$ -	\$ -	
Computer & Software CapEx	-	-	-	-	-	
Furniture & Fixtures CapEx	-	-	-	-	-	
Equipment CapEx	-	-	-	-	-	
Leasehold Improvements	-	-	-	-	-	
Allocation of Fixed Assets	(11,503)	(11,503)	-	(17,325)	(5,822)	
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>(11,503)</b>	<b>(11,503)</b>	<b>-</b>	<b>(17,325)</b>	<b>(5,822)</b>	
<b>TOTAL BUDGET (=B+C)</b>	<b>1,543,852</b>	<b>1,543,852</b>	<b>285,000</b>	<b>1,943,053</b>	<b>399,201</b>	
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ (285,000)</b>	<b>\$ (0)</b>	<b>\$ 0</b>	

## Administrative Services

Administrative Services Program Resources						
(in whole dollars)						
	Direct Expenses and Fixed Assets			FTEs		
	2016 Budget	2017 Budget	Increase (Decrease)	2016 Budget	2017 Budget	Increase (Decrease)
Technical Committees and Members Forum	\$71,929	\$72,500	\$571	0.50	0.50	0.00
General and Administrative	\$3,345,139	\$3,245,691	(\$99,447)	2.50	2.50	0.00
Legal and Regulatory	\$639,905	\$648,680	\$8,775	1.00	1.00	0.00
Information Technology	\$1,233,263	\$1,185,675	(\$47,588)	3.00	2.00	-1.00
Human Resources	\$176,588	\$182,059	\$5,471	1.00	1.00	0.00
Finance and Accounting	\$519,820	\$525,262	\$5,442	1.00	1.00	0.00
Total Administrative Services	\$5,986,643	\$5,859,868	(\$126,775)	9.00	8.00	-1.00

### Program Scope and Functional Description

Administrative services support the previously identified five program areas of: reliability standards; compliance monitoring and enforcement and organization registration and certification; training, education, and operator certification; reliability assessment and performance analysis; and situation awareness and infrastructure security. Administrative services consist of: technical committees and members' forums; general and administrative; legal and regulatory; information technology; human resources; and finance and accounting.

### Methodology for Allocation of Administrative Services Expenses to Programs

NPCC total overhead expenses, such as office rent and office costs, will be charged to the Administrative Services Programs and then reallocated proportionately based on FTE to the programs through Indirect Expenses.



## Administrative Services

Funding sources and related expenses for the Administrative Services section of the 2017 business plan are shown in the table below. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

Statement of Activities and Capital Expenditures						
2016 Budget & Projection, and 2017 Budget						
ADMINISTRATIVE SERVICES						
	2016	2016	Variance	2017	Variance	
	Budget	Projection	2016 Projection	Budget	2017 Budget	
			v 2016 Budget		v 2016 Budget	
			Over(Under)		Over(Under)	
<b>Funding</b>						
<b>ERO Funding</b>						
ERO Assessments	\$ (592,801)	\$ (592,801)	\$ -	\$ (185,991)	\$ 406,811	
Penalty Sanctions	-	-	-	-	-	
<b>Total ERO Funding</b>	<b>\$ (592,801)</b>	<b>\$ (592,801)</b>	<b>\$ -</b>	<b>\$ (185,991)</b>	<b>\$ 406,811</b>	
Membership Dues	-	-	-	-	-	
Testing Fees	-	-	-	-	-	
Services & Software	-	-	-	-	-	
Workshops	-	-	-	-	-	
Interest	-	-	-	-	-	
Miscellaneous	-	-	-	-	-	
<b>Total Funding (A)</b>	<b>\$ (592,801)</b>	<b>\$ (592,801)</b>	<b>\$ -</b>	<b>\$ (185,991)</b>	<b>\$ 406,811</b>	
<b>Expenses</b>						
<b>Personnel Expenses</b>						
Salaries	\$ 1,951,407	\$ 1,813,407	\$ (138,000)	\$ 1,872,579	\$ (78,828)	
Payroll Taxes	102,585	92,585	(10,000)	93,995	(8,590)	
Benefits	422,729	405,729	(17,000)	418,433	(4,296)	
Retirement Costs	330,001	315,001	(15,000)	317,471	(12,531)	
<b>Total Personnel Expenses</b>	<b>\$ 2,806,722</b>	<b>\$ 2,626,722</b>	<b>\$ (180,000)</b>	<b>\$ 2,702,478</b>	<b>\$ (104,244)</b>	
<b>Meeting Expenses</b>						
Meetings	\$ 125,000	\$ 125,000	\$ -	\$ 120,000	\$ (5,000)	
Travel	160,100	145,100	(15,000)	143,590	(16,510)	
Conference Calls	47,000	47,000	-	37,000	(10,000)	
<b>Total Meeting Expenses</b>	<b>\$ 332,100</b>	<b>\$ 317,100</b>	<b>\$ (15,000)</b>	<b>\$ 300,590</b>	<b>\$ (31,510)</b>	
<b>Operating Expenses</b>						
Consultants & Contracts	\$ 122,000	\$ 122,000	\$ -	\$ 152,000	\$ 30,000	
Office Rent	802,500	802,500	-	809,700	7,200	
Office Costs	639,500	639,500	-	679,100	39,600	
Professional Services	1,011,000	1,011,000	-	1,041,000	30,000	
Computer & Equipment Leases	-	-	-	-	-	
Miscellaneous	41,000	41,000	-	50,000	9,000	
Depreciation	231,821	231,821	-	250,000	18,179	
<b>Total Operating Expenses</b>	<b>\$ 2,847,821</b>	<b>\$ 2,847,821</b>	<b>\$ -</b>	<b>\$ 2,981,800</b>	<b>\$ 133,979</b>	
<b>Total Direct Expenses</b>	<b>\$ 5,986,643</b>	<b>\$ 5,791,643</b>	<b>\$ (195,000)</b>	<b>\$ 5,984,868</b>	<b>\$ (1,775)</b>	
<b>Indirect Expenses</b>	<b>\$ (5,986,643)</b>	<b>\$ (5,986,643)</b>	<b>\$ -</b>	<b>\$ (5,984,868)</b>	<b>\$ 1,775</b>	
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Total Expenses (B)</b>	<b>\$ -</b>	<b>\$ (195,000)</b>	<b>\$ (195,000)</b>	<b>\$ -</b>	<b>\$ 0</b>	
<b>Change in Assets</b>	<b>\$ (592,801)</b>	<b>\$ (397,801)</b>	<b>\$ 195,000</b>	<b>\$ (185,991)</b>	<b>\$ 406,811</b>	
<b>Fixed Assets</b>						
Depreciation	(231,821)	(231,821)	\$ -	(250,000)	\$ (18,179)	
Computer & Software CapEx	125,000	125,000	-	125,000	-	
Furniture & Fixtures CapEx	-	-	-	-	-	
Equipment CapEx	-	-	-	-	-	
Leasehold Improvements	-	-	-	-	-	
Allocation of Fixed Assets	106,821	106,821	-	125,000	18,179	
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>TOTAL BUDGET (=B+C)</b>	<b>-</b>	<b>(195,000)</b>	<b>(195,000)</b>	<b>-</b>	<b>0</b>	
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (592,801)</b>	<b>\$ (397,801)</b>	<b>\$ 195,000</b>	<b>\$ (185,991)</b>	<b>\$ 406,811</b>	

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## Technical Committees and Member Forums

### Program Scope and Functional Description

The success of the NPCC programs depends on the active and direct volunteerism and participation of its members. The stakeholders are the source of expertise in the industry. To promote the reliable and efficient operation of the interconnected bulk power systems in Northeastern North America, NPCC invites high level policy makers from Federal, Provincial and State regulatory and/or governmental authorities and senior executives within NPCC and NERC to identify and discuss emerging issues related to the reliability of the NPCC Region.

### 2017 Key Assumptions

- NPCC's standing committee and subgroup structure for effective stakeholder involvement will continue in 2017
- NPCC will continue to utilize methods to encourage active involvement in its Regional programs that require less stakeholder travel and face-to-face meetings, as the economy improves in 2017
- NPCC will continue to invest in technology and innovation to allow efficient collaboration on technical issues related to reliability

### 2017 Goals and Key Deliverables

The 2017 NPCC General Meeting provides an opportunity for NPCC Members to meet high level policy makers from Federal, Provincial and State regulatory and/or governmental authorities and senior NERC and NPCC executives to discuss topics related to the reliable planning and operation of the power system, including consideration of emerging reliability, critical infrastructure and environmental issues.

### 2017 Public Information Committee Goals and Objectives

The objective of the NPCC Public Information Committee is to highlight and summarize NPCC activities and accomplishments in the past year, disseminate and coordinate the appropriate release of information to the media, respond to related requests for information, and coordinate with related NPCC Area, NERC media and public information activities. Activities anticipated include, but are not limited to:

- Conducting the Media Event – release of the Summer 2017 NPCC Reliability Assessment
- Participation in NERC Regional communication initiatives:
  - Regional communications teleconferences as required
  - Coordination of Emergency or Blackout communications plans
  - Coordination with other NERC activities as required (i.e., situation awareness, event analysis, reliability assessments, etc.)

### Resource Requirements

#### Personnel

- NPCC anticipates no need to hire additional personnel in this program area in 2017.

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## General and Administrative

### Program Scope and Functional Description

The NPCC general and administrative function provides executive management of the corporation, management of NPCC office, and other administrative support programs.

NPCC total overhead expenses, such as office rent and office costs, will be charged to the Administrative Services Programs and then reallocated proportionately based on FTE to the programs through Indirect Expenses.

### Resource Requirements

#### Personnel

- NPCC anticipates no need to hire additional personnel in this program area in 2017.

#### Consultants and contracts

- Increase in expense is associated with various consultants and contracts including a total remuneration study in 2017.

#### Office Rent

- Increase in landlord operating expenses and real estate taxes.

#### Professional Services

- Independent director search to be conducted in 2017.

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## Legal and Regulatory

### Program Scope and Functional Description

NPCC's professional legal services provide counsel to the President and CEO, Board of Directors, Vice President and COO, Treasurer, General Counsel and staff on a wide range of legal and regulatory matters including legislation, corporate law, code of conduct, confidentiality, governance, employment law, tax matters, contract law and other areas affecting NPCC. In support of ERO Goal 5.c., NPCC's in-house counsel evaluates internal controls and corporate, operational, strategic and reputational risk, and participates in risk identification, evaluation and mitigation activities. In-house counsel provides legal advice to advance significant corporate policy and strategic planning initiatives and also provide legal support to other program areas on matters arising in connection with the performance of NPCC's delegated functions. In-house counsel draft agreements and pleadings and provide interpretations of relevant statutes, regulations, court opinions, and regulatory decisions of FERC, state agencies and provincial authorities. Outside counsel, as necessary, reviews items filed with the governmental agencies for legal sufficiency, maintains relationships with U.S. and Canadian jurisdictions and provides contract review.

### Resource Requirements

#### Personnel

- NPCC anticipates no need to hire additional personnel in this program area in 2017.

#### Professional Services

- Professional services expense is projected to remain in line with 2016 levels.

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## Information Technology

### Program Scope and Functional Description

NPCC's Information Technology services ensure information assets and the environment in which they operate are secure and in conformance to NPCC IT Policies and Procedures and all applicable Critical Electric Infrastructure Information protection and Confidentiality requirements. NPCC maintains an offsite backup server for continuity of essential operations in the event that its primary location is unavailable.

NPCC supports the ERO efforts to implement, operate and maintain software tools supporting common enterprise wide operations and leveraging ERO solutions which have been approved by the ERO Executive Management Group (EROEMG), which is comprised of the senior leadership of NERC and each of the Regional Entities. NPCC's budget assumes the availability of enterprise software tools as described in NERC's business plan and budget. If implementation of these software applications is delayed or otherwise not available as planned, NPCC could incur additional costs to implement ERO Enterprise-wide programs pending the availability of these applications.

NERC and the Regional Entities are committed to working collaboratively to minimize duplication of effort and investments, and improve operational efficiency. This collaboration continues to refine existing strategies, governance and procurement practices applicable to the development, operation and maintenance of enterprise architecture, software and data systems supporting complementary and combined NERC and Regional Entity operations.

The NERC information technology budget does not supplant NPCC's need for IT expenditures for specific regional projects and internal region specific IT support needs. NPCC's 2017 Business Plan and Budget assumes agreed-upon ERO Enterprise applications will be available and includes only NPCC costs for region specific support needs.

### 2017 Key Assumptions

- Continue to develop and maintain the compliance portal through collaboration with other Regional Entities and NERC (CUG).
- Support the Event Analysis program through continued participation in the tools used for the tracking and analysis of system events and identification of better practice elements.
- Support the Bulk Electric System Exception Process (BEP) to enable and facilitate tracking and processing of exceptions submitted. Maintenance of the BESNET support services such as updates, patching, coordinating issues with NERC.
- Support Cyber Security Reviews done by Compliance to provide advisory role during those reviews.

### 2017 Goals and Key Deliverables

Responsibilities encompass a variety of complex technical, administrative, and supervisory work in the development, installation, and maintenance of information technology systems. IT goals include, but are not limited to:

- Conduct initial implementation and utilization of a document management system
- Create an information security program and environment aimed at reducing breach of security risks
- Determine longer-term software and systems needs and hardware acquisitions
- Develop and implement information security standards and procedures

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- Ensure all information systems are functional and secure, and that all applications running on those systems meet business requirements for performance, availability, and security
  - Plan and implement organization-wide information systems, services, and network facilities, including local area networks, wide-area networks, and peripheral systems
  - Provide outreach and education to NPCC members in IT best practices
  - Continually improve Disaster Recovery and Business Continuity policies and practices to ensure continuity and reliability of IT and business related services

## **Resource Requirements**

### **Personnel**

- Reallocation of staff during 2016 resulted in a decrease of one full time employee in Information Technology. NPCC anticipates no need to hire additional personnel in this program area in 2017.

### **Office Costs**

- Increase in IT office costs is primarily related to enhancements to increase security, which will be conducted on an ongoing basis in alignment with ERO goals.

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## Human Resources

### Program Scope and Functional Description

NPCC has assembled an exceptional team of highly qualified employees to carry out the activities of NPCC. The human resources function, in adherence with applicable federal and state laws, designs, plans, and implements human resources policies and procedures, including: staffing; compensation; benefits; employee relations; training and development; and employee time tracking.

### Resource Requirements

#### Personnel

- Temporary office services increased to assist in administrative services, particularly in the area of human resources.

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## Accounting and Finance

### Program Scope and Functional Description

The accounting and finance function directs the overall financial plans and accounting practices of the organization; oversees treasury, accounting, budget, tax, and audit activities; and oversees financial and accounting system controls and standards. NPCC uses a CPA firm to prepare its unaudited statements of activities and financial statements for quarterly reviews. Independent audits have identified this system as a best practice.

### 2017 Goals and Key Deliverables

The objectives are to provide or obtain the financial and accounting services for NPCC and coordinate with NERC requirements:

- Utilize the NERC System of Accounts for consistency
- Utilize an accrual method of accounting for consistency with NERC in methodology
- Alignment of changes in budget and changes in aggregate assessment
- Cash Management
- Budget Development using the NERC budget template formats
- Forecasts and Projections
- Alignment of NPCC Committees, Task Forces and Working Groups with the programs
- Payroll and expense administration
- Preparation of unaudited Quarterly Financial Variance Reports
- IRS Reporting
- Annual Independent Audit initiated by the Regional Entity

### Resource Requirements

#### Personnel

- NPCC anticipates no need to hire additional personnel in this program area in 2017.



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## Regional Entity Assessment Analysis

In the area of assessments there are distinct funding mechanisms as outlined in the following table. For the Regional Entity division, the North American Electric Reliability Corporation (NERC) will assess load serving entities (LSEs) or their designees (within NPCC the designees are the Balancing Authority Areas (BAAs) for New York, New England, New Brunswick, Nova Scotia, Ontario and Québec) based upon 2015 proportional Net Energy for Load (NEL) and other specific program area funding arrangements and make quarterly remittances to the Regional Entity on or about the 15th day of January, April, July and October. For funding associated with the criteria services division, the Independent System Operators/Balancing Authority Areas (ISO/BAAs) will be assessed by NPCC for their proportional share of the divisional budget based upon 2015 NEL within the Region. Non ISO/BAA Full Members will be assessed no membership fee.

### NPCC Cost Allocation Methodology

The accompanying table provides information regarding cost allocation for both the Regional Entity division and the criteria services division of NPCC, including the details associated with the funding of the Compliance Program within the RE division. For purposes of determining assessments to support NPCC's resource requirements, costs are allocated among the BAAs within NPCC as the designees for the load-serving-entities in New York, New England, Ontario, Québec, New Brunswick and Nova Scotia.

In order to reflect and respect the international membership and nature of NPCC, any sub-regional reliability assessment costs in response to U.S. only regulatory initiatives will be considered for allocation to U.S. only BAAs consistent with NERC Rules of Procedure section 1102. Additionally, the compliance responsibilities and authorities within the U.S., and the specific compliance responsibilities within each of the Canadian provinces within NPCC, and the attendant costs of portions of the compliance program differ among the areas within the Regional Entity. Within the U.S. portion of NPCC all costs attributable to delegated (statutory) functions performed by NPCC, including all compliance functions, are assessed based on a NEL allocation. Within the Canadian portion of NPCC those costs attributable to compliance functions performed by NPCC on behalf of provincial governmental and/or regulatory authorities are allocated consistent with the unique Memoranda of Understanding or Agreements that have been entered into for those provinces. To address these different compliance regimes, NPCC developed a composite cost allocation methodology that allocates U.S. only reliability assessment and compliance costs on a fair and equitable basis within the Regional Entity.

As an initial step of that methodology, the NEL for each of the BAAs and their relative percentage to the NPCC total NEL is calculated for the most recent year for which data is available, the second previous year. In order to establish the RE division funding requirements for each Balancing Authority Area on a NEL basis for all programs except for Compliance, the proposed expenses and fixed assets of all other programs are calculated and the adjustment for the RE division cash reserve requirement is identified. Any penalty monies received from NPCC registered entities within the U.S. prior to June 30<sup>th</sup> of the year preceding the business plan and budget year are then allocated among the NPCC program areas based on their FTE ratio and between the U.S. BAAs based on their relative NELs. Consistent with each of the Canadian provincial MOUs and agreements, all penalty monies resulting from compliance actions within Canada, if any, would remain within the applicable province. The total budgeted fees for NPCC

workshop participation are indicated as a credit, with the resultant addition being the RE division assessment, without the compliance program costs, calculated on a NEL basis.

In accordance with the *NPCC Amended and Restated Bylaws* the CS division proposed expenses and fixed assets of all programs are calculated and the adjustment for the CS division cash reserve requirement is identified, with the resultant addition being the CS division funding requirement and assessment, calculated on a NEL basis

For costs associated with the RE division compliance program, NPCC's allocation methodology apportions 23.28% of the costs for the program, attributed to CORC Fundamentals (CF), between the BAAs in the United States and Canada on a NEL basis.

Audits and Investigations (AI) related costs, representing 51.98% of the costs of the compliance program, are allocated between U.S. and Canadian BAAs in NPCC, and among the Canadian provinces, using an audit-based methodology. The audit-based methodology incorporates relative costs based on categories of compliance audits which are reflective of their size and complexity, as well as the differing compliance program implementation models that are utilized in NPCC due to the international nature of the Regional Entity. The portion allocated to the U.S. BAAs in NPCC is calculated using the audit-based methodology, and this amount is then re-allocated between the New York and New England BAAs based on their relative NEL.

The remaining 24.74% of the costs of the compliance program represent Mitigation and Enforcement (ME) related costs and are allocated between U.S. and Canadian BAAs in NPCC, and among the Canadian provinces, using an enforcement activity based methodology. Based on historical data, NPCC reviewed each BAAs percentage of violations, mitigation plans and settlement agreements to determine each BAAs total average percentage of enforcement activities. The portion allocated to the U.S. BAAs in NPCC is calculated using the enforcement activity based methodology, and this amount is then re-allocated between the New York and New England BAAs based on their relative NEL.

Any penalty monies received from NPCC registered entities within the U.S. by June 30th of the year preceding the business plan and budget year are then allocated among the NPCC program areas based on their FTE ratio and between the U.S. BAAs based on their relative NELs, and then added to the total compliance program expenses and fixed assets to yield a total compliance program assessment.

The CORC actual vs budget variance from the most recent year for which audited financials are available is broken out from the rest of the Adjustment to Cash Reserve and assigned to the CORC program allocation of costs. Within Quebec these costs are funded directly by the regulator, therefore, the assignment of program area variances needs to respect those specific circumstances.

Finally, the total RE division funding requirements and assessments by BAA are tabulated and the total funding requirements and assessments for NPCC, both the RE and CS divisions, are combined.

NPCC 2017 Regional Entity (RE)  
and Criteria Services (CS) Divisional Funding Information

A-1	B-1	B-1a.	C-1	C-1a.	D-1	E-1	F-1	G-1	H-1	I-1	J-1	K-1	L-1	M-1
NPCC Balancing Authorities (LSE Designees)	2015 Net Energy for Load (MWh)	2015 NPCC US NEL (MWh)	2015 NPCC NEL % of Total	2015 NPCC NEL % of U.S.	Associated with U.S. Only Reliability Study <sup>1</sup>	2017 <sup>2</sup> NPCC RE Division Expenses & Fixed Assets Minus CORC and U.S. Only	Adjustment to RE Division Cash Reserve Requirement Less CORC Assigned	2017 <sup>2</sup> NPCC RE Division Funding Requirement Minus CORC	2017 <sup>2</sup> NPCC RE Division Assessment Minus CORC (G-1 plus H-1 plus I-1)	2017 NPCC CS Division Expenses & Fixed Assets	2017 NPCC CS Division Adjustment to Cash Reserve Requirement (K-1 plus L-1)	2017 NPCC CS Division Funding Requirement & Member Fees	2017 NPCC CS Division Adjustment to Cash Reserve Requirement	2017 NPCC CS Division Requirement (K-1 plus L-1)
New England	126,955,000	126,955,000	19.982%	44.001%	TBD	1,283,041	-37,165	1,245,876	0	-12,788	1,233,088	205,194	15,780	220,974
New York	161,572,000	161,572,000	25.430%	55.999%	TBD	1,632,889	-47,298	1,585,591	0	-16,275	1,569,316	261,144	20,083	281,227
Ontario	137,012,000	137,012,000	21.565%			1,384,680	-40,109	1,344,571	0	-13,801	1,330,769	221,448	17,030	238,478
Quebec	184,629,000	184,629,000	29.059%			1,865,910	-54,048	1,811,862	0	-18,598	1,793,264	298,410	22,949	321,359
New Brunswick	14,199,000	14,199,000	2.23%			143,499	-4,157	139,342	0	-1,430	137,912	22,949	1,765	24,714
Nova Scotia	10,982,000	10,982,000	1.728%			110,987	-3,215	107,772	0	-1,106	106,666	17,750	1,365	19,115
<b>Total</b>	<b>635,349,000</b>	<b>288,527,000</b>	<b>100.000%</b>	<b>100.000%</b>	<b>\$0</b>	<b>\$6,421,005</b>	<b>-\$185,991</b>	<b>\$6,235,015</b>	<b>\$0</b>	<b>-\$64,000</b>	<b>\$6,171,015</b>	<b>\$1,026,896</b>	<b>\$78,971</b>	<b>\$1,105,867</b>

A-2	B-2	C-2	D-2	E-2	F-2	G-2	H-2	I-2	J-2	K-2	L-2	M-2	N
NPCC Balancing Authorities (LSE Designees)	2015 NEL Based Allocation of 23.28% of 2016 CORC Program Fundamentals <sup>3</sup>	2017 Audit and Investigation Allocation Methodology	2017 CORC Allocation of 51.98% of CORC	2017 Mitigation and Enforcement Allocation Methodology	2017 CORC Allocation of 24.74% of CORC	2017 Total CORC Program Expenses & Fixed Assets	2017 CORC Program Penalty Monies Applied to CORC Program	Assigned 2015 Actual vs Budget Variance	2017 Total CORC Program Assessment (G-2 plus H-2 plus I-2)	2017 RE Division Total Funding Requirement (G-1 plus G-2)	2017 RE Division Total Assessment (J-1 plus J-2)	2017 NPCC Total Funding Requirement (M-1 plus M-2)	2017 NPCC Total Assessment & Member Fees (N-1 plus N-2)
New England	405,904	46.963%	1,669,867	38.143%	823,543	2,899,314	0	-212,988	2,686,325	4,145,190	3,919,413	4,366,164	4,140,387
New York	516,582	36.386%	2,110,473	48.543%	1,048,099	3,675,154	0	-269,187	3,405,967	5,260,746	4,975,283	5,541,972	5,256,510
Ontario	438,058	4.749%	215,389	3.780%	3,780%	735,064	0	-54,600	680,465	2,079,635	2,011,234	2,318,114	2,249,712
Quebec	590,300	7.373%	334,407	8.519%	183,929	1,108,656	0	-81,465	1,027,171	2,920,498	2,820,435	3,241,857	3,141,794
New Brunswick	45,397	2.453%	110,440	0.472%	10,183	166,021	0	-13,027	152,993	306,363	290,905	330,078	315,620
Nova Scotia	35,112	2.095%	94,999	0.544%	11,748	141,859	0	-10,735	131,124	249,631	237,790	268,746	256,905
<b>Total</b>	<b>\$2,031,354</b>	<b>83.349%</b>	<b>\$3,780,341</b>	<b>86.685%</b>	<b>\$1,871,642</b>	<b>\$8,726,049</b>	<b>\$0</b>	<b>-\$642,003</b>	<b>\$8,084,046</b>	<b>\$14,961,064</b>	<b>\$14,255,060</b>	<b>\$16,066,930</b>	<b>\$15,360,927</b>

1 Any sub-regional reliability assessment costs in response to U.S. only regulatory initiatives will be considered for allocation to U.S. only BAs consistent with NERC Rules of Procedure section 1102.

2 Consistent with NERC's Policy on Allocation of Certain Compliance and Enforcement Costs, the NPCC Board approved Allocation Methodologies for Certain NPCC Compliance Program Area Costs Assessed to Non-U.S. Entities.

3 CORC Program Fundamentals expenses of \$2,031,354 represent 23.28% of the Total CORC Program Costs and are allocated using the Regional NEL based methodology.

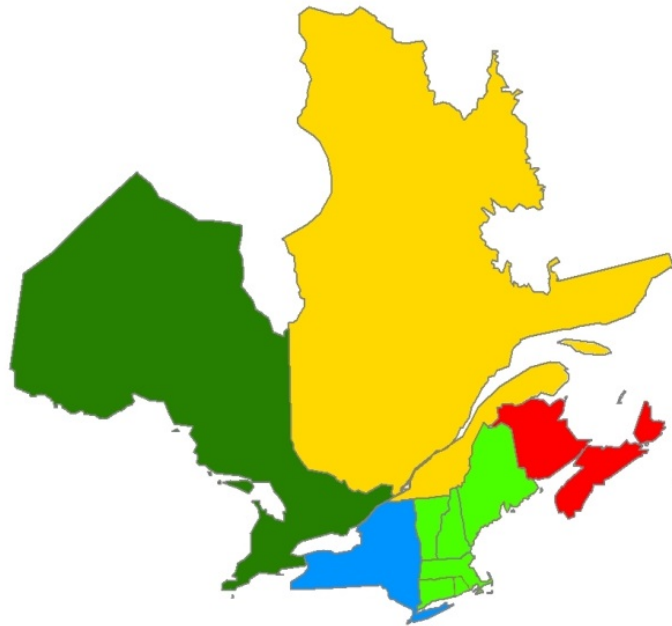
4 Audit and Investigation expenses of \$4,535,577 represent 51.98% of the Total CORC Program Costs. The Canadian costs are allocated utilizing an audit based methodology. The portion of \$3,349% attributable to U.S. NPCC is allocated between the New York and New England balancing authority areas based on their respective net energy for load (NEL) as shown in Columns B-1a. and C-1a. The ratios in C-1a. are applied to the 83.349% of U.S. audit costs to obtain the percentages (Column C-2) which are then applied to the 24.74% of CORC costs.

5 Mitigation and Enforcement expenses of \$2,159,119 represent 24.74% of the Total CORC Program Costs. The Canadian costs are allocated utilizing an enforcement activity based methodology. The portion of 86.68% attributable to U.S. NPCC is allocated between the New York and New England balancing authority areas based on their respective net energy for load (NEL) as shown in Columns B-1a. and C-1a. The ratios in C-1a. are applied to the 83.349% of U.S. enforcement costs to obtain the percentages (Column C-2) which are then applied to the 24.74% of CORC costs.

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## Section B – Supplemental Financial Information 2017 Business Plan and Budget

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## Section B — Supplemental Financial Information

### Reserve Balance

#### Table B-1 Reserve Balance

Working Capital and Operating Reserve Analysis 2016-2017			
REGIONAL ENTITY DIVISION			
	Total Reserve	Operating Reserve	Working Capital
Beginning Total Reserve, December 31, 2015	4,489,880	3,227,676	1,262,204
Plus: 2016 ERO Funding (from LSEs or designees)	14,349,196	14,349,196	0
Plus: 2016 Other funding sources	131,000	131,000	0
Less: 2016 Projected expenses & capital expenditures	(15,072,998)	(15,072,998)	0
<b>Projected Total Reserve, December 31, 2016</b>	<b>3,897,079</b>	<b>2,634,875</b>	<b>1,262,204</b>
<b>Desired Total Reserve, December 31, 2017</b> <sup>1</sup>	<b>3,069,085</b>	1,806,881 <sup>2</sup>	1,262,204
20.26% of Total Regional Entity Budget of \$15,147,054			
Less: Projected Working Capital and Operating Reserve, December 31, 2016	(3,897,079)	(2,634,875)	(1,262,204)
<b>Increase(decrease) in assessments to achieve desired Total Reserve</b>	<b>(827,994)</b>	<b>(827,994)</b>	<b>0</b>
2017 Expenses and Capital Expenditures	15,147,054		
Less: Penalty Sanctions <sup>4</sup>	0		
Less: Other Funding Sources	(64,000)		
Adjustment to achieve desired Total Reserve balance	(827,994)		
<b>2017 Assessment</b>	<b>14,255,060</b>		

<sup>1</sup> Total Reserve within a range of 16.67% - 33.33% of Budget.

<sup>2</sup> Operating Reserve within a range from 8.33% to 25.00% of Budget. \$1,806,881 represents 11.93% of the 2017 budget of \$15,147,054

<sup>3</sup> Working Capital equal to 8.33% of Budget. \$1,262,204 represents 8.33% of the 2017 budget of \$15,147,054

<sup>4</sup> Represents collections July 1, 2015 to June 30, 2016.

### Explanation of Changes in Reserve Policy from Prior Year

None

### Breakdown by Statement of Activity Sections

The following detailed schedules are in support of the Regional Entity division Statement of Activities on page 13 of the 2017 Business Plan and Budget. All significant variances have been disclosed by program area in the preceding pages.

#### Penalty Sanctions

U.S. penalty monies received prior to June 30, 2016 are to be used to offset assessments in the 2017 Budget, as documented in the NERC Policy – Accounting, Financial Statement, and Budgetary Treatment of Penalties Imposed and Received for Violations of Reliability Standard. Penalty monies received from July 1, 2016 through June 30, 2017 will be used to offset U.S. load serving entity designee assessments in the 2017 Budget.

Allocation Method: U.S. penalty sanctions received have been allocated to the following Regional Entity division programs to reduce assessments: Reliability Standards; Compliance Monitoring & Enforcement and Organization Registration & Certification; Reliability Assessments and Performance Analysis; Training, Education and Operator Certification; and Situation Awareness and Infrastructure Security. U.S. penalty sanctions are allocated based upon the number of FTEs in the Program divided by the aggregate total FTEs in the Programs receiving the allocation.

No penalty sanctions were received from July 1, 2015 through June 30, 2016.

**Table B-2 Penalty Sanctions**

Penalty Sanctions Received Prior to June 30, 2016	Date Received	Amount Received
<b>Total Penalties Received</b>		<b>\$ -</b>

**Table B-3 Supplemental Funding**

Outside Funding Breakdown By Program (excluding ERO Assessments & Penalty Sanctions)	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget
<b>Reliability Standards</b>				
<b>Total</b>	\$ -	\$ -	\$ -	\$ -
<b>Compliance Monitoring, Enforcement &amp; Org. Registration</b>				
	\$ -	\$ -	\$ -	\$ -
	-	-	-	-
<b>Total</b>	\$ -	\$ -	\$ -	\$ -
<b>Reliability Assessment and Performance Analysis</b>				
	\$ -	\$ -	\$ -	\$ -
	-	-	-	-
<b>Total</b>	\$ -	\$ -	\$ -	\$ -
<b>Training and Education</b>				
Workshops	\$ 64,000	\$ 64,000	\$ 64,000	\$ -
<b>Total</b>	\$ 64,000	\$ 64,000	\$ 64,000	\$ -
<b>Situation Awareness and Infrastructure Security</b>				
	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ -	\$ -	\$ -	\$ -
<b>Technical Committees and Member Forums</b>				
	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ -	\$ -	\$ -	\$ -
<b>Administrative Services Programs</b>				
	\$ -	\$ -	\$ -	\$ -
<b>Total</b>	\$ -	\$ -	\$ -	\$ -
<b>Total Outside Funding</b>	\$ 64,000	\$ 64,000	\$ 64,000	\$ -

**Explanation of Significant Variances –2017 Budget versus 2016 Budget**

- NPCC assumed no interest income because of continuing low market interest rates.

Table B-4 Personnel Expenses

Personnel Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
<b>Salaries</b>					
Salary	\$ 6,531,470	\$ 6,531,470	\$ 6,718,926	\$ 187,456	2.9%
Employment Agency Fees	\$ 10,000	\$ 10,000	\$ 10,000	\$ -	0.0%
Temporary Office Services	\$ 20,000	\$ 20,000	\$ 30,000	\$ 10,000	50.0%
<b>Total Salaries</b>	\$ 6,561,470	\$ 6,561,470	\$ 6,758,926	\$ 197,456	3.0%
<b>Total Payroll Taxes</b>	\$ 399,057	\$ 399,057	\$ 404,319	\$ 5,262	1.3%
<b>Benefits</b>					
Education Reimbursement	\$ 15,000	\$ 15,000	\$ 22,500	\$ 7,500	50.0%
Training and Seminars	\$ 36,860	\$ 36,860	\$ 36,860	\$ -	0.0%
Medical Insurance	\$ 763,048	\$ 763,048	\$ 790,034	\$ 26,986	3.5%
Life-LTD-STD Insurance	\$ 83,048	\$ 83,048	\$ 88,716	\$ 5,667	6.8%
Worker's Compensation	\$ 15,000	\$ 15,000	\$ 15,000	\$ -	0.0%
Vacation	\$ 451,843	\$ 451,843	\$ 462,494	\$ 10,651	2.4%
Relocation	\$ -	\$ -	\$ -	\$ -	-
<b>Total Benefits</b>	\$ 1,364,799	\$ 1,364,799	\$ 1,415,603	\$ 50,804	3.7%
<b>Retirement</b>					
Pension Contribution	\$ -	\$ -	\$ 37,000	\$ 37,000	-
Employee Savings Plan	\$ 713,118	\$ 713,118	\$ 727,223	\$ 14,105	2.0%
Savings Admin	\$ 60,000	\$ 60,000	\$ 45,000	\$ (15,000)	-25.0%
Deferred Compensation	\$ 60,000	\$ 60,000	\$ 38,000	\$ (22,000)	-36.7%
<b>Total Retirement</b>	\$ 833,118	\$ 833,118	\$ 847,223	\$ 14,105	1.7%
<b>Total Personnel Costs</b>	\$ 9,158,445	\$ 9,158,445	\$ 9,426,071	\$ 267,627	2.9%
<b>FTEs</b>	36.86	36.86	36.86	-	0.0%
<b>Cost per FTE</b>					
Salaries	\$ 178,011	\$ 178,011	\$ 183,367	\$ 5,357	3.0%
Payroll Taxes	\$ 10,826	\$ 10,826	\$ 10,969	\$ 143	1.3%
Benefits	\$ 37,027	\$ 37,027	\$ 38,405	\$ 1,378	3.7%
Retirement	\$ 22,602	\$ 22,602	\$ 22,985	\$ 383	1.7%
<b>Total Cost per FTE</b>	\$ 248,466	\$ 248,466	\$ 255,726	\$ 7,261	2.9%

### Explanation of Significant Variances –2017 Budget versus 2016 Budget

- Temporary office services were increased to provide assistance in administrative services.
- Education reimbursement cost is based on additional employee that has expressed interest in pursuing an advanced degree.
- Savings admin decrease is due to termination of the defined benefit plan.



Table B-5 Meeting Expense

Meeting Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Meetings	\$ 394,000	\$ 394,000	\$ 377,100	\$ (16,900)	-4.3%
Travel	\$ 907,100	\$ 907,100	\$ 855,232	\$ (51,868)	-5.7%
Conference Calls	\$ 47,000	\$ 47,000	\$ 37,000	\$ (10,000)	-21.3%
<b>Total Meeting Expenses</b>	<b>\$ 1,348,100</b>	<b>\$ 1,348,100</b>	<b>\$ 1,269,332</b>	<b>\$ (78,768)</b>	<b>-5.8%</b>

## Explanation of Significant Variances –2017 Budget versus 2016 Budget

- Continued efforts to limit the number of attendees to offsite meetings and hold more meetings on-site and via webinar.

Table B-6 Consultants and Contracts

Consultants	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
<b>Consultants</b>					
Reliability Standards	\$ -	\$ -	\$ -	\$ -	-
Compliance Enforcement and Organization Registration and Certification	\$ 15,000	\$ 15,000	\$ -	\$ (15,000)	-100.0%
Reliability Assessment and Performance Analysis	\$ -	\$ -	\$ 35,000	\$ 35,000	-
Training and Education	\$ -	\$ -	\$ -	\$ -	-
Situation Awareness and Infrastructure Security	\$ -	\$ -	\$ -	\$ -	-
Member Forums	\$ -	\$ -	\$ -	\$ -	-
General and Administrative	\$ 33,000	\$ 33,000	\$ 30,000	\$ (3,000)	-9.1%
Legal and Regulatory	\$ -	\$ -	\$ -	\$ -	-
Information Technology	\$ -	\$ -	\$ -	\$ -	-
Human Resources	\$ -	\$ -	\$ -	\$ -	-
Accounting and Finance	\$ -	\$ -	\$ -	\$ -	-
<b>Consultants Total</b>	<b>\$ 48,000</b>	<b>\$ 48,000</b>	<b>\$ 65,000</b>	<b>\$ 17,000</b>	<b>35.4%</b>
Contracts	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Reliability Standards	\$ 10,000	\$ 10,000	\$ 10,000	\$ -	0.0%
Compliance Enforcement and Organization Registration and Certification	\$ 1,545,000	\$ 1,350,000	\$ 1,274,000	\$ (271,000)	-17.5%
Reliability Assessment and Performance Analysis	\$ 374,500	\$ 479,500	\$ 378,000	\$ 3,500	0.9%
Training and Education	\$ -	\$ -	\$ -	\$ -	-
Situation Awareness and Infrastructure Security	\$ 157,000	\$ 247,000	\$ 160,000	\$ 3,000	1.9%
Member Forums	\$ -	\$ -	\$ -	\$ -	-
General and Administrative	\$ 82,000	\$ 82,000	\$ 115,000	\$ 33,000	40.2%
Legal and Regulatory	\$ -	\$ -	\$ -	\$ -	-
Information Technology	\$ -	\$ -	\$ -	\$ -	-
Human Resources	\$ -	\$ -	\$ -	\$ -	-
Accounting and Finance	\$ 7,000	\$ 7,000	\$ 7,000	\$ -	0.0%
<b>Contracts Total</b>	<b>\$ 2,175,500</b>	<b>\$ 2,175,500</b>	<b>\$ 1,944,000</b>	<b>\$ (231,500)</b>	<b>-10.6%</b>
<b>Total Consultants and Contracts</b>	<b>\$ 2,223,500</b>	<b>\$ 2,223,500</b>	<b>\$ 2,009,000</b>	<b>\$ (214,500)</b>	<b>-9.6%</b>

## Explanation of Significant Variances –2017 Budget versus 2016 Budget

- Ongoing effort to decrease the use of consultants and contractors when possible. (See program area sections for detail regarding a specific program area.)

Table B-7 Office Rent

Office Rent	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Office Rent	\$ 650,000	\$ 650,000	\$ 650,000	\$ -	0.0%
Utilities	\$ 40,000	\$ 40,000	\$ 43,000	\$ 3,000	7.5%
Maintenance	\$ 40,000	\$ 40,000	\$ 40,000	\$ -	0.0%
Security	\$ 2,500	\$ 2,500	\$ 2,700	\$ 200	8.0%
Real Estate Taxes	\$ 70,000	\$ 70,000	\$ 74,000	\$ 4,000	5.7%
<b>Total Office Rent</b>	<b>\$ 802,500</b>	<b>\$ 802,500</b>	<b>\$ 809,700</b>	<b>\$ 7,200</b>	<b>0.9%</b>

## Explanation of Significant Variances –2017 Budget versus 2016 Budget

- Increase in landlord operating expenses and real estate taxes.

Table B-8 Office Costs

Office Costs	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Telephone	\$ 112,000	\$ 112,000	\$ 112,000	\$ -	0.0%
Internet Expense	\$ 95,400	\$ 95,400	\$ 105,600	\$ 10,200	10.7%
Office Supplies	\$ 33,000	\$ 33,000	\$ 33,000	\$ -	0.0%
Computer Supplies and Maintenance	\$ 321,000	\$ 321,000	\$ 350,000	\$ 29,000	9.0%
Subscriptions & Publications	\$ 13,500	\$ 13,500	\$ 13,500	\$ -	0.0%
Dues	\$ 4,000	\$ 4,000	\$ 4,400	\$ 400	10.0%
Postage	\$ 1,200	\$ 1,200	\$ 1,200	\$ -	0.0%
Express Shipping	\$ 10,000	\$ 10,000	\$ 10,000	\$ -	0.0%
Copying	\$ 26,400	\$ 26,400	\$ 26,400	\$ -	0.0%
Reports	\$ 6,000	\$ 6,000	\$ 6,000	\$ -	0.0%
Stationary and Office Forms	\$ 2,000	\$ 2,000	\$ 2,000	\$ -	0.0%
Equipment Repair/Service Contracts	\$ -	\$ -	\$ -	\$ -	-
Bank Charges	\$ 15,000	\$ 15,000	\$ 15,000	\$ -	0.0%
Sales and Use Tax	\$ -	\$ -	\$ -	\$ -	-
Merchant Credit Card Fees	\$ -	\$ -	\$ -	\$ -	-
Presentation and Publicity	\$ -	\$ -	\$ -	\$ -	-
<b>Total Office Costs</b>	<b>\$ 639,500</b>	<b>\$ 639,500</b>	<b>\$ 679,100</b>	<b>\$ 39,600</b>	<b>6.2%</b>

## Explanation of Significant Variances –2017 Budget versus 2016 Budget

- Increase in IT office costs is primarily related to penetration testing, which will be conducted on an ongoing basis going forward in an effort to increase security in alignment with ERO goals.

**Table B-9 Professional Services**

Professional Services	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
BOT Fee	\$ 325,000	\$ 325,000	\$ 325,000	\$ -	0.0%
BOT Search Fee	\$ -	\$ -	\$ 20,000	\$ 20,000	-
Legal - Reorganization	\$ -	\$ -	\$ -	\$ -	-
Accounting & Auditing Fees	\$ 310,000	\$ 310,000	\$ 310,000	\$ -	0.0%
Legal Fees - Other	\$ 316,000	\$ 316,000	\$ 316,000	\$ -	0.0%
Insurance - Commercial	\$ 60,000	\$ 60,000	\$ 70,000	\$ 10,000	16.7%
<b>Total Services</b>	<b>\$ 1,011,000</b>	<b>\$ 1,011,000</b>	<b>\$ 1,041,000</b>	<b>\$ 30,000</b>	<b>3.0%</b>

**Explanation of Significant Variances –2017 Budget versus 2016 Budget**

- Search fee is associated with the anticipated search for an independent director in 2017 based on term expiration.

**Table B-10 – Miscellaneous**

Miscellaneous Expense	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Miscellaneous Expense	\$ 41,000	\$ 41,000	\$ 50,000	\$ 9,000	22.0%
<b>Total Miscellaneous Expense</b>	<b>\$ 41,000</b>	<b>\$ 41,000</b>	<b>\$ 50,000</b>	<b>\$ 9,000</b>	<b>22.0%</b>

**Table B-11 Other Non-Operating Expenses**

Other Non-Operating Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Interest Expense	\$ -	\$ -	\$ -	\$ -	-
Office Relocation	\$ -	\$ -	\$ -	\$ -	-
<b>Total Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>

**Table B-12 Fixed Assets**

Fixed Assets	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Depreciation	\$ (231,821)	\$ (231,821)	\$ (250,000)	\$ (18,179)	7.8%
Equipment CapEx	\$ -	\$ -	\$ -	\$ -	-
Computer & Software CapEx	\$ 276,000	\$ 276,000	\$ 276,000	\$ -	0.0%
Furniture & Fixtures CapEx	\$ -	\$ -	\$ -	\$ -	-
Leasehold Improvements	\$ -	\$ -	\$ -	\$ -	-
Allocation of Fixed Assets	\$ -	\$ -	\$ -	\$ -	-
<b>Total Increase (Decrease) in Fixed Assets</b>	<b>\$ 44,179</b>	<b>\$ 44,179</b>	<b>\$ 26,000</b>	<b>\$ (18,179)</b>	<b>-41.1%</b>

Table B-13 2018 and 2019 Projections

Statement of Activities and Capital Expenditures 2017 Budget & Projected 2018 and 2019 Budgets							
	2017 Budget	2018 Projection	\$ Change 17 v 18	% Change 17 v 18	2019 Projection	\$ Change 18 v 19	% Change 18 v 19
<b>Funding</b>							
<b>ERO Funding</b>							
ERO Assessments	\$ 14,255,061	\$ 14,586,670	\$ 331,610	2.3%	\$ 14,930,175	\$ 343,505	2.3%
Penalty Sanctions	-	-	-	-	-	-	-
<b>Total ERO Funding</b>	<b>\$ 14,255,061</b>	<b>\$ 14,586,670</b>	<b>\$ 331,610</b>	<b>2.3%</b>	<b>\$ 14,930,175</b>	<b>\$ 343,505</b>	<b>2.3%</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-
Workshops	64,000	64,000	-	0.0%	64,000	-	0.0%
Interest	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 14,319,061</b>	<b>\$ 14,650,670</b>	<b>\$ 331,610</b>	<b>2.3%</b>	<b>\$ 14,994,175</b>	<b>\$ 343,505</b>	<b>2.3%</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 6,758,926	\$ 6,961,694	\$ 202,768	3.0%	\$ 7,170,545	\$ 208,851	3.0%
Payroll Taxes	404,319	416,449	12,130	3.0%	428,943	12,493	3.0%
Benefits	1,415,603	1,500,539	84,936	6.0%	1,590,572	90,032	6.0%
Retirement Costs	847,223	872,639	25,417	3.0%	898,818	26,179	3.0%
<b>Total Personnel Expenses</b>	<b>\$ 9,426,071</b>	<b>\$ 9,751,322</b>	<b>\$ 325,250</b>	<b>3.5%</b>	<b>\$ 10,088,877</b>	<b>\$ 337,556</b>	<b>3.5%</b>
<b>Meeting Expenses</b>							
Meetings	\$ 377,100	\$ 380,871	\$ 3,771	1.0%	\$ 384,680	\$ 3,809	1.0%
Travel	855,232	863,784	8,552	1.0%	872,422	8,638	1.0%
Conference Calls	37,000	37,370	370	1.0%	37,744	374	1.0%
<b>Total Meeting Expenses</b>	<b>\$ 1,269,332</b>	<b>\$ 1,282,025</b>	<b>\$ 12,693</b>	<b>1.0%</b>	<b>\$ 1,294,846</b>	<b>\$ 12,820</b>	<b>1.0%</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 2,009,000	\$ 2,009,000	-	0.0%	\$ 2,009,000	\$ -	0.0%
Office Rent	809,700	817,797	8,097	1.0%	825,975	8,178	1.0%
Office Costs	679,100	692,682	13,582	2.0%	706,536	13,854	2.0%
Professional Services	1,041,000	1,041,000	-	0.0%	1,041,000	-	0.0%
Miscellaneous	50,000	51,000	1,000	2.0%	52,020	1,020	2.0%
Depreciation	250,000	255,000	5,000	2.0%	260,100	5,100	2.0%
<b>Total Operating Expenses</b>	<b>\$ 4,838,800</b>	<b>\$ 4,866,479</b>	<b>\$ 27,679</b>	<b>0.6%</b>	<b>\$ 4,894,631</b>	<b>\$ 28,152</b>	<b>0.6%</b>
<b>Total Direct Expenses</b>	<b>\$ 15,534,203</b>	<b>\$ 15,899,826</b>	<b>\$ 365,623</b>	<b>2.4%</b>	<b>\$ 16,278,354</b>	<b>\$ 378,528</b>	<b>2.4%</b>
<b>Indirect Expenses</b>	<b>\$ (413,149)</b>	<b>\$ (421,412)</b>	<b>\$ (8,263)</b>	<b>2.0%</b>	<b>\$ (429,840)</b>	<b>\$ (8,428)</b>	<b>2.0%</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>
<b>Total Expenses (B)</b>	<b>\$ 15,121,054</b>	<b>\$ 15,478,414</b>	<b>\$ 357,360</b>	<b>2.4%</b>	<b>\$ 15,848,513</b>	<b>\$ 370,099</b>	<b>2.4%</b>
<b>Change in Assets</b>	<b>\$ (801,994)</b>	<b>\$ (827,744)</b>	<b>\$ (25,750)</b>	<b>3.2%</b>	<b>\$ (854,338)</b>	<b>\$ (26,594)</b>	<b>3.2%</b>
<b>Fixed Assets</b>							
Depreciation	\$ (250,000)	\$ (255,000)	\$ (5,000)	2.0%	\$ (260,100)	\$ (5,100)	2.0%
Computer & Software CapEx	276,000	276,000	-	0.0%	276,000	-	0.0%
Furniture & Fixtures CapEx	-	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-	-	-
<b>(Incr)Dec in Fixed Assets (C)</b>	<b>\$ 26,000</b>	<b>\$ 21,000</b>	<b>\$ (5,000)</b>	<b>-19.2%</b>	<b>\$ 15,900</b>	<b>\$ (5,100)</b>	<b>-24.3%</b>
<b>TOTAL BUDGET (=B+C)</b>	<b>\$ 15,147,054</b>	<b>\$ 15,499,414</b>	<b>\$ 352,360</b>	<b>2.3%</b>	<b>\$ 15,864,413</b>	<b>\$ 364,999</b>	<b>2.4%</b>
<b>TOTAL CHANGE IN WORKING CAPITAL</b>	<b>\$ (827,994)</b>	<b>\$ (848,744)</b>	<b>\$ (20,750)</b>	<b>2.5%</b>	<b>\$ (870,238)</b>	<b>\$ (21,494)</b>	<b>2.5%</b>
FTEs	36.86	36.86	0	0.0%	36.86	0.00	0.0%

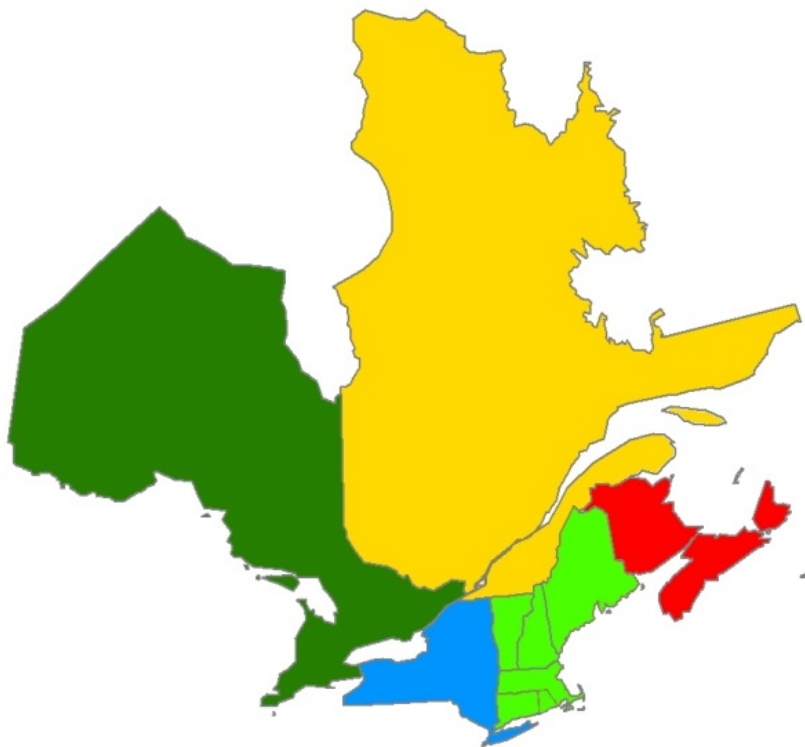
### Assumptions

- No changes in assumptions
- Staffing remains flat
- Change in assessments is equal to change in total budget

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## Section C – Criteria Services Division Activities 2017 Business Plan and Budget

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## Section C —2017 Criteria Services Division Business Plan and Budget

<b>Criteria Services Division</b>			
(in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	2.14	2.14	0.00
Total Direct Expenses	\$738,525	\$623,747	(\$114,778)
Total Indirect Expenses	\$427,047	\$413,149	(\$13,898)
Other Non-Operating Expenses	\$0	\$0	\$0
Working Capital and Operating Reserves Requirement	(\$96,525)	\$78,971	\$175,496
Inc(Dec) in Fixed Assets	(\$8,506)	(\$10,000)	(\$1,494)
Funding Requirement	\$1,060,542	\$1,105,867	\$45,325

### NPCC Regionally-Specific Criteria Services Background

NPCC Criteria Services division activities are based on the development, maintenance (including retirement when no longer needed), and promulgation of Regionally-specific more stringent criteria, as well as criteria establishing resource adequacy requirements within the Region. These criteria contain requirements which are more stringent, more specific or augment the existing NERC Reliability Standards requirements. These criteria require continual evaluation to ensure they are “not inconsistent with” any NERC reliability standards as the standards are approved by FERC and the applicable provincial governmental authorities, as per the NERC Rules of Procedure.

### Membership and Governance

Full members are subject to compliance with Regionally-specific criteria, in addition to continent-wide Reliability Standards, and receive criteria-related services from the Criteria Services division.

Full Members, aside from those who perform the Balancing Authority function, are not assessed an annual membership fee. Those that perform Balancing Authority functions are assessed and remit a proportional net energy for load share of expenses for criteria services. NPCC would also directly assign criteria service division costs to a Balancing Authority Area or entity, where significant costs are incurred for that Balancing Authority Area. The funding for NPCC’s Criteria Services division is approved by the NPCC Board of Directors.

### Criteria Services Division Functional Scope

Through its Criteria Services division, NPCC promotes the reliable and efficient operation of the international, interconnected bulk power systems in Northeastern North America through the establishment of Regionally-specific criteria, and monitoring and enforcement of compliance with such criteria.

NPCC provides Full Members with Regional reliability assurance services, and acts as the vehicle through which States and Provinces can fulfill their political mandates, with respect to resource adequacy, as well as overseeing the Northeastern North American electric infrastructure.

## Major 2017 Assumptions and Cost Impacts

The Criteria Services division services are expected to remain stable throughout 2017

- The Criteria Compliance Enforcement Program (CCEP) review and evaluation process is the mechanism for monitoring key criteria attributes as determined by the respective NPCC Task Forces and the CC. in 2012.
- Past non-compliances, if any, followed the due process stated in the CCEP-1 process document and proper resolution/enforcement action taken.

## 2017 Primary Goals and Objectives

- Continue with the development and maintenance of a set of NPCC Directories which are “not inconsistent with” the NERC Reliability Standards and which clearly delineate the more stringent NPCC criteria requirements
  - The combination of North American and more-stringent NPCC Regional criteria provide for consistency and operational clarity while providing more robust defense in–depth, results based, criteria requirements to ensure BPS reliability
  - Continually review the criteria found in the NPCC Directories and the ERO standards to ensure no redundancies or inconsistencies exist.
  - Retire Directories and/or Criteria which have been overtaken by improved NERC standards
  - Continually file revised and updated more stringent requirements with the New York State Department of Public Service and Canadian Provinces as applicable
- Review, maintain, and revise the NPCC Regional Reliability Directories to facilitate compliance assessments and ensure the Criteria portions of the Directories are “not inconsistent” with, nor duplicative with, the approved and effective NERC Standards.
- The criteria services division and CCEP Working Group (reporting to the Compliance Committee) will work with the various Task Forces to develop Criteria Compliance Reporting Forms for any additional NPCC Directories to ensure that the more stringent or Regionally-specific criteria is being met.
- The criteria services division and CCEP working group will work with TFCO, TFCP, TFSS, and TFSP to review criteria and measures within each specific NPCC Directory to identify and develop them into specific reporting forms for approval.
- Continually review impact of Bulk Electric System definition on Directory and Criteria content and compliance reporting.
- Continually review potential impacts of Sector or NPCC organizational changes on the Directories and Criteria by performing a review of enforcement and arbitration processes as needed
- Assist Legal with preparation of revised Directories for Regulatory filings with the individual Provinces in accordance with their respective Memorandum of Understandings (MOUs) as well as the State of New York Public Service Commission
- Facilitate any requested clarifications for NPCC Criteria with the necessary subject matter experts and also identify any other potential opportunities for clarifications of the Criteria.

- Conduct review of the following Documents;
  - Directory#2 –*Emergency Operations* –the TFCO will review criteria in accordance with the NPCC Reliability Assurance Program (NRAP).
  - Directory#5- *Reserve* –the TFCO will review the criteria in consideration of recent revisions to the NERC BAL standards.
  - Directory 7 – NPCC Special Protection Systems – Serve as lead Task Force working in conjunction with TFCP and TFSS on revisions required to ensure consistency with the development of the new NERC standard on Remedial Action Schemes.
  - A-10 - *Classification of Bulk Power System Elements*-the TFCP will coordinate a periodic review of the methodology in accordance with the NPCC Reliability Assurance Program (NRAP).
  - Review and respond to Requests for Clarifications to existing NPCC Standards, Directories, and Criteria

### **NPCC Reliability Directory Maintenance and Development**

The NPCC Regional Reliability Directories were developed to demonstrate that the NPCC more stringent criteria are “not inconsistent with” the NERC Reliability Standards as mandated by the NERC Rules of Procedure. The conversion of NPCC’s criteria into Directories was undertaken to remove any redundancies with the NERC or NPCC Regional Reliability Standards and to clearly delineate the more stringent NPCC criteria requirements, assign Functional Model designations to those responsible for compliance and create measurable compliance criteria. Subsequent to the initial establishment of the Directories, which also organized functionally related B Guidelines and C Procedures into a single Directory, the Directories were further reviewed to translate existing criteria language into a “requirement type” format. The development of the criteria into NERC style requirements facilitates the NPCC Region’s CCEP and also ensures the delineation of the more stringent and more specific Regional criteria from the latest approved and effective set of NERC ERO standards.

In 2017, work will continue with the maintenance, revision, or potential retirement of individual Directories to address any actual or anticipated redundancies with new or modified NERC or NPCC Reliability Standards. The ongoing review and maintenance of the Directories will require Task Force and Criteria Services staff to support this effort and to serve as subject matter experts. In addition to the ongoing review of the criteria within the Directories for potential duplicity with the NERC standards, any Directories that have not had the criteria translated into NERC style requirements will also be reviewed in order to achieve criteria ‘requirements’ which are clear, concise and measurable. Also, a standards style template will be applied to the existing Directories to make them more consistent with the look of the standards. As NERC standards improve, the need for NPCC Directories and the amount of criteria contained therein will decrease over time, however in the interim, significant review is necessary to ensure the criteria remain “not inconsistent with” the NERC standards as outlined in the NERC Rules of Procedure. NPCC will conduct internal reviews of all draft standards against Regional criteria and utilize subject matter experts to identify reliability and compliance related concerns. NPCC will file the revised NPCC Directories and notifications of retirements of Directories with the Canadian governmental and/or provincial Regulatory authorities within the NPCC “footprint”, on an as



needed basis, in accordance with established provincial procedures and agreements executed with NPCC.

The following Directories will either be under revision or reviewed for further development based on a schedule set forth in the NPCC Reliability Assessment Program:

### **NPCC Operations and Planning Directories**

The following Directories are envisioned to remain active for 2017.

#### *Directory #1, Design and Operation of the Bulk Power System.*

This Directory documents NPCC's Regionally-specific, more stringent criteria, and demonstrates coordination and consistency with all the existing NERC TPL, BAL, IRO, INT, MOD, TOP, PRC and VAR standards. The NPCC TFCP and TFCO completed a review of the Directory#1 criteria in 2015, during which the criteria was translated into NERC style requirements and revisions were enacted to ensure consistency with recent changes to the TPL and TOP standards.

#### *Directory #2, Emergency Operations*

This Directory documents NPCC's Regionally-specific, more stringent criteria, and demonstrates coordination and consistency with all the existing NERC EOP and TOP standards. The NPCC Task Force on Coordination of Operation will lead this review and revision.

#### *Directory # 4, System Protection Criteria*

This Directory documents NPCC's Regionally-specific, more stringent criteria, and demonstrates coordination and consistency with certain applicable NERC PRC standards. The NPCC Task Force on System Protection will lead this review and revision.

#### *Directory # 5, Reserve*

This Directory documents NPCC's Regionally-specific, more stringent criteria, and demonstrates coordination and consistency with all the existing applicable NERC BAL, INT, and IRO standards. The NPCC Task Force on Coordination of Operation will lead this review and revision and ensure consistency with the BAL standards.

#### *Directory # 7, Special Protection Systems*

This Directory documents NPCC's Regionally-specific, more stringent criteria for application and approval of SPS. The NPCC Task Force on System Protection will lead this review and revision and ensure consistency with the Remedial Action Scheme PRC-012 standard.

#### *Directory # 8, System Restoration*

This Directory documents NPCC's Regionally-specific, more stringent criteria with which each applicable entity must plan for and perform power system restoration following a major or a total blackout, and demonstrates coordination and consistency with applicable NERC EOP standards. The NPCC Task Force on Coordination of Operation will lead this review and revision.

Directory # 11, *Disturbance Monitoring Equipment*,

This directory documents NPCC’s Regionally-specific, more stringent criteria, and demonstrates coordination and consistency with certain existing NERC PRC standards. The NPCC Task Force on System Protection anticipates the development and approval of Directory#11 in order to facilitate the retirement of PRC -002-NPCC-1 and will lead this review and revision.

Directory # 12, *Automatic UFLS Program Requirements*,

This Directory documents NPCC’s Regionally-specific, more stringent criteria, and demonstrates coordination and consistency with certain existing NERC and NPCC PRC standard(s). The NPCC Task Force on System Studies will lead this review and revision until such time as the NPCC PRC-006-01 UFLS Regional Standard is approved by the NPCC membership, NERC BOT, the FERC and all the applicable governmental authorities in the Provinces of Canada within NPCC’s footprint.

### **NPCC Criteria Compliance Background**

The NPCC criteria services division assures the reliable operation of the bulk power system through implementation of a comprehensive compliance program. This program which includes monitoring, assessing and enforcing compliance with the more stringent, Regionally specific NPCC Criteria requirements, is known as the NPCC Criteria Compliance and Enforcement Program (CCEP) described in process document CCEP-1. This program was developed by the criteria services division and the CCEP Working Group under the purview of the NPCC Compliance Committee. The results of this program support the various Task Forces in their assessments of the NPCC criteria in meeting their goals for the Reliability Coordinating Committee as stated in Section A of this Business Plan.

The more stringent, Regionally-specific NPCC Criteria requirements reflect the unique operational and planning aspects of the bulk power system within the NPCC Region and are included in the NPCC “A” documents and their successors, the NPCC Directories.

NPCC issues non-monetary sanctions to enforce compliance with NPCC Criteria.

- The CCEP program is described in document CCEP-1, *NPCC Criteria Compliance and Enforcement Program (CCEP) Process Document*
- The implementation plan is described in document CCEP-2, *Implementation Plan for 2011 NPCC Criteria Compliance and Enforcement Program*
- On April 5, 2011, the above became effective upon Full Member approval of CCEP-1, and CCEP-2 and retired the following
  - NPCC Criteria A-8, Reliability Compliance and Enforcement Program (RCEP)
  - NPCC Guide B-22, Guidelines for Implementation of the NPCC Inc. Compliance Program
  - NPCC Procedure C-32, Review Process for NPCC Reliability Compliance Enforcement Program
  - Each of the above have been annotated as “retired effective 4/5/11 upon Full Member approval of CCEP-1... and CCEP-2...” on the NPCC public website

- The CCEP-1 document recognizes the applicability of NPCC’s Regionally-specific, more stringent reliability criteria to the Full Members of NPCC, consistent with the *Amended and Restated ByLaws*, and respects the provisions of the several Canadian Memoranda of Understanding in the execution of the processes described
- Provides a comprehensive CCEP Process Diagram showing the process of evaluating and approving Criteria Certification submittals, and additional processes and responsibilities in the event that non-compliances, disputes and sanctions arise
- Describes the roles and responsibilities of Reporting Members, the CC, the RCC and the Enforcement Panel in the compliance review and enforcement process
- Describes Levels of Non-Compliance, associated non-monetary Sanctions, Lateness Policy and the Arbitration/Dispute Resolution process
- Addresses Mitigation Plans for any violations under the enforcement process; and
- Lists the mandatory Certification Forms to be submitted for review by the Task Forces to ensure compliance with NPCC Directories are being met

The CCEP currently requires annual submittal of Certification Forms by the Reliability Coordinators and Balancing Authorities to confirm compliance with various NPCC Directories. Currently the required Certification forms are for Directory #1- *Area Transmission Review*, Directory #8 - *Key Facility List*, Directory #9 – *Generator Real Power Verification*, Directory #10 - *Verification of Generator Gross and Net Reactive Power Capability*, and Directory #12 - *UFLS Program Requirements*. In 2016 NPCC will consider an expansion of the CCEP to include compliance assessment activities to other active Directories.

The CCEP identifies those specific NPCC Directories that are subject to monitoring, assessment and enforcement.

The NPCC Compliance Committee (CC) has final approval of compliance assessments related to CCEP. The CCEP describes the roles and responsibilities of committees and panels used to resolve contested compliance and/or sanction or penalty determinations related to NPCC Directories.

## **Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

### **Resource Requirements**

#### **Personnel**

- NPCC anticipates no need to hire additional personnel in this program area in 2017.
- Benefits and Retirement expense is reduced due to the termination of NPCC’s defined benefit pension plan.

## 2016 Budget and Projection and 2017 Budget Comparisons

<b>Statement of Activities and Capital Expenditures</b>						
<b>2016 Budget &amp; Projection, and 2017 Budget</b>						
<b>CRITERIA SERVICES DIVISION</b>						
				Variance		Variance
	2016	2016	2016 Projection	v 2016 Budget	2017	v 2016 Budget
	Budget	Projection	v 2016 Budget	Over(Under)	Budget	Over(Under)
<b>Funding</b>						
<b>ERO Funding</b>						
ERO Assessments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Penalty Sanctions	-	-	-	-	-	-
<b>Total ERO Funding</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Membership Dues	1,060,542	1,060,542	-	-	1,105,867	45,325
Testing Fees	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-
Workshops	-	-	-	-	-	-
Interest	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 1,060,542</b>	<b>\$ 1,060,542</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,105,867</b>	<b>\$ 45,325</b>
<b>Expenses</b>						
<b>Personnel Expenses</b>						
Salaries	\$ 393,882	\$ 393,882	\$ -	\$ -	\$ 401,142	\$ 7,260
Payroll Taxes	23,275	23,275	-	-	23,301	26
Benefits	88,412	88,412	-	-	69,100	(19,313)
Retirement Costs	144,950	144,950	-	-	42,605	(102,345)
<b>Total Personnel Expenses</b>	<b>\$ 650,519</b>	<b>\$ 650,519</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 536,147</b>	<b>\$ (114,372)</b>
<b>Meeting Expenses</b>						
Meetings	\$ 6,500	\$ 6,500	\$ -	\$ -	\$ 5,000	\$ (1,500)
Travel	46,000	46,000	-	-	51,600	5,600
Conference Calls	-	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 52,500</b>	<b>\$ 52,500</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 56,600</b>	<b>\$ 4,100</b>
<b>Operating Expenses</b>						
Consultants & Contracts	\$ 25,000	\$ 25,000	\$ -	\$ -	\$ 18,000	\$ (7,000)
Office Rent	-	-	-	-	-	-
Office Costs	-	-	-	-	-	-
Professional Services	-	-	-	-	-	-
Computer & Equipment Leases	-	-	-	-	-	-
Miscellaneous	2,000	2,000	-	-	3,000	1,000
Depreciation	8,506	8,506	-	-	10,000	1,494
<b>Total Operating Expenses</b>	<b>\$ 35,506</b>	<b>\$ 35,506</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 31,000</b>	<b>\$ (4,506)</b>
<b>Total Direct Expenses</b>	<b>\$ 738,525</b>	<b>\$ 738,525</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 623,747</b>	<b>\$ (114,778)</b>
<b>Indirect Expenses</b>	<b>\$ 427,047</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 413,149</b>	<b>\$ (13,898)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 1,165,572</b>	<b>\$ 1,165,572</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,036,896</b>	<b>\$ (128,677)</b>
<b>Change in Assets</b>	<b>\$ (105,031)</b>	<b>\$ (105,031)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 68,971</b>	<b>\$ 174,002</b>
<b>Fixed Assets</b>						
Depreciation	\$ (8,506)	(8,506)	\$ -	\$ -	\$ (10,000)	\$ (1,494)
Computer & Software CapEx	-	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-	-
Allocation of Fixed Assets	-	-	-	-	-	-
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>(8,506)</b>	<b>(8,506)</b>	<b>-</b>	<b>-</b>	<b>(10,000)</b>	<b>(1,494)</b>
<b>TOTAL BUDGET (=B+C)</b>	<b>1,157,066</b>	<b>1,157,066</b>	<b>-</b>	<b>-</b>	<b>1,026,896</b>	<b>(130,171)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (96,525)</b>	<b>\$ (96,525)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 78,971</b>	<b>\$ 175,496</b>

## Personnel Analysis

Total FTE's by Program Area	Budget 2016	Projection 2016	Direct FTEs 2017 Budget	Shared FTEs <sup>1</sup> 2017 Budget	Total FTEs 2017 Budget	Change from 2016 Budget
<b>CRITERIA SERVICES DIVISION</b>						
<b>Operational Programs</b>						
Reliability Standards	1.07	1.07	1.00	0.07	1.07	0.00
Compliance Enforcement and Organization Registration and Certification	0.00	0.00	0.00	0.00	0.00	0.00
Training and Education	0.00	0.00	0.00	0.00	0.00	0.00
Reliability Assessment and Performance Analysis	1.07	1.07	1.00	0.07	1.07	0.00
Situation Awareness and Infrastructure Security	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total FTEs Operational Programs</b>	<b>2.14</b>	<b>2.14</b>	<b>2.00</b>	<b>0.14</b>	<b>2.14</b>	<b>0.00</b>
<b>Administrative Programs</b>						
Member Forums	0.00	0.00	0.00	0.00	0.00	0.00
General and Administrative	0.00	0.00	0.00	0.00	0.00	0.00
Information Technology	0.00	0.00	0.00	0.00	0.00	0.00
Legal and Regulatory	0.00	0.00	0.00	0.00	0.00	0.00
Human Resources	0.00	0.00	0.00	0.00	0.00	0.00
Accounting and Finance	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total FTEs Administrative Programs</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Total FTEs</b>	<b>2.14</b>	<b>2.14</b>	<b>2.00</b>	<b>0.14</b>	<b>2.14</b>	<b>0.00</b>

<sup>1</sup>A shared FTE is defined as an employee who performs both Regional Entity and Criteria Services division functions.

## Reserve Analysis 2016 - 2017

Working Capital and Operating Reserve Analysis 2016-2017			
CRITERIA SERVICES DIVISION			
	Total Reserve	Operating Reserve	Working Capital
<b>Beginning Total Reserve, December 31, 2015</b>	188,696	99,941	88,755
2016 Non-Statutory Funding (from members)	1,060,542	1,060,542	0
2016 Other funding sources	0	0	0
Less: 2016 Projected expenses & fixed asset additions	(1,157,066)	(1,157,066)	0
<b>Projected Total Reserve, December 31, 2016</b>	<b>92,171</b>	<b>3,416</b>	<b>88,755</b>
<b>Desired Total Reserve, December 31, 2017 <sup>1</sup></b>	<b>171,142</b>	85,571 <sup>2</sup>	85,571 <sup>3</sup>
Less: Projected Working Capital and Operating Reserve, December 31, 2016	(92,171)	(3,416)	(88,755)
<b>Increase(decrease) in assessments to achieve desired Total Reserve</b>	<b>78,971</b>	<b>82,155</b>	<b>(3,184)</b>
2017 Funding requirement for expenses and fixed asset additions	1,026,896		
Adjustment to achieve desired Working Capital and Operating Reserve balance	78,971		
<b>2017 Funding and reserve requirement</b>	<b>1,105,867</b>		

<sup>1</sup> Total Reserve within a range of 16.67% - 33.33% of Budget.

<sup>2</sup> Total NPCC Operating Reserve must be within a range from 8.33% to 25.00% of Budget. \$85,571 represents 8.33% of the 2017 CS budget of \$1,026,896.

<sup>3</sup> Total NPCC Working Capital must equal 8.33% of Budget. \$85,571 represents 8.33% of the 2017 CS budget of \$1,026,896.

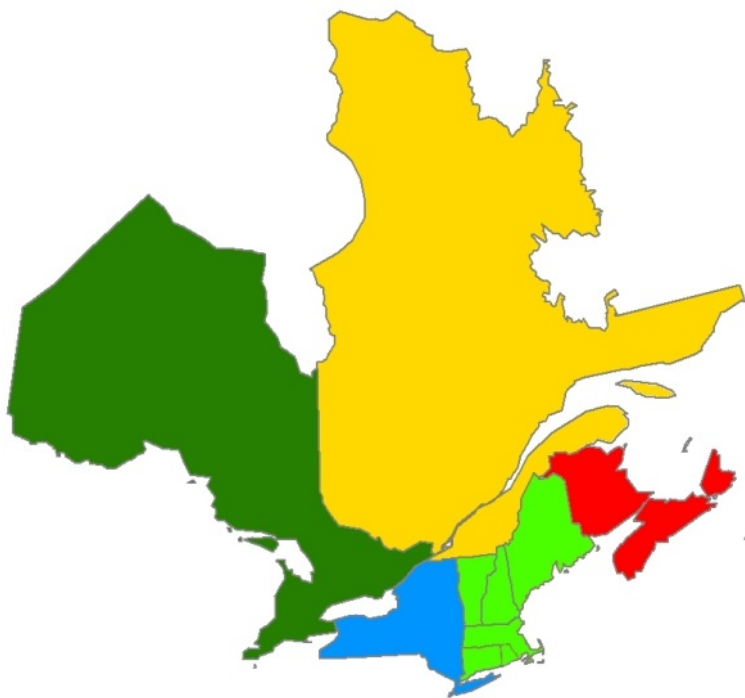
### Explanation of Changes in Reserve Policy from Prior Year

None

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Section D – Additional Consolidated Financial  
Statements  
2017 Business Plan and Budget

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## Section D — Additional Financial Statements

### Statement of Financial Position

<b>Statement of Financial Position</b>				
<b>2015 Audited, 2016 Projection, and 2017 Budget</b>				
<b>Regional Entity and Criteria Services Division</b>				
		(Per Audit)	Projected	Budget
		31-Dec-15	31-Dec-16	31-Dec-17
<b>ASSETS</b>				
Cash		5,772,460	4,273,000	3,634,000
Restricted cash		217,101	150,000	150,000
Temporary cash investments		1,811,014	1,811,000	1,811,000
Prepaid expenses		307,164	307,000	307,000
Other assets		117,086	150,000	183,000
Equipment and leasehold improvements, net		870,589	849,000	720,000
<b>Total Assets</b>		<b>9,095,414</b>	<b>7,540,000</b>	<b>6,805,000</b>
<b>LIABILITIES AND NET ASSETS</b>				
<b>Liabilities</b>				
Accrued expenses and other liabilities		2,004,110	2,039,000	2,109,000
Deferred revenue		788,147	-	-
Deferred rent		686,992	633,000	580,000
<b>Total Liabilities</b>		<b>3,479,249</b>	<b>2,672,000</b>	<b>2,689,000</b>
Net Assets - unrestricted		5,616,165	4,868,000	4,116,000
<b>Total Liabilities and Net Assets</b>		<b>9,095,414</b>	<b>7,540,000</b>	<b>6,805,000</b>



Section D — Additional Financial Statements

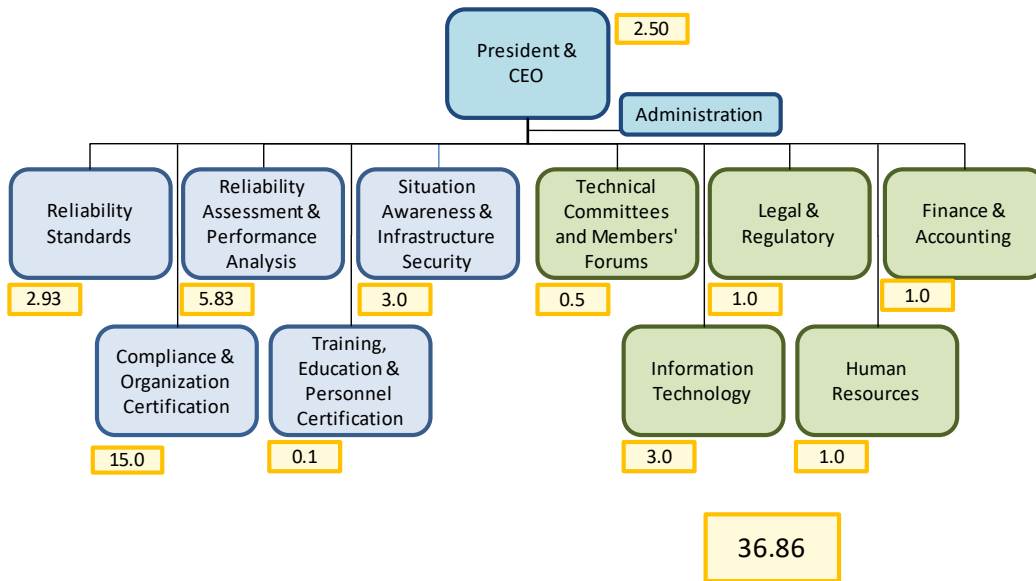
NPCC Statement of Activities 2017 Budget		RE Division Total	Reliability Standards (Section 300)	Compliance Monitoring and Enforcement and Organization Registration and Certification (Section 400 & 500)	Reliability Assessment and Performance Analysis (Section 800)	Training, Education, and Operator Certification (Section 900)	Situation Awareness and Infrastructure Security (Section 1000)	Administrative Services
<b>Funding</b>								
<b>ERO Funding</b>								
ERO Assessments	14,255,061	1,022,328		8,084,046	3,206,966	184,658	1,943,053	(185,991)
Penalty Sanctions	-	-		-	-	-	-	-
<b>Total ERO Funding</b>	<b>14,255,061</b>	<b>1,022,328</b>		<b>8,084,046</b>	<b>3,206,966</b>	<b>184,658</b>	<b>1,943,053</b>	<b>(185,991)</b>
Membership Dues	-	-		-	-	-	-	-
Testing Fees	-	-		-	-	-	-	-
Services & Software	-	-		-	-	-	-	-
Workshops	64,000	-		-	-	64,000	-	-
Interest	-	-		-	-	-	-	-
Miscellaneous	-	-		-	-	-	-	-
<b>Total Funding (A)</b>	<b>14,319,061</b>	<b>1,022,328</b>		<b>8,084,046</b>	<b>3,206,966</b>	<b>248,658</b>	<b>1,943,053</b>	<b>(185,991)</b>
<b>Expenses</b>								
<b>Personnel Expenses</b>								
Salaries	6,758,926	370,220		2,749,908	1,084,994	21,012	660,213	1,872,579
Payroll Taxes	404,319	21,273		179,504	65,373	1,396	42,778	93,995
Benefits	1,415,603	97,411		519,457	214,688	4,801	160,814	418,433
Retirement Costs	847,223	43,020		290,486	121,271	2,641	72,333	317,471
<b>Total Personnel Expenses</b>	<b>9,426,071</b>	<b>531,925</b>		<b>3,739,356</b>	<b>1,486,325</b>	<b>29,850</b>	<b>936,137</b>	<b>2,702,478</b>
<b>Meeting Expenses</b>								
Meetings	377,100	13,000		23,800	20,500	186,300	13,500	120,000
Travel	855,232	103,157		329,500	186,850	13,635	78,500	143,590
Conference Calls	37,000	-		-	-	-	-	37,000
<b>Total Meeting Expenses</b>	<b>1,269,332</b>	<b>116,157</b>		<b>353,300</b>	<b>207,350</b>	<b>199,935</b>	<b>92,000</b>	<b>300,590</b>
<b>Operating Expenses</b>								
Consultants & Contracts	2,009,000	10,000		1,274,000	413,000	-	160,000	152,000
Office Rent	809,700	-		-	-	-	-	809,700
Office Costs	679,100	-		-	-	-	-	679,100
Professional Services	1,041,000	-		-	-	-	-	1,041,000
Miscellaneous	50,000	-		-	-	-	-	50,000
Depreciation	250,000	-		-	-	-	-	250,000
<b>Total Operating Expenses</b>	<b>4,838,800</b>	<b>10,000</b>		<b>1,274,000</b>	<b>413,000</b>	<b>-</b>	<b>160,000</b>	<b>2,981,800</b>
<b>Total Direct Expenses</b>	<b>15,534,203</b>	<b>658,082</b>		<b>5,366,656</b>	<b>2,106,675</b>	<b>229,785</b>	<b>1,188,137</b>	<b>5,984,868</b>
<b>Indirect Expenses</b>	<b>(413,149)</b>	<b>372,606</b>		<b>3,282,024</b>	<b>1,125,541</b>	<b>19,306</b>	<b>772,241</b>	<b>(5,984,868)</b>
<b>Other Non-Operating Expenses</b>	<b>-</b>	<b>-</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Expenses (B)</b>	<b>15,121,054</b>	<b>1,030,688</b>		<b>8,648,680</b>	<b>3,232,217</b>	<b>249,091</b>	<b>1,960,378</b>	<b>-</b>
<b>Change in Assets</b>	<b>(801,994)</b>	<b>(8,359)</b>		<b>(564,634)</b>	<b>(25,251)</b>	<b>(433)</b>	<b>(17,325)</b>	<b>(185,991)</b>
<b>Fixed Assets</b>								
Depreciation	(250,000)	-		-	-	-	-	(250,000)
Computer & Software CapEx	276,000	-		151,000	-	-	-	125,000
Furniture & Fixtures CapEx	-	-		-	-	-	-	-
Equipment CapEx	-	-		-	-	-	-	-
Leasehold Improvements	-	-		-	-	-	-	-
Allocation of Fixed Assets	0	(8,359)		(73,631)	(25,251)	(433)	(17,325)	125,000
<b>Inc (Dec) in Fixed Assets (C)</b>	<b>26,000</b>	<b>(8,359)</b>		<b>77,369</b>	<b>(25,251)</b>	<b>(433)</b>	<b>(17,325)</b>	<b>-</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>15,147,054</b>	<b>1,022,328</b>		<b>8,726,049</b>	<b>3,206,966</b>	<b>248,658</b>	<b>1,943,053</b>	<b>-</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>(827,994)</b>	<b>0</b>		<b>(642,003)</b>	<b>0</b>	<b>(0)</b>	<b>(0)</b>	<b>(185,991)</b>

Section D — Additional Financial Statements

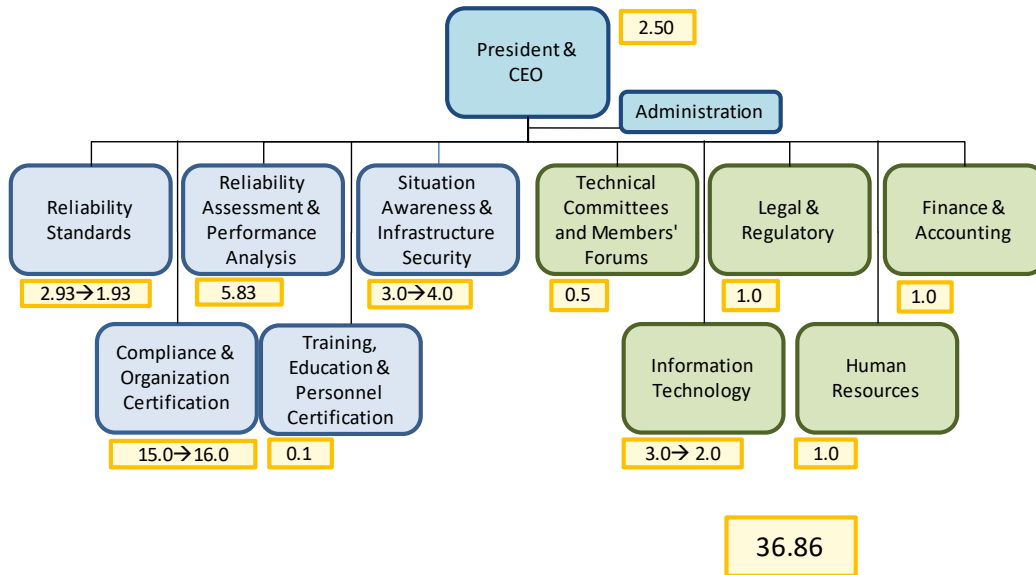
<b>NPCC Statement of Activities 2017 Budget</b>		<b>CS Division Total</b>	<b>Criteria Development</b>	<b>Criteria Assessment</b>	<b>General and Administrative</b>
<b>Funding</b>					
<b>ERO Funding</b>					
ERO Assessments		-			
Penalty Sanctions		-			
<b>Total ERO Funding</b>		-	-	-	-
Membership Dues		1,105,867	505,610	521,285	78,971
Testing Fees		-	-	-	-
Services & Software		-	-	-	-
Workshops		-	-	-	-
Interest		-	-	-	-
Miscellaneous		-	-	-	-
<b>Total Funding (A)</b>		<b>1,105,867</b>	<b>505,610</b>	<b>521,285</b>	<b>78,971</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries		401,142	183,406	217,736	-
Payroll Taxes		23,301	10,849	12,452	-
Benefits		69,100	36,825	32,274	-
Retirement Costs		42,605	19,956	22,648	-
<b>Total Personnel Expenses</b>		<b>536,147</b>	<b>251,036</b>	<b>285,111</b>	<b>-</b>
<b>Meeting Expenses</b>					
Meetings		5,000	2,500	2,500	-
Travel		51,600	30,000	21,600	-
Conference Calls		-	-	-	-
<b>Total Meeting Expenses</b>		<b>56,600</b>	<b>32,500</b>	<b>24,100</b>	<b>-</b>
<b>Operating Expenses</b>					
Consultants & Contracts		18,000	14,000	4,000	-
Office Rent		-	-	-	-
Office Costs		-	-	-	-
Professional Services		-	-	-	-
Miscellaneous		3,000	1,500	1,500	-
Depreciation		10,000	5,000	5,000	-
<b>Total Operating Expenses</b>		<b>31,000</b>	<b>20,500</b>	<b>10,500</b>	<b>-</b>
<b>Total Direct Expenses</b>		<b>623,747</b>	<b>304,036</b>	<b>319,711</b>	<b>-</b>
<b>Indirect Expenses</b>		<b>413,149</b>	<b>206,574</b>	<b>206,574</b>	<b>-</b>
<b>Other Non-Operating Expenses</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Expenses (B)</b>		<b>1,036,896</b>	<b>510,610</b>	<b>526,285</b>	<b>-</b>
<b>Change in Assets</b>		<b>68,971</b>	<b>(5,000)</b>	<b>(5,000)</b>	<b>78,971</b>
<b>Fixed Assets</b>					
Depreciation		(10,000)	(5,000)	(5,000)	-
Computer & Software CapEx		-	-	-	-
Furniture & Fixtures CapEx		-	-	-	-
Equipment CapEx		-	-	-	-
Leasehold Improvements		-	-	-	-
Allocation of Fixed Assets		-	-	-	-
<b>Inc (Dec) in Fixed Assets ( C )</b>		<b>(10,000)</b>	<b>(5,000)</b>	<b>(5,000)</b>	<b>-</b>
<b>TOTAL BUDGET (=B + C)</b>		<b>1,026,896</b>	<b>505,610</b>	<b>521,285</b>	<b>-</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>		<b>78,971</b>	<b>-</b>	<b>-</b>	<b>78,971</b>

## Appendix A Staff Allocations

2016 Budget Staff Allocations - RE Division

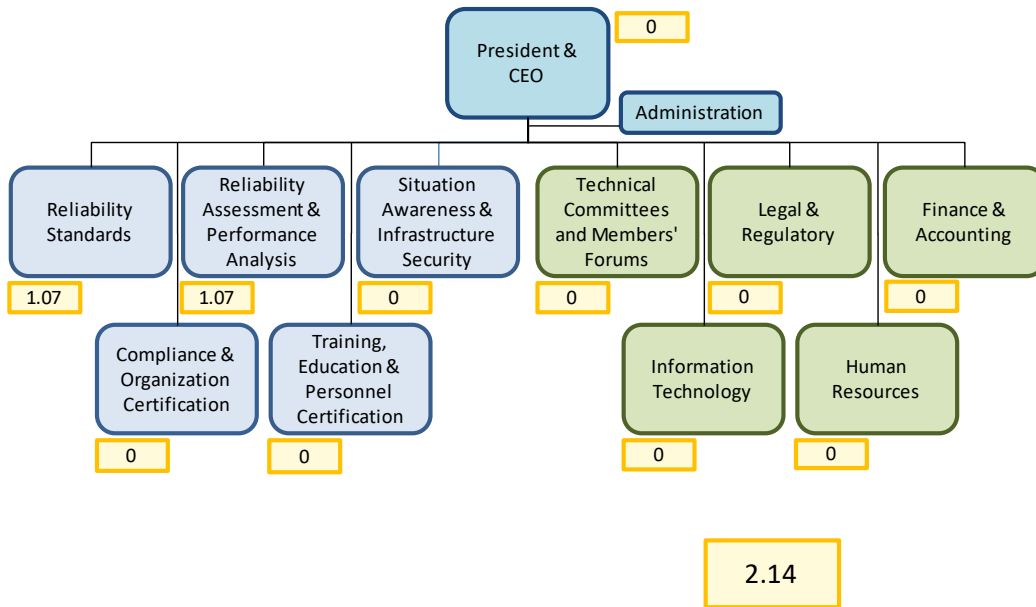


2017 Budget Staff Allocations - RE Division

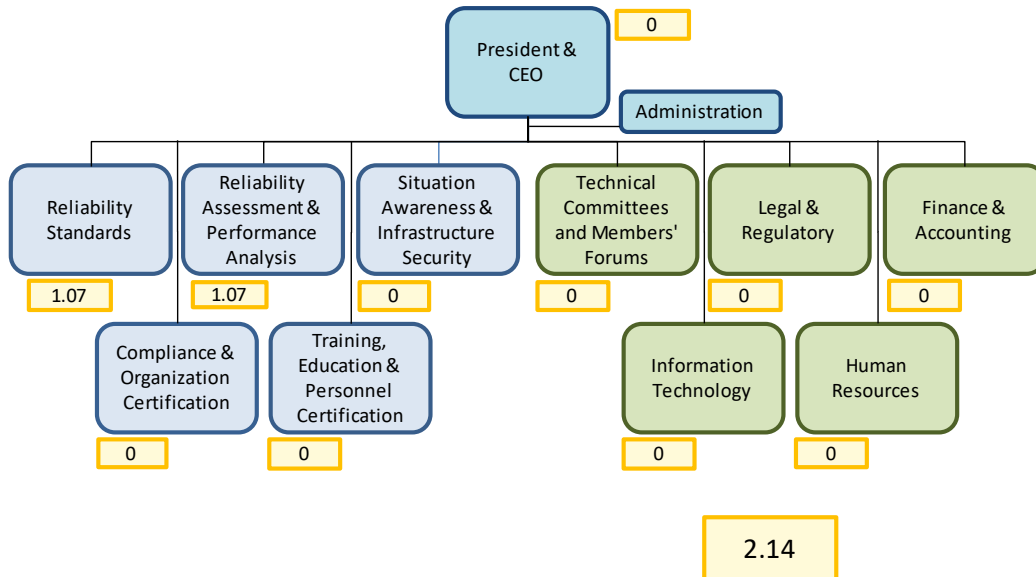


Section D — Additional Financial Statements

2016 Budget Staff Allocations - CS Division



2017 Budget Staff Allocations - CS Division



## Appendix B Acronyms

This section lists acronyms used in this document.

Acronym	Definition
AI	Audits and Investigations
BAA	Balancing Authority Area
BEPWG	BES Exception Process Working Group
BES	Bulk Electric System
BOT	Board of Trustees
BPS	Bulk Power System
CC	Compliance Committee
CCEP	Criteria Compliance Enforcement Program
CDAA	CMEP Data Administration Application
CEAP	Cost Effective Analysis Process
CEH	Continuing Education Hour
CGNC	Corporate Governance and Nominating Committee
CIPC	Critical Infrastructure Protection Committee
CIPIS	Critical Information Protection Information Sharing
CMEP	Compliance Monitoring and Enforcement Program
CORC	Compliance Monitoring and Enforcement and Organization Registration and Certification Program
CPP	Clean Power Plan
CRRRA	Cost of Risk Reduction Analysis
CUG	Consortium Users Group
DADS	Demand Availability Data System
DADSWG	Demand Response Availability Data System Working Group
ERA	Entity Reliability Assessment
ERAG	Eastern Interconnection Reliability Assessment Group
ERO	Electric Reliability Organization
EUB	Electric Utility Board
EUB	Energy and Utilities Board
FAC	Finance and Audit Committee
FERC	Federal Energy Regulatory Commission
FFT	Find, Fix, Track
GADS	Generator Availability Data System
GADSWG	Generating Availability Data System Working Group
GMD	Geomagnetic Disturbance
HQCMÉ	Hydro-Québec Contrôle des mouvements d'énergie
HSIN	Homeland Security Information Network
ICE	Internal Controls Evaluation
IED	Intelligent Electronic Device
IERP	Independent Experts Review Panel Report
IESO	Independent Electricity System Operator
ISO	Independent System Operator
ITSG	IT Steering Group
LCEFT	Load, Capacity, Energy, Fuels, and Transmission
LMS	Learning Management System
LMWG	Load Modeling Working Group
LSE	Load Serving Entity
MACD	Market Assessment and Compliance Division of the IESO
MDCC	Management Development and Compensation Committee
ME	Mitigation and Enforcement
MMWG	Multi-Regional Modeling Working Group
MOU	Memorandum of Understanding
MPLS	Multiprotocol Label Switching
MVWG	Model Validation Working Group
NAESB	North American Electric Standards Review Board

## Section D — Additional Financial Statements

Acronym	Definition
NEL	Net Energy for Load
NERC	North American Electric Reliability Corporation
NOAV	Notice of Alleged Violation
NOCV	Notice of Confirmed Violation
NOPR	Notice of Proposed Rulemaking
NOPV	Notice of Possible Violation
NPCC	Northeast Power Coordinating Council, Inc.
NRAP	NPCC Reliability Assessment program
NSPI	Nova Scotia Power Incorporated
NSUARB	Nova Scotia Utility and Review Board
OEB	Ontario Energy Board
PAS	Performance Analysis Subcommittee
PC	Pension Committee
PMOS	Project Management Oversight Subcommittee
PSMTF	Protection System Mis-operations Task Force
PSTN	Public Switched Telephone Network
QCMEP	Québec Reliability Standards Compliance Monitoring and Enforcement Program
RADS	Reliability Assessment Data System
RADWG	Reliability Assessment Data Working Group
RAS	Reliability Assessment Subcommittee
RC	Reliability Coordinator
RCC	Reliability Coordinating Committee
RISC	Reliability Issues Steering Committee
RSAW	Reliability Standards Audit Worksheet
RSC	Regional Standards Committee
RTO	Regional Transmission Organization
SAFNR	Situational Awareness-FERC, NERC, Regions
SAMS	System Analysis and Modeling Subcommittee
SAR	Standards Authorization Request
SAT	Systematic Approach to Training
SBS	Standards Balloting System
SCPS	Standards Committee Process Subcommittee
SDT	Standards Drafting Team
SEDS	Spare Equipment Database System
SEDTF	Spare Equipment Database Task Force
SPS	Special Protection Systems
TADS	Transmission Availability Data System
TADSWG	Transmission Availability Data System Working Group
TFCO	Task Force on Coordination of Operation
TFCP	Task Force on Coordination of Planning
TFE	Technical Feasibility Exception
TFIST	Task Force on Infrastructure Security and Technology
TFSP	Task Force on System Protection
TFSS	Task Force on System Studies
TLR	Transmission Loading Relief
TOP	Transmission Operator
UFLS	Underfrequency Load Shedding
UVLS	Under-Voltage Load Shedding
VRF	Violation Risk Factor
VSL	Violation Security Level

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**DOCKET NO. RR16-\_\_-000**

**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**2017 BUSINESS PLAN AND BUDGET FILING**

**ATTACHMENT 6**

**RELIABILITYFIRST CORPORATION**

**PROPOSED 2017 BUSINESS PLAN AND BUDGET**





**RELIABILITY FIRST**

**RELIABILITYFIRST CORPORATION  
2017 BUSINESS PLAN AND BUDGET**

**APPROVED BY BOARD OF DIRECTORS  
JUNE 2, 2016**

**FINAL VERSION**

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## Introduction

The following table summarizes ReliabilityFirst Corporation's (ReliabilityFirst) budget for 2017.

	2017 Budget			
	(in whole dollars)	U.S.	Canada	Mexico
Statutory FTEs	72.3			
Non-statutory FTEs	-			
<b>Total FTEs</b>	72.3			
Statutory Expenses	\$ 19,995,941			
Non-Statutory Expenses	\$ -			
<b>Total Expenses</b>	\$ 19,995,941			
Statutory Inc(Dec) in Fixed Assets	\$ (87,002)			
Non-Statutory Inc(Dec) in Fixed Assets	\$ -			
<b>Total Inc(Dec) in Fixed Assets</b>	\$ (87,002)			
Statutory Working Capital Requirement	\$ 310,942			
Non-Statutory Working Capital Requirement	\$ -			
<b>Total Working Capital Requirement</b>	\$ 310,942			
Total Statutory Funding Requirement	\$ 20,219,881			
Total Non-Statutory Funding Requirement	\$ -			
<b>Total Funding Requirement</b>	\$ 20,219,881			
<b>Statutory Funding Assessments</b>	\$ 19,560,881	\$ 19,560,881		
<b>Non-Statutory Fees</b>	\$ -	\$ -		
NEL (MWH)				
NEL%	100%	100%		

## Organizational Overview

ReliabilityFirst is a not-for-profit company incorporated in the State of Delaware and authorized by the Federal Energy Regulatory Commission (FERC) to operate as a Regional Entity. ReliabilityFirst is responsible for promoting and improving the reliability of the Bulk Electric System (BES) in all or parts of thirteen states and the District of Columbia. As a Regional Entity, ReliabilityFirst performs key reliability functions delegated to it by the Electric Reliability Organization (ERO), the North American Electric Reliability Corporation (NERC). These functions include:

- Active participation in the development of North American Reliability Standards for the BES, and as needed, development of Reliability Standards applicable within the ReliabilityFirst Region.
- Monitoring and enforcement of approved Reliability Standards, including the registration of responsible entities, and as needed, certification of such entities.
- Assessment of the present and future reliability, adequacy, and security of the BES.
- Promoting effective training and education of personnel and entities.

- Promoting situational awareness and the protection of critical infrastructure.

ReliabilityFirst intends to perform only the functions delegated to it by the ERO in 2017.

## **Membership and Governance**

### **Members**

- ReliabilityFirst has an open membership policy that permits participation of all industry stakeholders through their designated representatives. There is no annual fee for ongoing membership in ReliabilityFirst. There are six (6) Industry Sectors: Suppliers, Transmission Companies, Regional Transmission Organizations (RTOs), Small Load Serving Entities (LSEs), Medium LSEs, and Large LSEs.
- There are three (3) Classes of Members: Regular Members, Associate Members, and Adjunct Members.
  - A Regular Member is any entity that has joined an Industry Sector that either (i) has no Affiliates or Related Parties that are Members or (ii) is the entity designated to be the Regular Member by any related group of Associate Members.
  - An Associate Member is any entity that has joined an Industry Sector and is an Affiliate or Related Party of a Regular Member.
  - An Adjunct Member is any entity that does not qualify to join an Industry Sector but has been approved for membership. Adjunct Members may include Regulatory Participants.

There are currently 60 Members of ReliabilityFirst; 43 are Regular Members with voting rights, 9 are Associate Members, and 8 are Adjunct Members. ReliabilityFirst's foundation has been and continues to be the broad, active participation of volunteer technical and policy experts representing electricity industry stakeholders within the Region who are committed to the reliability of the BES. ReliabilityFirst believes that use of industry expert resources, combined with a competent and independent ReliabilityFirst staff, provides a strong and cost effective approach to reliability that is consistent with the industry self-regulatory model envisioned by Congress in the Energy Policy Act of 2005.

### **Board of Directors**

ReliabilityFirst is governed by a hybrid, independent, and balanced stakeholder Board that consists of 14 directors.

- Eight (8) directors are elected by the Industry Sectors as follows:
  - Suppliers elect two (2) directors;
  - Transmission Companies elect two (2) directors;
  - RTOs elect one (1) director;
  - Small LSEs elect one (1) director;
  - Medium LSEs elect one (1) director; and

- Large LSEs elect one (1) director.
- Three (3) directors are at-large. At-large directors are elected by all of the Industry Sectors voting together as a single class.
- Three (3) directors are independent from ReliabilityFirst, any Member, Affiliate or Related Party of any Member. Independent directors are elected by all of the Industry Sectors voting together as a single class.

## 2017 Key Assumptions

The NERC and Regional Entity business plans and budgets reflect a set of common assumptions developed jointly by NERC and the Regional Entities as part of the annual business plan and budget process. The *ERO Enterprise 2016-2019 Shared Business Plan and Budget Assumptions* document is located in Exhibit A of NERC's 2017 Business Plan and Budget.

## 2017 Key Deliverables

- Promote a culture that addresses reliability risks across the ReliabilityFirst Region and the ERO.
  - Ensure that the industry understands the essential reliability purpose of Reliability Standards and the corresponding expectations for those Reliability Standards.
  - Work with the industry to maintain and continuously improve effective risk control programs for reliability, security, and resiliency.
  - Use efficient processes and proportional exercise of discretion to verify that the industry meets reliability objectives.
- Identify the most significant risks to reliability in the ReliabilityFirst Region.
  - Identify and prioritize risks based on reliability impacts, cost/practicality assessments, projected resources, and emerging issues.
  - Analyze events and system performance consistently to determine sequence, cause, and remediation. Identify reliability risks and trends to inform reliability assurance activities.
  - Ensure that the industry is well-informed of emerging trends, risk analysis, lessons learned, and expected actions.
- Mitigate reliability risks.
  - Ensure that the industry understands reliability and security threats and addresses them effectively.
  - Facilitate information sharing among the industry, Regions, ERO, and government.
  - Work with the ERO to track industry accountability for critical reliability and security recommendations.
- Promote a culture of reliability excellence.

- Ensure reliable data modeling. Verify that the data represents system behavior accurately. Facilitate data sharing among entities.
- Serve as a leading resource to industry and policy makers to supply reliability-related information.
- Serve as an independent, objective, and fair enforcement authority, without conflicts of interest.
  - Register entities commensurate to the risk they pose to the BES and ensure that all key entities are certified to have essential capabilities.
  - Ensure that all compliance monitoring and enforcement activities are risk-based, reliability-focused, and adhere to the requirements of the ReliabilityFirst delegation agreement and the Risk Based Compliance Monitoring and Enforcement Program. Perform these activities in an efficient, effective, and transparent manner.
  - Ensure that all violations of mandatory Reliability Standards are mitigated in a timely, thorough, and comprehensive manner to prevent reoccurrence.
- Improve transparency, consistency, quality and timeliness of results; collaborate with NERC and the other Regions; improve efficiencies and cost effectiveness.
  - Identify, understand, and manage internal risks.
  - Ensure processes are effective, efficient, and continually improving.

## **2017 Overview of Budget**

This Business Plan and Budget reflects ReliabilityFirst's best estimate of the costs it will incur in carrying out its delegated functions in support of the ERO in 2017. Overall, the ReliabilityFirst 2017 budget of \$19,908,939 increased 2.8% over the 2016 budget of \$19,367,209. The 2017 assessment of \$19,560,881 represents a 1% increase over the 2016 assessment of \$19,367,209.

Personnel costs increased by \$582,486, an increase of 3.7% over the 2016 budget. Incorporated into the personnel costs is a 3% general wage increase and a 15% medical premium increase. For 2017, ReliabilityFirst did not include a personnel vacancy rate because the personnel dollars resulting from vacancies are to be used to fund the company's recruitment activities to attract necessary employee candidates, support employee relocation needs, and the use of college interns.

The meetings, operating and fixed asset costs of \$3,552,317 decreased by 1.1% over the 2016 budget of \$3,593,074.

The 2017 assessment represents the actual monies to be collected to fund the total operating expenses of the organization for the calendar year. Based upon an evaluation of projected assessments across multiple years, the 2017 assessment was determined in an effort to stabilize year-upon-year assessment variations.

The ReliabilityFirst Board has approved a \$1,000,000 operating reserve for 2017, which is the same level that existed in 2016. This level of operating reserve is believed to be sufficient for any

unbudgeted and unexpected expenditures of the organization, and is consistent with Board Policy.

The board of directors also approved an increase in the working capital reserve. Historically, the working capital reserve has consisted of the amount necessary to satisfy projected cash flow for daily operations. However, in an ERO Enterprise wide effort to better manage and stabilize assessments, the working capital reserve has been increased to include additional funds that will be used to enhance day to day cash flow management of expenditures, while providing the capability to stabilize future assessments. In the 2017 budget, the operating and working capital reserves have been differentiated to enable more granular identification and control in the utilization and monitoring of these funds in the appropriate manner.

Several years ago, NERC and the eight Regional Entities formed an executive management group (known as the ERO EMG) which, among other things, concentrates on developing enterprise-wide applications, thus improving efficiency and consistency across NERC and the Regional Entities. As enterprise-wide projects are identified and prioritized by the ERO EMG, they are managed at NERC. ReliabilityFirst assumes agreed upon ERO Enterprise wide applications will be available and has only included appropriate funding for applications and supporting systems necessary to satisfy its business needs that are not within the mutually agreed upon scope of the ERO Enterprise wide applications funded by NERC.

In the development of each annual Business Plan and Budget, ReliabilityFirst examines projected workload using the common assumptions referenced above and conducts a manpower analysis to determine staffing levels required to complete necessary tasks and meet the obligations of the Regional Delegation Agreement. The manpower analysis for 2017 yielded a requirement of 75.5 Full Time Equivalent (FTEs) in order to fully address the expected workload. Although the manpower analysis indicates a need for 75.5 FTEs, the staffing level incorporated into the 2017 budget includes staffing for 72.3 FTEs, which holds staffing levels stable compared to 2015 and 2016. ReliabilityFirst believes this staffing level is justified due to enhancements being made in many process areas and the maturation of the organization (and the resulting expected efficiency improvements).

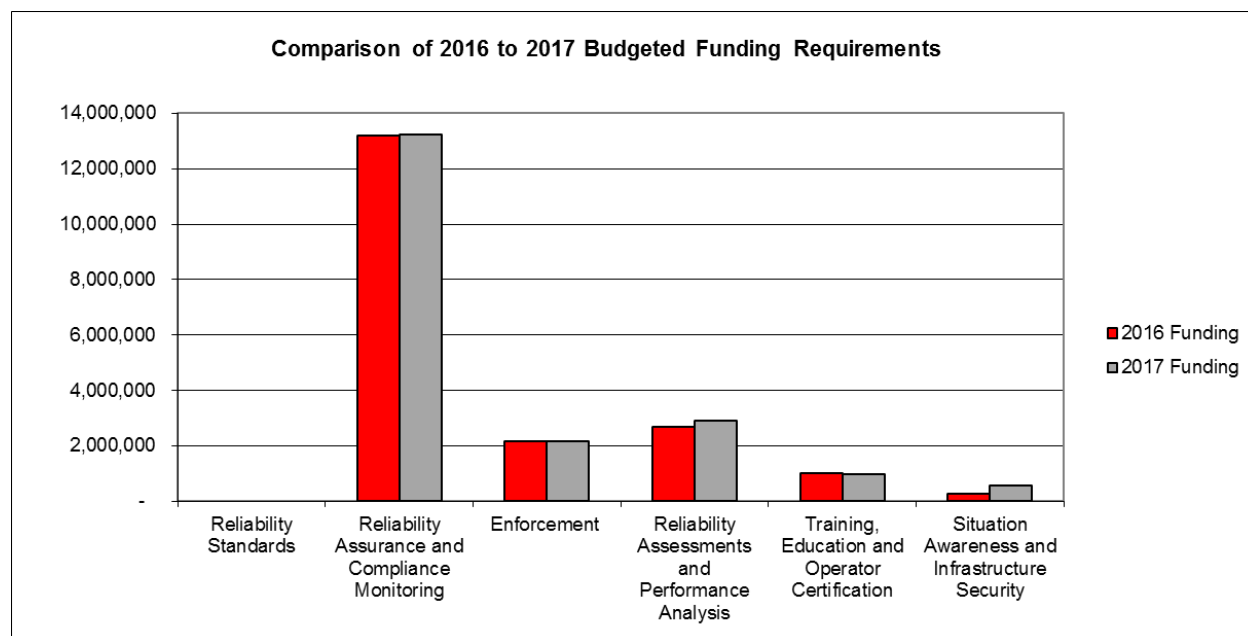


## Summary of Budget by Program Area

The following table and figure summarize and illustrate ReliabilityFirst’s budget by program area.

Program	Budget 2016	Projection 2016	Budget 2017	Variance	
				2016 Budget v 2017 Budget	Variance %
Reliability Standards	-	-	-	-	0.0%
Reliability Assurance and Compliance Monitoring	13,198,505	12,838,969	13,238,645	40,140	0.3%
Enforcement	2,182,560	2,164,777	2,183,152	592	0.0%
Reliability Assessments and Performance Analysis	2,697,660	2,731,375	2,925,193	227,533	8.4%
Training, Education and Operator Certification	1,006,097	921,274	975,009	(31,088)	-3.1%
Situation Awareness and Infrastructure Security	282,387	284,111	586,940	304,553	107.8%

## 2017 Versus 2016 Cost Allocation by Program Summary of Expenses



## FTEs by Program Area

Total FTEs by Program Area	Budget 2016	Projection 2016	Total FTEs 2017 Budget	Change from 2016 Budget
<b>STATUTORY</b>				
<b>Operational Programs</b>				
Reliability Standards	0.00	0.00	0.00	0.00
Reliability Assurance and Compliance Monitoring	37.50	36.29	36.50	-1.00
Enforcement	8.25	8.59	8.25	0.00
Reliability Assessment and Performance Analysis	8.35	8.35	8.35	0.00
Training and Education	3.00	3.00	3.00	0.00
Situation Awareness and Infrastructure Security	0.50	0.50	1.50	1.00
<b>Total FTEs Operational Programs</b>	<b>57.60</b>	<b>56.73</b>	<b>57.60</b>	<b>0.00</b>
<b>Total FTEs Administrative Programs</b>	<b>14.60</b>	<b>14.70</b>	<b>14.70</b>	<b>0.10</b>
<b>Total FTEs</b>	<b>72.20</b>	<b>71.43</b>	<b>72.30</b>	<b>0.10</b>

For an explanation of the variances, refer to the Resource Requirements section in each program area in Section A.

## 2016 Budget and Projection and 2017 Budget Comparisons

The following table lists the 2016 budget and projection compared to the 2017 budget.

<b>2016 Budget and Projection, and 2017 Budget</b>					
<b>STATUTORY</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ReliabilityFirst Funding</b>					
ReliabilityFirst Assessments	\$ 19,367,209	\$ 19,367,209	\$ -	\$ 19,560,881	\$ 193,672
Penalty Sanctions	748,250	748,250	-	659,000	(89,250)
<b>Total ReliabilityFirst Funding</b>	<b>\$ 20,115,459</b>	<b>\$ 20,115,459</b>	<b>\$ -</b>	<b>\$ 20,219,881</b>	<b>\$ 104,422</b>
Membership Dues	-	-	-	-	-
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding</b>	<b>20,115,459</b>	<b>20,115,459</b>	<b>-</b>	<b>20,219,881</b>	<b>104,422</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 11,427,306	\$ 11,222,439	\$ (204,867)	\$ 11,895,781	\$ 468,475
Payroll Taxes	699,888	660,537	(39,351)	705,869	5,981
Benefits	1,786,698	1,671,323	(115,375)	1,805,733	19,035
Retirement Costs	1,860,244	1,793,133	(67,111)	1,949,240	88,996
<b>Total Personnel Expenses</b>	<b>\$ 15,774,136</b>	<b>\$ 15,347,432</b>	<b>\$ (426,704)</b>	<b>\$ 16,356,622</b>	<b>\$ 582,486</b>
<b>Meeting Expenses</b>					
Meetings	\$ 222,750	\$ 222,750	\$ -	\$ 243,490	\$ 20,740
Travel	836,800	836,800	-	765,950	(70,850)
Conference Calls	42,000	42,000	-	49,200	7,200
<b>Total Meeting Expenses</b>	<b>\$ 1,101,550</b>	<b>\$ 1,101,550</b>	<b>\$ -</b>	<b>\$ 1,058,640</b>	<b>\$ (42,910)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 540,110	\$ 540,110	\$ -	\$ 431,312	\$ (108,798)
Office Rent	534,619	534,619	-	520,176	(14,443)
Office Costs	717,183	717,183	-	759,162	41,979
Professional Services	488,989	488,989	-	471,105	(17,884)
Miscellaneous	34,640	34,640	-	42,422	7,782
Depreciation	352,668	352,668	-	356,502	3,834
<b>Total Operating Expenses</b>	<b>\$ 2,668,209</b>	<b>\$ 2,668,209</b>	<b>\$ -</b>	<b>\$ 2,580,679</b>	<b>\$ (87,530)</b>
<b>Total Direct Expenses</b>	<b>\$ 19,543,895</b>	<b>\$ 19,117,191</b>	<b>\$ (426,704)</b>	<b>\$ 19,995,941</b>	<b>\$ 452,046</b>
<b>Indirect Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 0</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Other Non-Operating Expenses</b>	<b>\$ 2,482</b>	<b>\$ 2,482</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (2,482)</b>
<b>Total Expenses</b>	<b>\$ 19,546,377</b>	<b>\$ 19,119,673</b>	<b>\$ (426,704)</b>	<b>\$ 19,995,941</b>	<b>\$ 449,564</b>
<b>Change in Assets</b>	<b>\$ 569,082</b>	<b>\$ 995,786</b>	<b>\$ 426,704</b>	<b>\$ 223,940</b>	<b>\$ (345,142)</b>
<b>Fixed Assets</b>					
Depreciation	(352,668)	(352,668)	-	(356,502)	(3,834)
Computer & Software CapEx	133,500	133,500	-	219,500	86,000
Furniture & Fixtures CapEx	40,000	40,000	-	-	(40,000)
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	50,000	50,000
	<b>\$ (179,168)</b>	<b>\$ (179,168)</b>	<b>\$ -</b>	<b>\$ (87,002)</b>	<b>\$ 92,166</b>
Allocation of Fixed Assets	-	-	0	-	-
<b>Inc/(Dec) in Fixed Assets</b>	<b>\$ (179,168)</b>	<b>\$ (179,168)</b>	<b>\$ 0</b>	<b>\$ (87,002)</b>	<b>\$ 92,166</b>
<b>Total Budget</b>	<b>\$ 19,367,209</b>	<b>\$ 18,940,505</b>	<b>\$ (426,704)</b>	<b>\$ 19,908,939</b>	<b>\$ 541,730</b>
<b>Change in Working Capital</b>	<b>\$ 748,251</b>	<b>\$ 1,174,954</b>	<b>\$ 426,704</b>	<b>\$ 310,942</b>	<b>\$ (437,308)</b>

## **Section A – Statutory Programs**

## Reliability Standards Program

<b>Reliability Standards Program</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	0.00	0.00	0.00
Direct Expenses	\$ -	\$ -	\$ -
Indirect Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ -	\$ -	\$ -
Total Funding Requirement	\$ -	\$ -	\$ -

### Program Scope and Functional Description

ReliabilityFirst may develop Regional Reliability Standards as deemed necessary. ReliabilityFirst Standards must be developed in accordance with the ReliabilityFirst Reliability Standards Development Procedure and must be more stringent than a NERC Reliability Standard, addressing a regional difference or a regional difference necessitated by a physical difference in the BES.

ReliabilityFirst may also develop regional criteria. Regional criteria are good utility practices used to enhance the reliability of the BES and may augment Reliability Standards. Regional criteria are not Reliability Standards, and therefore are not enforceable. ReliabilityFirst regional criteria are developed in accordance with the ReliabilityFirst Reliability Standards Development Procedure.

### 2017 Key Assumptions

The Reliability Standards Program incorporates the regional specific common business planning assumptions as described in the *ERO Enterprise 2016 - 2019 Shared Business Plan and Budget Assumptions* document.

Consistent with its approach in 2015 and 2016, ReliabilityFirst has reallocated the resources and expenses associated with the Reliability Standards Program to the Reliability Assurance and Compliance Monitoring Program, due to decreased activity in the Standards Program. In the unanticipated instance that ReliabilityFirst needs to develop a new Regional Reliability Standard or regional criteria in 2017, ReliabilityFirst will temporarily redeploy the necessary resources from the existing Reliability Assurance and Compliance Monitoring Program and Reliability Assessment and Performance Analysis Program.

### 2017 Key Deliverables

- Although none are anticipated, submit to NERC, and subsequently file with FERC any new Regional Reliability Standards that:
  - May be needed to support revised NERC Reliability Standards.
  - May address reliability gaps not currently covered by NERC Reliability Standards.

- Although none are anticipated, submit to ReliabilityFirst Board any new regional criteria that:
  - Address issues not within the scope of NERC Reliability Standards.
  - Promote more consistent implementation of a NERC Reliability Standard within the Region.
- Initiate and coordinate revisions to Regional Reliability Standards or regional criteria in any stage of development to align with NERC and FERC requirements.
  - Support for enhanced periodic reviews focused on conducting measured, in-depth reviews to further improve Reliability Standards using the Enhanced Periodic Review template.
  - Support for ERO activities necessary to incorporate Regional Reliability Standards into continent-wide standards as appropriate as the continent-wide Reliability Standards are reviewed through the Enhanced Periodic Review process.
  - Retire Regional Reliability Standards and regional criteria that are duplicative with NERC Reliability Standards or no longer needed for reliability.
- Review and provide feedback on potential Regional concerns associated with NERC Reliability Standards and RSAWs under development.

### **Resource Requirements**

- **Personnel**

No increase in personnel is budgeted in this year. As explained in the 2017 Key Assumptions, in the unanticipated instance that ReliabilityFirst needs to develop a Regional Reliability Standard or regional criteria, ReliabilityFirst will temporarily allocate the necessary resources from the Reliability Assurance and Compliance Monitoring and Reliability Assessment and Performance Analysis Programs.

- **Contractors and Consultants**

No contractor or consultant support is budgeted in this year.

## Compliance Monitoring and Enforcement, and Organization Registration and Certification Program

<b>Compliance Monitoring, and Enforcement, and Organization Registration and Certification Program</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	45.75	44.75	(1.00)
Direct Expenses	\$ 11,009,462	\$ 10,987,785	\$ (21,677)
Indirect Expenses	\$ 4,517,711	\$ 4,518,559	\$ 848
Inc(Dec) in Fixed Assets	\$ (146,108)	\$ (84,548)	\$ 61,560
Total Funding Requirement	\$ 15,381,065	\$ 15,421,797	\$ 40,732

### Program Scope and Functional Description

The Compliance Monitoring and Enforcement, and Organization Registration and Certification Program is structured to achieve maximum effectiveness, consistency, and provide the requisite due diligence in reliability assurance activities, compliance monitoring, investigations and assessments, data and status reporting, enforcement actions, and settlement and hearing activities, in the furtherance of ReliabilityFirst's mission to assure reliability.

ReliabilityFirst has delineated the responsibility to execute the Compliance Monitoring and Enforcement, and Organization Registration and Certification Program among three primary groups: Reliability Assurance, Compliance Monitoring, and Enforcement.

The Reliability Assurance group performs various activities to drive continuous improvement; to assess risk; and scope compliance monitoring and enforcement activities in accordance with risk. These activities, discussed in further detail in the Reliability Assurance section, include: (1) conducting Inherent Risk Assessments to determine the scope and frequency of compliance monitoring activities for an entity; (2) conducting Internal Controls Evaluations to drive continuous improvement and to further refine the scope and frequency of compliance monitoring, based upon the maturity of an entity's internal controls; (3) developing lessons learned and identifying key trends to share with the industry; (4) performing registration and certification activities; and (5) conducting risk assessments and supporting mitigation plan activities associated with noncompliances (e.g., reviewing proposed mitigation plans, accepting those that contain effective corrective and preventative actions, and verifying their completion to ensure the entity has returned to compliance).

The Compliance Monitoring group monitors compliance to the NERC Reliability Standards (Reliability Standards) across 227 registered owners, operators, and users of the BES through a variety of risk-based activities. These activities, discussed in further detail in the Compliance Monitoring section, include compliance audits, spot checks, investigations, and the assessment of complaints.

The Enforcement group is responsible for performing ReliabilityFirst's delegated function to enforce, where necessary, compliance with the Reliability Standards. These efforts, discussed in further detail in the Enforcement section, involve ensuring that the selected disposition method for any noncompliance is appropriately supported by the record in light of the risk posed by the noncompliance and promotes the desired entity behavior.

Major activities for the Reliability Assurance, Compliance Monitoring, and Enforcement groups during 2017 include the continued implementation of the Risk-Based Compliance Monitoring and Enforcement Program and Risk-Based Registration, and the transition to the CIP Version 5 Standards (CIP V5). These are all joint ERO Enterprise level initiatives that benefit NERC, the Regional Entities, and the Registered Entities. ReliabilityFirst will continue to assess resource conditions and will redeploy existing staff, utilize contract resources, or provide a manpower evaluation for additional staffing to provide the resource support which is determined to be necessary to support the implementation of these major activities.

A detailed Program Scope and Functional Description for the Reliability Assurance, Compliance Monitoring, and Enforcement groups, as well as the Key Assumptions and Deliverables for each of these groups, can be found in their respective sections below.



<b>Reliability Assurance and Compliance Monitoring</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	37.50	36.50	(1.00)
Direct Expenses	\$ 9,619,253	\$ 9,626,528	\$ 7,275
Indirect Expenses	\$ 3,703,042	\$ 3,685,529	\$ (17,513)
Inc(Dec) in Fixed Assets	\$ (123,790)	\$ (73,412)	\$ 50,378
Total Funding Requirement	\$ 13,198,505	\$ 13,238,645	\$ 40,140

## Reliability Assurance

### Program Scope and Functional Description

The activities performed by the Reliability Assurance group include: Regional Risk Assessments, Inherent Risk Assessments, Internal Controls Evaluations, assist visits, organization registration and certification activities, mitigation plan acceptance, approval, and verification, reviews of self-logged minimal risk issues, processing and assessment of guided self-certifications and periodic data submittals, the review, analysis and reporting of system disturbances and events, winter preparedness evaluations, risk-harm analysis of noncompliances, risk analytics, the creation of compliance oversight plans and schedules to align monitoring activities with potential risks, the provision of industry training, BES Definition Exception Process and Self-Determined Notification activities, and serving as a technical resource for the Corporation.

### 2017 Key Assumptions

The Reliability Assurance group incorporates the regional specific common business planning assumptions as described in the *ERO Enterprise 2016 - 2019 Shared Business Plan and Budget Assumptions* document and includes the following regional assumptions:

1. Inherent Risk Assessment and Internal Controls Evaluation activities are expected to increase with the ongoing implementation of the Risk-Based Compliance Monitoring and Enforcement Program. This implementation includes completing Inherent Risk Assessments for all Registered Entities, implementing refinements to the Internal Controls Evaluation process, and ensuring that compliance oversight plans address emerging risks to reliability and are tailored to the inherent risks posed by specific entities.
2. Monitoring and management of compliance monitoring and enforcement metrics in support of NERC's Strategic Plan and Oversight Program is expected to continue.
3. The BES Definition and Exception Process and Self-Determined Notification processing was mostly implemented in 2015 and 2016, but there may continue to be new submittals in 2017. Resources in the registration area will continue to process BES Exception

Requests, Self-Determined Notifications and answer entity questions related to the revised BES Definition.

4. Entities have expressed a desire to consolidate and where applicable, increase the number of Joint Registration Organizations and Coordinated Functional Registrations. Requests are expected to increase as entities better delineate shared responsibilities and seek to achieve efficiency and effectiveness in compliance management by registering as a corporate entity. This increase will have a direct impact on the workload associated with registration and certification.
5. The Multi-Regional Registered Entity (MRRE) process expanded in 2016 and is expected to continue maturing in 2017. To date, ReliabilityFirst has been designated Lead Region for ten MRRE Groups encompassing 60 entities, and Affected Region for 13 MRRE Groups encompassing 49 entities. It is anticipated, taking into account ReliabilityFirst's location and impact on the eastern interconnection, that ReliabilityFirst may be designated as the Lead Region for additional MRREs. The expansion of the MRRE program has increased the workload associated with coordinating compliance monitoring and enforcement processes under the MRRE process.
6. Revisions to the registration process in accordance with FERC's Order approving NERC's Risk-Based Registration Initiative may result in registration staff's participation in the NERC-led review panels described in the NERC Rules of Procedure, Appendix 5A, Section III.D.
7. Assist Visits and Internal Controls Evaluations will continue to take place to collaboratively assist an entity's drive for continuous improvement and reliability excellence and its capability in key management practice areas. There was a marked increase in demand for Assist Visits in 2016, most of which focused on the transition to the CIP V5 Standards. This increased demand for Assist Visits, including requests for onsite Assist Visits at the entity's offices, is expected to continue and potentially expand in 2017.
8. There will be an effort to ensure that a specific risk targeted by a particular Reliability Standard is being adequately addressed (i.e., whether the Reliability Standard as written, monitored and enforced for compliance, is effectively mitigating the identified risk.)
9. Work with NERC will continue on the development of educational materials for Registered Entities regarding the Risk-Based Compliance Monitoring and Enforcement Program, Risk-Based Registration, and new and revised Reliability Standards.
10. There will be continued ERO Enterprise-wide collaboration and implementation of consistent risk-based compliance monitoring and enforcement practices.

### **2017 Key Deliverables**

- Process all registration requests and implement the Risk-Based Registration Initiative.
- Process BES Exception Requests and Self-Determined Notification submittals.

- Provide technical assessment of guided self-certifications and periodic data submittals.
- Provide technical subject matter expertise and support for compliance monitoring activities, regional outreach activities, and other initiatives as identified within ReliabilityFirst and/or the ERO.
- Support the development and integration of advanced analytical capabilities for identifying and determining reliability risks, and conducting various risk assessments (i.e. Regional Risk Assessments, Inherent Risk Assessments, and Risk-Harm Assessments).
- Support ERO Enterprise-wide data collection and analysis efforts.
- Collect and validate data for, review, and analyze system events and disturbances as described in the NERC ERO Event Analysis Process.
- For system events and disturbances, cooperate with NERC and FERC staff and other Regional staff to ensure root causes, corrective actions, lessons learned, and recommendations are identified and shared across the ERO Enterprise and the industry.
- For system events and disturbances, review and make a timely decision regarding whether compliance monitoring, enforcement, or outreach actions need to be undertaken (considering the significance of the event or disturbance and its risk to the BES).
- Collect and review disturbance reports as required in NERC Standard EOP-004 and as required by the Department of Energy in form OE-417.
- Participate in the recently developed annual Winter Preparedness program designed to help ensure the readiness of generating units to perform during extreme cold weather, and Summer Preparedness program designed to help ensure the readiness of the transmission system during extreme hot weather.
- Support the ongoing implementation of the Risk-Based Compliance Monitoring and Enforcement Program, with a focus on the ongoing assessment of ReliabilityFirst Regional Risk Elements, and maturation of the Inherent Risk Assessment and Internal Controls Evaluation processes.
- Perform Inherent Risk Assessments of entities in alignment with the ERO Inherent Risk Assessment guide to define the scope, recommended tool (audit, spot check, self-certification, etc.), and frequency of compliance monitoring activities for a given entity.
- Conduct risk-harm assessments and develop associated risk statements for all possible non-compliances, to assess the potential risk posed by each noncompliance and inform the proper enforcement action(s).
- Perform mitigation plan activities in an effort to return entities to compliance and prevent reoccurrence by:
  - Reviewing proposed mitigation plans and accepting those that contain effective corrective and preventative actions.

- Communicating with Enforcement and the entity throughout the mitigation plan review process to ensure defined corrective and preventative actions will mitigate the violation.
- Verifying mitigation plan completion through the evaluation of evidence provided by the entity to demonstrate that agreed-to actions have been implemented according to established milestones.
- Conducting outreach activities to help entities move beyond baseline compliance.
- Perform reviews of self-logged noncompliances, submitted quarterly by entities granted logging privileges, to assess the non-compliances and their associated risk determinations and mitigating activities.
- Support the development, training, and outreach for entities to successfully transition to the CIP V5 Standards.
- Perform assist visits, support two regional compliance workshops, and monthly “open” compliance calls.
- Support the NERC Security Review Program, as requested.
- Support the integration and use of the ERO Enterprise Learning Management System.
- Assist NERC with the coordination, planning, delivery, and management of training and outreach activities across the ERO Enterprise in concert with Region-specific training and outreach activities.
- Participate in the ERO Enterprise staff learning development process through the ERO working groups and functional area program leaders.

## Resource Requirements

- **Personnel**

A decrease of one FTE is budgeted for this year. This FTE is being reallocated to the Situation Awareness and Infrastructure Security Program in order to support advanced analytic capabilities.

In the event the workload exceeds available resources, contractors may be used to temporarily supplement staff. There is a possible need for additional resources to address an increase in the demand for Assist Visits and Internal Controls Evaluations from Registered Entities as these programs become more fully realized.

- **Contractors and Consultants**

Contractor and consultant support is budgeted to assist in Risk-Harm Assessments, Mitigation Plan reviews, and System Event review activities where needed.

## Compliance Monitoring

### Program Scope and Functional Description

The activities performed by the Compliance Monitoring group to help ensure the reliability, security, and resiliency of the BES include: Operations/Planning and Critical Infrastructure Protection (CIP) audits, guided self-certifications, complaints, investigations, spot checks, and management of Technical Feasibility Exceptions (TFEs). The Compliance Monitoring group also reviews and finalizes compliance oversight plans and serves as a subject matter expert and technical resource for the Corporation.

### 2017 Key Assumptions

The Compliance Monitoring group incorporates the regional specific common business planning assumptions as described in the *ERO Enterprise 2016 - 2019 Shared Business Plan and Budget Assumptions* document and includes the following regional assumptions:

1. Assure reliability by monitoring compliance to the Reliability Standards for applicable entities through audits and/or spot checks, using a risk-based approach, ensuring that all pre-audit, onsite or offsite, and post audit activities are completed per the established process and timelines.
2. Pursuant to the Risk-Based Compliance Monitoring and Enforcement Program, all entities will have an Inherent Risk Assessment completed to determine the scope of their engagement. Audits will continue under the on-going schedule to complete the Balancing Authority, Transmission Operator, and Reliability Coordinator audits on a three year cycle. All entities that are registered for other functions will be assessed based upon their Inherent Risk Assessment to determine if their engagement will continue or be delayed. Audit scopes will be determined through an assessment of an entity's risk profile (i.e. the Inherent Risk Assessment and an optional Internal Controls Evaluation). This change is not expected to result in a reduction in resource needs during the 2017 through 2019 timeframe.
3. Perform a Compliance Assessment Review of each system event with special focus and analysis of Category 2 events and above. This analysis is not expected to affect existing resources in either the Operations/Planning or Critical Infrastructure Protection (CIP) areas.
4. The use of spot checks and guided self-certifications, when determined to be the most effective and efficient means to assure significant reliability risks do not exist, are expected to increase as risk-based monitoring is implemented. This should have a minor effect on overall resource requirements, but may require more frequent engagements with entities.
5. ReliabilityFirst will continue to implement the guidance and process steps contained in the ERO Auditor Handbook and Checklist, and other ERO Enterprise tools. ReliabilityFirst will support the training requirements necessary to meet the criteria set forth by the ERO

Auditor Manual and Handbook and the Compliance Auditor Capabilities and Competency Guide.

6. ReliabilityFirst and NERC will continue to collaborate and define ongoing training needs, priorities, and implementation schedules for the compliance staff. Through NERC training and other available training courses, ReliabilityFirst will provide the necessary training to continue to provide a credible, skilled, competent, and respected compliance monitoring staff.
7. ReliabilityFirst will continue to seek and implement initiatives to increase efficiencies and productivity. Staff will continue to collaborate with NERC to build an ERO Enterprise-wide audit management tool. This will improve the efficiency of monitoring processes and NERC oversight for all the Regions.
8. The Final FERC Rules approving the CIP V5 Standards have established an effective date of July 1, 2016. There will be an additional workload to provide outreach and training to entities owning Low Impact BES Cyber Systems who are new to the monitoring process; and to all entities on the effective implementation of CIP V5. This additional workload materialized in 2016 and is expected to continue throughout 2017. Existing CIP staff will continue to manage and monitor the impact, which will guide the development of any future resource recommendations.
9. The time required to complete the onsite CIP audit reviews for the CIP V5 Standards includes site and field visits based on the scope of the audit and whether initial evidence is sufficient to substantiate that an entity is compliant. This may add workload to the CIP Monitoring Program in 2017.
10. With FERC approval of CIP V5, the ERO Enterprise continues to evaluate:
  - a. Whether the approved changes in CIP V5 will materially change the amount of time Regional Entities will need to spend on compliance monitoring activities for entities with High, Medium, and Low BES Assets, and BES Cyber Systems, including whether field visits will be required; and
  - b. Whether material changes or additions are going to be required by the Regional Entity and NERC outreach efforts to communicate requirements to these entities.Results of this evaluation may impact the audit scope, regional resource requirements, and expectations that will need to be factored into future resource recommendations for the budget.
11. The NERC Rules of Procedure Appendix 4D was revised and approved by FERC due to a change in the applicable TFE requirements in the CIP V5 Standards. This will require webCDMS tool updates and internal process modifications. The immediate impact of these required changes is currently being analyzed. ReliabilityFirst will continue to support the TFE program with existing CIP staff and will monitor the impact, which will guide the development of any future resource recommendations.

12. CIP Staff will support ERO and Regional outreach and training efforts including the NERC Security Reliability Program, CIP V5 Small Group Advisory Sessions, ReliabilityFirst CIP V5 Workshops, ReliabilityFirst CIP V5 Focus Group Sessions, and CIP-related Assist Visits.

### **2017 Key Deliverables**

- Manage all compliance activities in a risk-based, fair, and consistent manner, affording all entities appropriate due process.
- Conduct thorough and professional compliance audits consistently with all Regions through the incorporation of the Auditor Handbook and Checklist. Audit teams will consist of staff supplemented, when necessary, by independent contractors.
- Prepare and distribute compliance monitoring process reports to NERC and Registered Entities.
- Ensure all auditors receive training and meet all NERC auditor training requirements.
- Provide efficiencies in compliance monitoring processes through continued auditor training and process improvements.
- Support two reliability workshops, monthly "open" compliance calls, CIP V5 Outreach Workshops and training sessions, assist visits (as needed), and provide Registered Entity assistance as required.
- CIP audits will be performed as separate audits from the Operations/Planning audits unless agreed to otherwise between ReliabilityFirst and the audited entity. The number of CIP audits targeted for 2017 is defined below:
  - 9 CIP audits of entities on the three year cycle (onsite).
    - These audits will be conducted on larger entities with High, Medium, and Low impact BES Cyber Systems.
  - 14 CIP audits of entities historically on the six year cycle (on-site or offsite).
    - These audits will be conducted on smaller entities with Medium and Low impact BES Cyber Systems and may require on-site visits as new assets will be in scope.
- The number of Operations/Planning engagements planned for 2017 is defined below and will be based on the entity's Inherent Risk Assessment and risk the entity poses to the BES.
  - 6 audits of entities on the three year cycle (onsite).
  - 42 audits of entities based upon the Inherent Risk Assessment (old six year entities).
  - Participating as Affected Regional Entity on MRRE Spot Checks, Guided Self-Certifications and Audits – to be determined, based upon risk and the entity's compliance oversight program.

- Spot Checks and Guided Self-Certifications will be used to assess performance to selected Reliability Standards when an audit is delayed and on an as-needed basis. Guidance on when a Spot Check or Guided Self-Certification may be appropriate is outlined in the annual CMEP Implementation Plan and will be augmented by ReliabilityFirst's Regional Risk Assessment, Inherent Risk Assessments, and results from compliance monitoring activities that identify emerging risks. Spot Checks and Guided Self-Certifications may also be used to confirm prior self-certifications, self-reports, the status of mitigation plans or agreed-to mitigation activities associated with settlement agreements.
- Manage TFE processing in accordance with the revised NERC Rules of Procedure Appendix 4D modified as a result of the change of applicable requirements under CIP V5.
- Compliance audits of CIP Standards will continue to include the review of Approved and Terminated TFEs. ReliabilityFirst plans to continue incorporating the review of these TFEs into the existing audit review schedule for 2017 and beyond.
- Participate in the 2017 NERC Security Review Program CIP Outreach sessions. The expectation is that NERC will conduct two to three security reviews of entities registered in the ReliabilityFirst region in 2017.
- Support NERC in continuing the training and outreach for Registered Entities to successfully implement the CIP Version 5 standards and Operations/Planning Standards.
- Complete Compliance Assessment Reviews according to the ReliabilityFirst Compliance Assessment process, to determine if there is a need for the initiation of a compliance monitoring process.

### **Resource Requirements**

- **Personnel**

In the event the workload exceeds available resources, contractors may be used to temporarily supplement staff. The workload in the CIP monitoring area will be continually evaluated to ensure the availability of necessary resources.

- **Contractors and Consultants**

Contractor and consultant support is budgeted in 2017 to temporarily supplement staff in the event workload exceeds available resources.



**Reliability Assurance and Compliance Monitoring Budget Detail**

The following table shows funding sources and related expenses for the Reliability Assurance and Compliance Monitoring section of the 2017 Business Plan and Budget. Explanations of variances by expense category are included with the Supplemental Financial Tables found in Section B.

<b>2016 Budget and Projection, and 2017 Budget</b>					
<b>Reliability Assurance and Compliance Monitoring</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ReliabilityFirstFunding</b>					
ERO Assessments	\$ 12,711,363	\$ 12,711,363	\$ -	\$ 12,821,050	\$ 109,687
Penalty Sanctions	487,142	487,142	-	417,595	(69,546)
<b>Total ReliabilityFirst Funding</b>	<b>\$ 13,198,505</b>	<b>\$ 13,198,505</b>	<b>\$ -</b>	<b>\$ 13,238,645</b>	<b>\$ 40,140</b>
Membership Dues	-	-	-	-	-
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding</b>	<b>13,198,505</b>	<b>13,198,505</b>	<b>-</b>	<b>13,238,645</b>	<b>40,140</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 6,157,443	\$ 6,000,209	\$ (157,235)	\$ 6,303,496	\$ 146,053
Payroll Taxes	383,693	361,870	(21,823)	374,528	(9,165)
Benefits	924,660	861,407	(63,253)	950,873	26,213
Retirement Costs	963,975	925,560	(38,415)	987,840	23,865
<b>Total Personnel Expenses</b>	<b>\$ 8,429,771</b>	<b>\$ 8,149,046</b>	<b>\$ (280,726)</b>	<b>\$ 8,616,737</b>	<b>\$ 186,966</b>
<b>Meeting Expenses</b>					
Meetings	\$ 21,850	\$ 21,850	\$ -	\$ 18,250	\$ (3,600)
Travel	564,000	564,000	-	513,000	(51,000)
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 585,850</b>	<b>\$ 585,850</b>	<b>\$ -</b>	<b>\$ 531,250</b>	<b>\$ (54,600)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 243,600	\$ 243,600	\$ -	\$ 152,400	\$ (91,200)
Office Rent	-	-	-	-	-
Office Costs	336,287	336,287	-	297,897	(38,390)
Professional Services	-	-	-	-	-
Miscellaneous	1,400	1,400	-	4,100	2,700
Depreciation	22,345	22,345	-	24,144	1,799
<b>Total Operating Expenses</b>	<b>\$ 603,632</b>	<b>\$ 603,632</b>	<b>\$ -</b>	<b>\$ 478,541</b>	<b>\$ (125,091)</b>
<b>Total Direct Expenses</b>	<b>\$ 9,619,253</b>	<b>\$ 9,338,528</b>	<b>\$ (280,726)</b>	<b>\$ 9,626,528</b>	<b>\$ 7,275</b>
<b>Indirect Expenses</b>	<b>\$ 3,703,042</b>	<b>\$ 3,622,464</b>	<b>\$ (80,578)</b>	<b>\$ 3,685,529</b>	<b>\$ (17,513)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses</b>	<b>\$ 13,322,295</b>	<b>\$ 12,960,991</b>	<b>\$ (361,304)</b>	<b>\$ 13,312,057</b>	<b>\$ (10,238)</b>
<b>Change in Assets</b>	<b>\$ (123,790)</b>	<b>\$ 237,514</b>	<b>\$ 361,304</b>	<b>\$ (73,412)</b>	<b>\$ 50,378</b>
<b>Fixed Assets</b>					
Depreciation	(22,345)	(22,345)	-	(24,144)	(1,799)
Computer Hardware & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
<b>Total Fixed Assets</b>	<b>\$ (22,345)</b>	<b>\$ (22,345)</b>	<b>\$ -</b>	<b>\$ (24,144)</b>	<b>\$ (1,799)</b>
Allocation of Fixed Assets	\$ (101,445)	\$ (99,678)	1,767	\$ (49,268)	\$ 52,177
<b>Inc/(Dec) in Fixed Assets</b>	<b>\$ (123,790)</b>	<b>\$ (122,023)</b>	<b>\$ 1,767</b>	<b>\$ (73,412)</b>	<b>\$ 50,378</b>
<b>Total Budget</b>	<b>\$ 13,198,505</b>	<b>\$ 12,838,969</b>	<b>\$ (359,536)</b>	<b>\$ 13,238,645</b>	<b>\$ 40,140</b>
<b>Total Change in Working Capital</b>	<b>\$ (0)</b>	<b>\$ 359,536</b>	<b>\$ 359,536</b>	<b>\$ -</b>	<b>\$ 0</b>

**Enforcement**

	<b>Enforcement</b> (in whole dollars)		
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	8.25	8.25	0.00
Direct Expenses	\$ 1,390,209	\$ 1,361,257	\$ (28,952)
Indirect Expenses	\$ 814,669	\$ 833,031	\$ 18,362
Inc(Dec) in Fixed Assets	\$ (22,318)	\$ (11,136)	\$ 11,182
Total Funding Requirement	\$ 2,182,560	\$ 2,183,152	\$ 592

**Program Scope and Functional Description**

The Enforcement group performs ReliabilityFirst's delegated function to enforce, where necessary, compliance with the Reliability Standards. This effort involves ensuring that the selected disposition method for any noncompliance is appropriately supported by the record in light of the risk posed by the noncompliance and promotes the desired entity behaviors to enhance reliability.

In the event that a noncompliance is enforced, Enforcement staff is responsible for (1) drafting and negotiating with entities all necessary disposition documents; (2) performing hearings where necessary; (3) ensuring all requisite notices are timely issued; (4) post-filing support and advocacy with NERC and FERC; and (5) ensuring that the record and related disposition documents comply with all applicable (a) FERC orders, rules, and regulations, (b) NERC Rules of Procedures and Appendices, guidance, and ERO-wide program documents, and (c) ReliabilityFirst policies and procedures (collectively, "applicable orders, rules, and procedures"). In the event that a noncompliance is not enforced (e.g., compliance exception or dismissal), Enforcement staff is responsible for (1) drafting all necessary internal disposition reports and external disposition documents and notices; (2) ensuring all requisite notices are timely issued; (3) post-filing support and advocacy with NERC and FERC; and (4) ensuring that the record and related disposition documents comply with all applicable orders, rules, and procedures.

For continuity and stakeholder convenience, Enforcement staff also serve as a single point of contact for entities for noncompliance-related activities.

ReliabilityFirst frequently serves as the lead Region in resolving multi-regional enforcement actions for significant Registered Entities. Consequently, Enforcement staff devotes substantial resources to coordinate the enforcement work of various Regions, obtain consensus on a myriad of issues, and negotiate acceptable resolutions.

Enforcement staff regularly works with FERC, NERC, the other Regions, and industry to shape effective enforcement policies that drive desired entity behavior. This work includes drafting, or supporting the drafting, of ERO-wide enforcement program documents and enforcement related regulatory filings, presenting and training on enforcement programs in various forums, and

monitoring and managing enforcement metrics in support of NERC's strategic Plan and Oversight Program. Enforcement staff also works with NERC and the other Regions to promote and otherwise ensure collaboration and implementation of consistent enforcement practices focused on higher reliability risks.

The Enforcement group has evaluated its processes and staffing levels and has determined that, since the number of noncompliances appear to be reaching more of a steady state and there has been implementation of various process improvements, Enforcement staff levels are adequate to ensure that noncompliances are processed as quickly as practicable consistent with their circumstances.

Although the number of noncompliances processed has remained steady over the past two years, ReliabilityFirst anticipates there may be an increase in the number of noncompliances for a period of time when CIP V5 becomes enforceable due to the increased scope of the assets covered. ReliabilityFirst presently anticipates that enforcement work in this regard will mostly occur in the compliance exception space and entail enforcement ensuring that adequate records are internally developed and maintained.

### **2017 Key Assumptions**

The Enforcement group incorporates the regional specific common business planning assumptions as described in the *ERO Enterprise 2016 - 2019 Shared Business Plan and Budget Assumptions* document and includes the following regional assumptions:

1. The number of non-CIP violations will remain steady, and the number of CIP violations may increase leading up to CIP Version 5 implementation and for a period of time thereafter.
2. Enforcement staff levels are adequate to ensure the completion of the activities described in the Program Scope and Functional Description. If noncompliances increase in the future, additional Enforcement staff may be needed to avoid the creation of a backlog.
3. Complex, higher-risk noncompliances disposed as Settlement Agreements will require approximately 50% of Enforcement resources. These matters often involve more complex mitigation, above and beyond action items, and the negotiation of sanctions.
4. The Find Fix and Track (FFT) disposition method will be used for moderate risk issues. It will continue to be used less in favor of the Compliance Exception disposition method, which will be used for almost all qualified minimal risk noncompliances.
5. Enforcement staff will spend significant time ensuring adequate records are created for minimal risk issues. The expenditure of this time will be driven by anticipated receipt of minimal risk issues for CIP Version 5 as well as increased participation in the self-logging program and case by case compliance exception mechanisms.

6. ReliabilityFirst will frequently serve as the lead Region for multi-regional Registered Entities and devote substantial resources to coordinate enforcement work and negotiate acceptable solutions among the Regions.
7. Enforcement staff will continue to work with FERC, NERC, the other Regions, and the industry to shape effective enforcement policies that drive desired behavior and ensure consistency.
8. The number of hearings to be conducted in 2017 is unknown, and therefore no internal or external resources have been budgeted for hearings.

### **2017 Key Deliverables**

- Continue to focus on resolving enforcement actions in a thoughtful, risk-based, reliability focused manner.
- Ensure that the use of discretion in Enforcement is internally documented, repeatable, and consistent with NERC directives and FERC orders, rules, and regulations.
- Conduct initial violation fact and circumstance reviews and communicate with the entity through each step of the enforcement process.
- Continue to work with the Reliability Assurance group to refine the risk-harm assessment process, a key input into enforcement decision making.
- Continue to increase efficiency, through process improvement, in dispositioning enforcement actions and preparing settlement agreements.
- Continue to work with NERC and the other Regions to shape a well-reasoned Enforcement philosophy that results in uniform, repeatable, transparent, and reliability-focused approaches.
- Use knowledge obtained in the context of Inherent Risk Assessments and Internal Controls Evaluations to inform all of its decision-making.

### **Resource Requirements**

- **Personnel**

No increase in personnel is budgeted in this year.

- **Contractors and Consultants**

No contractor and consultant support is budgeted in this year.

**Enforcement Budget Detail**

The following table shows funding sources and related expenses for the Enforcement section of the *2017 Business Plan and Budget*. Explanations of variances by expense category are included with the Supplemental Financial Tables found in Section B.

<b>2016 Budget and Projection, and 2017 Budget</b>					
<b>Enforcement</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ReliabilityFirstFunding</b>					
ERO Assessments	\$ 2,075,389	\$ 2,075,389	\$ -	\$ 2,088,764	\$ 13,375
Penalty Sanctions	107,171	107,171	-	94,388	(12,783)
<b>Total ReliabilityFirst Funding</b>	<b>\$ 2,182,560</b>	<b>\$ 2,182,560</b>	<b>\$ -</b>	<b>\$ 2,183,152</b>	<b>\$ 592</b>
Membership Dues	-	-	-	-	-
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding</b>	<b>2,182,560</b>	<b>2,182,560</b>	<b>-</b>	<b>2,183,152</b>	<b>592</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 944,027	\$ 922,770	\$ (21,257)	\$ 962,026	\$ 17,999
Payroll Taxes	67,401	64,639	(2,762)	69,066	1,665
Benefits	173,031	142,729	(30,302)	147,725	(25,306)
Retirement Costs	150,897	145,927	(4,970)	153,346	2,449
<b>Total Personnel Expenses</b>	<b>\$ 1,335,356</b>	<b>\$ 1,276,065</b>	<b>\$ (59,291)</b>	<b>\$ 1,332,163</b>	<b>\$ (3,193)</b>
<b>Meeting Expenses</b>					
Meetings	\$ 5,500	\$ 5,500	\$ -	\$ 1,500	\$ (4,000)
Travel	40,000	40,000	-	17,000	(23,000)
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 45,500</b>	<b>\$ 45,500</b>	<b>\$ -</b>	<b>\$ 18,500</b>	<b>\$ (27,000)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	-	-	-	-	-
Office Rent	-	-	-	-	-
Office Costs	8,853	8,853	-	9,694	841
Professional Services	-	-	-	-	-
Miscellaneous	500	500	-	900	400
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 9,353</b>	<b>\$ 9,353</b>	<b>\$ -</b>	<b>\$ 10,594</b>	<b>\$ 1,241</b>
<b>Total Direct Expenses</b>	<b>\$ 1,390,209</b>	<b>\$ 1,330,918</b>	<b>\$ (59,291)</b>	<b>\$ 1,361,257</b>	<b>\$ (28,952)</b>
<b>Indirect Expenses</b>	<b>\$ 814,669</b>	<b>\$ 857,453</b>	<b>\$ 42,784</b>	<b>\$ 833,031</b>	<b>\$ 18,362</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses</b>	<b>\$ 2,204,878</b>	<b>\$ 2,188,371</b>	<b>\$ (16,507)</b>	<b>\$ 2,194,288</b>	<b>\$ (10,590)</b>
<b>Change in Assets</b>	<b>\$ (22,318)</b>	<b>\$ (5,811)</b>	<b>\$ 16,507</b>	<b>\$ (11,136)</b>	<b>\$ 11,182</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer Hardware & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
	\$ -	\$ -	\$ -	\$ -	\$ -
Allocation of Fixed Assets	\$ (22,318)	\$ (23,594)	(1,276)	\$ (11,136)	\$ 11,182
<b>Inc/(Dec) in Fixed Assets</b>	<b>\$ (22,318)</b>	<b>\$ (23,594)</b>	<b>\$ (1,276)</b>	<b>\$ (11,136)</b>	<b>\$ 11,182</b>
<b>Total Budget</b>	<b>\$ 2,182,560</b>	<b>\$ 2,164,777</b>	<b>\$ (17,783)</b>	<b>\$ 2,183,152</b>	<b>\$ 592</b>
<b>Total Change in Working Capital</b>	<b>\$ -</b>	<b>\$ 17,783</b>	<b>\$ 17,783</b>	<b>\$ -</b>	<b>\$ 0</b>

## Reliability Assessment and Performance Analysis Program

Reliability Assessments and Performance Analysis Program (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	8.35	8.35	0.00
Direct Expenses	\$ 1,895,704	\$ 2,095,713	\$ 200,009
Indirect Expenses	\$ 824,544	\$ 843,128	\$ 18,584
Inc(Dec) in Fixed Assets	\$ (22,588)	\$ (13,648)	\$ 8,940
Total Funding Requirement	\$ 2,697,660	\$ 2,925,193	\$ 227,533

### Program Scope and Functional Description

ReliabilityFirst's Reliability Assessment and Performance Analysis (RAPA) staff independently analyzes, assesses, and reports on the reliability and adequacy of the BES within the ReliabilityFirst footprint. This includes performance of seasonal, near-term and long-term resource and transmission assessments, special investigations as warranted, and collection and dissemination of data, lessons learned, and other information. The RAPA program provides resources and data input for the technical analyses and support of the many risk based activities described in the Reliability Assurance and Compliance Monitoring sections.

### 2017 Key Assumptions

The Reliability Assessment and Performance Analysis Program incorporates the regional specific common business planning assumptions as described in the *ERO Enterprise 2016 - 2019 Shared Business Plan and Budget Assumptions* document for the 2017 budget cycle. There are no additional assumptions unique to the Reliability Assessment and Performance Program.

### 2017 Key Deliverables

- Assessments of Reliability Performance
  - Perform seasonal (summer and winter) and long term resource adequacy assessments and produce reports.
  - Perform seasonal (summer and winter) transmission assessment studies, near-term (1 through 5 years into the future) and long-term (5 through 10 years into the future) transmission assessments, and produce reports.
  - Collect data and produce assessment reports for the NERC Reliability Assessment Subcommittee's short-term, long-term, and post-seasonal operational reports.
  - Provide technical support for the ERO's expanded and enhanced system studies and help perform analyses as needed.
  - Work with neighboring Regional Entities within the Eastern Interconnection Reliability Assessment Group (ERAG) to perform Eastern Interconnection assessment studies and produce reports.

- Update power flow base case models as needed for regional study efforts.
- Reporting Requirements
  - Submit ReliabilityFirst load, capacity, and transmission data and power flow base cases annually for the DOE EIA-411 report.
  - Assist NERC in the verification and validation of data for the Transmission Availability Data System (TADS), Generator Availability Data System (GADS), Demand Response Availability Data System (DADS), and the Misoperation Information Data Analysis System (MIDAS) of protection system misoperations.
  - Assist NERC in the verification and validation of data for the Reliability Assessment Data System (RADS). This project has been created to help automate the data collection, verification, validation, submission, and analysis process for the reliability assessment reports.
- Other Requirements and Activities
  - Publish any lessons learned that are developed from misoperation reporting and other sources.
  - Continue to actively participate in ERAG, which includes the Management Committee, MMWG, and the study groups.
  - Analyze protective relay misoperation information and track corrective action plans, as reported in the NERC MIDAS system. Facilitate a peer review process of this data via the RP Protection Subcommittee.
  - Conduct initial and periodic Special Protection System reviews and maintain a database of regional Special Protection Systems.
  - Conduct under-frequency load shed (UFLS) reviews.
  - Conduct under-voltage load shed (UVLS) reviews.
  - Develop and maintain a linear contingency database for transmission assessment studies.
  - In support of the ERO, actively participate in NERC committees, subcommittees, task forces, and other technical groups, such as the Planning Committee, Operating Committee, and associated subgroups, as well as the ERO-RAPA group.
  - Continue to support stakeholder participation through various regional technical groups. The Reliability Committee is the primary technical advisory body to the ReliabilityFirst Board of Directors. Other technical subcommittees analyze and discuss technical issues related to reliability assessments, disturbance reporting, event analysis, and other technical and assessment related activities. These groups provide a focused technical forum that facilitates: (1) sharing lessons learned; (2) discussing success stories; and (3) addressing relevant technical issues that are pertinent to that group's expertise and work related to the BES.

- Provide the various organizational groups with information and presentations to improve human performance.
- Provide Registered Entities with tailored training through annual workshops.
- Provide knowledge, techniques, and data input in support of the risk-based Regional activities, including the Inherent Risk Assessments and Regional Risk Assessments) efforts.

### **Resource Requirements**

- **Personnel**

No increase in personnel is budgeted in this year.

- **Contractors and Consultants**

Contractor and consulting support is budgeted to produce:

- ERAG steady state and dynamic base case models through the MMWG processes,
- ERAG event analysis process(es) and tools to develop steady state and dynamic models for analyzing system disturbances, and
- ERAG annual assessment studies.



## Reliability Assessment and Performance Analysis Program Budget Detail

The following table lists funding sources and related expenses for the Reliability Assessment and Performance Analysis section of the 2017 Business Plan and Budget. Explanations of variances by expense category are included with the Supplemental Financial Tables found in Section B.

<b>2016 Budget and Projection, and 2017 Budget</b>					
<b>Reliability Assessment and Performance Analysis</b>					
Funding	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>ReliabilityFirstFunding</b>					
ERO Assessments	\$ 2,589,189	\$ 2,589,189	\$ -	\$ 2,829,661	\$ 240,472
Penalty Sanctions	108,471	108,471	-	95,532	(12,939)
<b>Total ReliabilityFirst Funding</b>	<b>\$ 2,697,660</b>	<b>\$ 2,697,660</b>	<b>\$ -</b>	<b>\$ 2,925,193</b>	<b>\$ 227,533</b>
Membership Dues	-	-	-	-	-
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding</b>	<b>2,697,660</b>	<b>2,697,660</b>	<b>-</b>	<b>2,925,193</b>	<b>227,533</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 1,251,776	\$ 1,277,239	\$ 25,463	\$ 1,358,695	\$ 106,919
Payroll Taxes	80,732	78,443	(2,289)	83,237	2,505
Benefits	133,015	142,473	9,458	153,895	20,880
Retirement Costs	199,898	192,376	(7,522)	216,409	16,511
<b>Total Personnel Expenses</b>	<b>\$ 1,665,421</b>	<b>\$ 1,690,531</b>	<b>\$ 25,110</b>	<b>\$ 1,812,237</b>	<b>\$ 146,816</b>
<b>Meeting Expenses</b>					
Meetings	\$ 11,500	\$ 11,500	\$ -	\$ 18,500	\$ 7,000
Travel	92,500	92,500	-	110,000	17,500
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 104,000</b>	<b>\$ 104,000</b>	<b>\$ -</b>	<b>\$ 128,500</b>	<b>\$ 24,500</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 91,280	\$ 91,280	\$ -	\$ 110,012	\$ 18,732
Office Rent	-	-	-	-	-
Office Costs	34,883	34,883	-	42,487	7,604
Professional Services	-	-	-	-	-
Miscellaneous	120	120	-	100	(20)
Depreciation	-	-	-	2,377	2,377
<b>Total Operating Expenses</b>	<b>\$ 126,283</b>	<b>\$ 126,283</b>	<b>\$ -</b>	<b>\$ 154,976</b>	<b>\$ 28,693</b>
<b>Total Direct Expenses</b>	<b>\$ 1,895,704</b>	<b>\$ 1,920,814</b>	<b>\$ 25,110</b>	<b>\$ 2,095,713</b>	<b>\$ 200,009</b>
<b>Indirect Expenses</b>	<b>\$ 824,544</b>	<b>\$ 833,496</b>	<b>\$ 8,952</b>	<b>\$ 843,128</b>	<b>\$ 18,584</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses</b>	<b>\$ 2,720,248</b>	<b>\$ 2,754,310</b>	<b>\$ 34,062</b>	<b>\$ 2,938,841</b>	<b>\$ 218,593</b>
<b>Change in Assets</b>	<b>\$ (22,588)</b>	<b>\$ (56,650)</b>	<b>\$ (34,062)</b>	<b>\$ (13,648)</b>	<b>\$ 8,940</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	(2,377)	(2,377)
Computer Hardware & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
<b>Total Fixed Assets</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (2,377)</b>	<b>\$ (2,377)</b>
Allocation of Fixed Assets	\$ (22,588)	\$ (22,935)	(347)	\$ (11,271)	\$ 11,317
<b>Inc/(Dec) in Fixed Assets</b>	<b>\$ (22,588)</b>	<b>\$ (22,935)</b>	<b>\$ (347)</b>	<b>\$ (13,648)</b>	<b>\$ 8,940</b>
<b>Total Budget</b>	<b>\$ 2,697,660</b>	<b>\$ 2,731,375</b>	<b>\$ 33,715</b>	<b>\$ 2,925,193</b>	<b>\$ 227,533</b>
<b>Total Change in Working Capital</b>	<b>\$ -</b>	<b>\$ (33,715)</b>	<b>\$ (33,715)</b>	<b>\$ -</b>	<b>\$ 0</b>

## Training, Education, and Operator Certification Program

<b>Training, Education and Operator Certification Program</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	3.00	3.00	0.00
Direct Expenses	\$ 717,970	\$ 676,138	\$ (41,832)
Indirect Expenses	\$ 296,243	\$ 302,920	\$ 6,677
Inc(Dec) in Fixed Assets	\$ (8,116)	\$ (4,049)	\$ 4,067
Total Funding Requirement	\$ 1,006,097	\$ 975,009	\$ (31,088)

### Program Scope and Functional Description

The ReliabilityFirst Training and Education Program focuses on providing relevant training to entities operating in the ReliabilityFirst region. This training is structured to provide timely information in a concise format to enable participation at all levels within an organization. The Instruction System Designer participates in the NERC Staff Training Group, which identifies training needs of the industry and Regional staff. ReliabilityFirst does not provide system operator certification training, as it is provided by the RTOs within the Region.

### 2017 Key Assumptions

The Training and Education Program incorporates the regional specific common business planning assumptions as described in the *ERO Enterprise 2016 - 2019 Shared Business Plan and Budget Assumptions* document. There are no additional assumptions unique to the ReliabilityFirst Training and Education Program.

### 2017 Key Deliverables

- Board of Directors Training
  - Per the Bylaws of ReliabilityFirst, the Board of Directors receives training annually to keep current with activities within the ReliabilityFirst footprint and to stay abreast of changes affecting the industry. This training requirement also includes orientation training for new directors regarding the organization, governance practices, goals, and objectives.
- Industry Education
  - ReliabilityFirst will continue its effort to increase and add greater focus to its activities aimed at helping entities achieve excellence in reliability. These activities include:
    - The development and publication of lessons learned/best practices from system events.
    - Guidance on the CIP V5 reliability standards.

- Guidance on the implementation of the Risk-Based Compliance Monitoring and Enforcement Program, including on Inherent Risk Assessments and Internal Controls Evaluations
  - Identification of common root causes of Reliability Standards violations.
  - Efforts to better prepare entities for compliance audits and enforcement activities.
  - Open compliance and enforcement calls that cover a span of compliance, CIP V5 transition and enforcement related topics.
  - Increased focus on any lessons learned or trends identified from reliability assessments.
- Industry Workshops
    - Continue workshops and forums to allow for free exchange of information between ReliabilityFirst and its stakeholders. Workshops to be conducted in 2017 include:
      - Two Reliability workshops (spring and fall) to promote a culture of reliability focusing on security, resiliency, risk management, and targeted discussion on methods to demonstrate compliance.
      - Open forums to provide insight into new Reliability Standards developed and approved by the industry, changes in the Compliance Monitoring and Enforcement Program, Critical Infrastructure Protection issues, or other topics requested by entities.
      - CIP V5 Standards Seminar to provide insight into the evolution of these Standards and to provide a forum for entities to share thoughts, problems, and solutions.

### **Resource Requirements**

- **Personnel**

No increase in personnel is budgeted in this year, however, there was a redeployment in personnel designated to this program.

- **Contractors and Consultants**

No contractor and consultant support is budgeted in this year.

## Training, Education, and Operator Certification Program Budget Detail

The following table shows funding sources and related expenses for the Training, Education, and Operator Certification section of the *2017 Business Plan and Budget*. Explanations of variances by expense category are included with the Supplemental Financial Tables found in Section B.

<b>2016 Budget and Projection, and 2017 Budget</b>					
<b>Training, Education, and Operator Certification Program</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ReliabilityFirst Funding</b>					
ERO Assessments	\$ 967,126	\$ 967,126	\$ -	\$ 940,686	\$ (26,440)
Penalty Sanctions	38,971	38,971	-	34,323	(4,648)
<b>Total ReliabilityFirst Funding</b>	<b>\$ 1,006,097</b>	<b>\$ 1,006,097</b>	<b>\$ -</b>	<b>\$ 975,009</b>	<b>\$ (31,088)</b>
Membership Dues	-	-	-	-	-
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding</b>	<b>1,006,097</b>	<b>1,006,097</b>	<b>-</b>	<b>975,009</b>	<b>(31,088)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 444,686	\$ 379,321	\$ (65,365)	\$ 390,401	\$ (54,285)
Payroll Taxes	31,103	27,130	(3,973)	27,842	(3,261)
Benefits	58,287	52,486	(5,801)	58,311	24
Retirement Costs	70,894	58,117	(12,777)	62,184	(8,710)
<b>Total Personnel Expenses</b>	<b>\$ 604,970</b>	<b>\$ 517,054</b>	<b>\$ (87,916)</b>	<b>\$ 538,738</b>	<b>\$ (66,232)</b>
<b>Meeting Expenses</b>					
Meetings	\$ 105,000	\$ 105,000	\$ -	\$ 135,000	\$ 30,000
Travel	8,000	8,000	-	-	(8,000)
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 113,000</b>	<b>\$ 113,000</b>	<b>\$ -</b>	<b>\$ 135,000</b>	<b>\$ 22,000</b>
<b>Operating Expenses</b>					
Consultants & Contracts	-	-	-	-	-
Office Rent	-	-	-	-	-
Office Costs	-	-	-	2,400	2,400
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,400</b>	<b>\$ 2,400</b>
<b>Total Direct Expenses</b>	<b>\$ 717,970</b>	<b>\$ 630,054</b>	<b>\$ (87,916)</b>	<b>\$ 676,138</b>	<b>\$ (41,832)</b>
<b>Indirect Expenses</b>	<b>\$ 296,243</b>	<b>\$ 299,460</b>	<b>\$ 3,217</b>	<b>\$ 302,920</b>	<b>\$ 6,677</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses</b>	<b>\$ 1,014,213</b>	<b>\$ 929,514</b>	<b>\$ (84,699)</b>	<b>\$ 979,058</b>	<b>\$ (35,155)</b>
<b>Change in Assets</b>	<b>\$ (8,116)</b>	<b>\$ 76,583</b>	<b>\$ 84,699</b>	<b>\$ (4,049)</b>	<b>\$ 4,067</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer Hardware & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
	\$ -	\$ -	\$ -	\$ -	\$ -
Allocation of Fixed Assets	\$ (8,116)	\$ (8,240)	(124)	\$ (4,049)	\$ 4,067
<b>Inc/(Dec) in Fixed Assets</b>	<b>\$ (8,116)</b>	<b>\$ (8,240)</b>	<b>\$ (124)</b>	<b>\$ (4,049)</b>	<b>\$ 4,067</b>
<b>Total Budget</b>	<b>\$ 1,006,097</b>	<b>\$ 921,274</b>	<b>\$ (84,823)</b>	<b>\$ 975,009</b>	<b>\$ (31,088)</b>
<b>Total Change in Working Capital</b>	<b>\$ -</b>	<b>\$ 84,823</b>	<b>\$ 84,823</b>	<b>\$ -</b>	<b>\$ (0)</b>

## Situation Awareness and Infrastructure Security Program

<b>Situation Awareness and Infrastructure Security Program</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	0.50	1.50	1.00
Direct Expenses	\$ 235,369	\$ 420,237	\$ 184,868
Indirect Expenses	\$ 49,374	\$ 151,460	\$ 102,086
Inc(Dec) in Fixed Assets	\$ (2,356)	\$ 15,243	\$ 17,599
Total Funding Requirement	\$ 282,387	\$ 586,940	\$ 304,553

### Program Scope and Functional Description

In support of the ERO, Situation Awareness and Infrastructure Security staff, in coordination with members of the Reliability Assessment and Performance Analysis and Reliability Assurance groups, monitors present conditions on, and emerging threats to, the BES.

The Situation Awareness and Infrastructure Security activity continues to evolve to provide the tools and information required by the staff and stakeholders to promote infrastructure protection. The Situation Awareness and Infrastructure Security program area addresses two separate but related functions, Situation Awareness and Critical Infrastructure Protection (CIP).

The Situation Awareness and Infrastructure Security program supports the ReliabilityFirst staff and Registered Entities in understanding potential threats to the electricity sector, implementation of Reliability Standards developed to reinforce infrastructure security, maintaining an awareness of conditions on the BES, and identifying potential and emerging threats to the BES.

### 2017 Key Assumptions

The Situation Awareness and Infrastructure Security Program incorporates the regional specific common business planning assumptions as described in the *ERO Enterprise 2016 - 2019 Shared Business Plan and Budget Assumptions* document, and includes the following regional assumption:

1. National level security exercises will be conducted to examine industry's cyber security and physical security preparedness and response capabilities through simulation of coordinated cyber and physical attacks on industrial control systems, System Control and Data Acquisition, and information technology assets. ReliabilityFirst will participate in these exercises as appropriate.
2. ReliabilityFirst Situation Awareness and Infrastructure Security staff will monitor projects related to grid resilience and security such as the Cyber Resilient Energy Delivery Consortium. Staff will participate in these projects as appropriate, incorporate lessons learned from these projects into ReliabilityFirst's tools and processes, and share lessons learned with entities as appropriate.

**2017 Key Deliverables**

- Support of the ReliabilityFirst Critical Infrastructure Protection Committee (CIPC)
  - The purpose of the ReliabilityFirst CIPC is to share information concerning CIP and to promote CIP within the Region. Situation Awareness and Infrastructure Security staff will support the CIPC through the scheduling and facilitation of CIPC meetings and webinars and the dissemination of messages, alerts, and warnings from NERC, the Electricity Information Sharing and Analysis Center (E-ISAC), and the U.S. Department of Homeland Security (U.S. DHS) to the CIPC as permitted. Staff will also work to encourage and support sharing of information between entities and the E-ISAC.
- Support/Oversee ReliabilityFirst Staff Compliance to the NERC Cyber Security Standards (CIP-002 - CIP-011)
  - ReliabilityFirst is committed to complying with the intent of the NERC Cyber Security Standards. The Situation Awareness and Infrastructure Security staff will provide training, guidance, and oversight to the ReliabilityFirst staff, particularly the Information Technology staff, in achieving compliance to these Standards.
- Provide Information on CIP-Related Issues
  - This activity involves dissemination of information to entities from agencies such as the E-ISAC, the U.S. Department of Homeland Security, and others containing information on events or suspected events representing potential threats to the electricity sector.
  - Situation Awareness and Infrastructure Security staff will work with other members of the NERC CIPC and NERC staff to develop a robust messaging system for dissemination of CIP-related messages to the appropriate target audience and will promote the use of this messaging system for exchange of security-related information.
- Monitor the Health of the BES
  - The use of situation awareness tools by staff has been evolving over the last few years. Situation Awareness and Infrastructure Security staff continues to participate in the Situation Awareness for FERC, NERC, and the Regional Entities (SAFNR) project and uses the SAFNRv2 displays developed through this project. ReliabilityFirst is a signatory to the NERC Operating Reliability Data Confidentiality Agreement and the SAFNR Subscriber Agreement and as such, will use tools such as the Reliability Coordinator Information System (RCIS), System Data eXchange (SDX), Area Control Error (ACE), and Abnormal Frequency System Monitoring, in addition to SAFNR Version 2, to monitor the health of the BES within the ReliabilityFirst geographical area. In addition to the tools just mentioned, ReliabilityFirst will investigate other tools for monitoring the grid.
- Facilitate the ReliabilityFirst Threats and Vulnerabilities Team
  - In early 2014, ReliabilityFirst created a cross-functional team of subject matter experts to monitor, quantify, and assess new and emerging threats to the BES.

The team continues to mature the tools and techniques used to perform this activity in support of the Reliability Assurance program. In 2017, the team will enhance its ability to collect and analyze data in order to better identify and quantify emerging threats to the BES and to provide additional input to the ReliabilityFirst Regional Risk Assessment program. An Indications Analysis Tool used to quantify threats will be assessed for applicability to the work of the Threats and Vulnerabilities Team.

- Maintain and Test Business Continuity/Disaster Recovery and Pandemic Plans for the ReliabilityFirst Office
  - A business continuity plan deals with the ability to continue business functions in a degraded situation such as the loss of corporate assets including office space or computer assets.
  - A disaster recovery plan deals with a more complete loss of access to corporate assets due to a large-scale event such as a tornado or blackout.
  - A pandemic plan focuses on business continuity in the face of a declared pandemic.
- Assist stakeholders in complying with CIP Standards
  - As the NERC Cyber Security Standards (CIP-002 - CIP-011) and the Physical Security Standard (CIP-014) evolve, entities will continue to monitor and implement revisions to the Standards. Situation Awareness and Infrastructure Security staff will be available to answer questions concerning these Standards and, in coordination with the ReliabilityFirst CIPC, will sponsor/support regional workshops and webinars as needed to foster the exchange of ideas and solutions developed by entities.
- Support the Compliance Monitoring and Enforcement Program
  - Support the activities involving CIP-related issues and events in the Compliance Monitoring and Enforcement program, by providing expertise on CIP monitoring, mitigation plans and settlements that include assessment of compliance to the CIP Standards (CIP-002 - CIP-011).

### **Resource Requirements**

- **Personnel**

One additional FTE was reallocated from the Reliability Assurance and Compliance Monitoring Program this year to support advanced analytic capabilities.

- **Contractors and Consultants**

Contractor and consultant support is budgeted in 2017 to perform a Social Engineering Assessment.

**Situation Awareness and Infrastructure Security Program Budget Detail**

The following table shows funding sources and related expenses for the Situation Awareness and Infrastructure Security section of the 2017 Business Plan and Budget. Explanations of variances by expense category are included with the Supplemental Financial Tables found in Section B.

<b>2016 Budget and Projection, and 2017 Budget</b>					
<b>Situation Awareness and Infrastructure Security</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ReliabilityFirst Funding</b>					
ERO Assessments	\$ 275,892	\$ 275,892	\$ -	\$ 569,779	\$ 293,887
Penalty Sanctions	6,495	6,495	-	17,161	10,666
<b>Total ReliabilityFirst Funding</b>	<b>\$ 282,387</b>	<b>\$ 282,387</b>	<b>\$ -</b>	<b>\$ 586,940</b>	<b>\$ 304,553</b>
Membership Dues	-	-	-	-	-
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding</b>	<b>282,387</b>	<b>282,387</b>	<b>-</b>	<b>586,940</b>	<b>304,553</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 109,593	\$ 110,848	\$ 1,255	\$ 257,959	\$ 148,366
Payroll Taxes	5,717	5,503	(214)	15,692	9,975
Benefits	12,883	12,924	41	32,936	20,053
Retirement Costs	17,448	17,575	127	41,175	23,727
<b>Total Personnel Expenses</b>	<b>\$ 145,641</b>	<b>\$ 146,850</b>	<b>\$ 1,209</b>	<b>\$ 347,762</b>	<b>\$ 202,121</b>
<b>Meeting Expenses</b>					
Meetings	\$ 2,000	\$ 2,000	\$ -	\$ 1,000	\$ (1,000)
Travel	23,000	23,000	-	35,000	12,000
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ -</b>	<b>\$ 36,000</b>	<b>\$ 11,000</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 60,000	\$ 60,000	\$ -	\$ 25,000	\$ (35,000)
Office Rent	-	-	-	-	-
Office Costs	3,725	3,725	-	3,743	18
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	1,003	1,003	-	7,732	6,729
<b>Total Operating Expenses</b>	<b>\$ 64,728</b>	<b>\$ 64,728</b>	<b>\$ -</b>	<b>\$ 36,475</b>	<b>\$ (28,253)</b>
<b>Total Direct Expenses</b>	<b>\$ 235,369</b>	<b>\$ 236,578</b>	<b>\$ 1,209</b>	<b>\$ 420,237</b>	<b>\$ 184,868</b>
<b>Indirect Expenses</b>	<b>\$ 49,374</b>	<b>\$ 49,910</b>	<b>\$ 536</b>	<b>\$ 151,460</b>	<b>\$ 102,086</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses</b>	<b>\$ 284,743</b>	<b>\$ 286,487</b>	<b>\$ 1,744</b>	<b>\$ 571,697</b>	<b>\$ 286,954</b>
<b>Change in Assets</b>	<b>\$ (2,356)</b>	<b>\$ (4,100)</b>	<b>\$ (1,744)</b>	<b>\$ 15,243</b>	<b>\$ 17,599</b>
<b>Fixed Assets</b>					
Depreciation	(1,003)	(1,003)	-	(7,732)	(6,729)
Computer Hardware & Software CapEx	-	-	-	25,000	25,000
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
	<b>\$ (1,003)</b>	<b>\$ (1,003)</b>	<b>\$ -</b>	<b>\$ 17,268</b>	<b>\$ 18,271</b>
Allocation of Fixed Assets	\$ (1,353)	\$ (1,373)	(20)	(2,025)	(672)
<b>Inc/(Dec) in Fixed Assets</b>	<b>\$ (2,356)</b>	<b>\$ (2,376)</b>	<b>\$ (20)</b>	<b>\$ 15,243</b>	<b>\$ 17,599</b>
<b>Total Budget</b>	<b>\$ 282,387</b>	<b>\$ 284,111</b>	<b>\$ 1,724</b>	<b>\$ 586,940</b>	<b>\$ 304,553</b>
<b>Total Change in Working Capital</b>	<b>\$ -</b>	<b>\$ (1,724)</b>	<b>\$ (1,724)</b>	<b>\$ -</b>	<b>\$ -</b>



## Administrative Services

Administrative Services (in whole dollars)						
	Direct Expenses and Fixed Assets			FTEs		
	2016 Budget	2017 Budget	Increase (Decrease)	2016 Budget	2017 Budget	Increase (Decrease)
General and Administrative	\$ 2,435,418	\$ 2,452,289	\$ 16,871	3.00	3.00	0.00
Legal and Regulatory	\$ 724,146	\$ 699,004	\$ (25,142)	2.00	2.00	0.00
Information Technology	\$ 1,297,466	\$ 1,418,143	\$ 120,677	5.00	5.00	0.00
Human Resources	\$ 812,803	\$ 865,834	\$ 53,031	3.00	3.00	0.00
Finance and Accounting	\$ 262,219	\$ 303,048	\$ 40,829	1.60	1.70	0.10
Total Administrative Services	\$ 5,532,052	\$ 5,738,319	\$ 206,267	14.60	14.70	0.10

### Program Scope and Functional Description

Administrative Services is comprised of the following programs: General and Administrative, Legal and Regulatory Affairs, Information Technology, Human Resources, and Finance and Accounting.

### Methodology for Allocation of Administrative Services Expenses to Programs

The majority of the Operating Expenses are accounted for within the related department's budget. If an expense cannot be specifically associated to a department, it is included in one of the Administrative Services programs. All expenses for the Administrative Services Programs, referred to as indirect expenses, are allocated proportionately based on FTE count to the direct programs. This allocation provides improved financial perspective for the direct program areas.

**Administrative Services Budget Detail**

The following table shows funding sources and related expenses for the Administrative Services section of the 2017 Business Plan and Budget. Explanations of variances by expense category are included with the Supplemental Financial Tables found in Section B.

<b>2016 Budget and Projection, and 2017 Budget</b>					
<b>Administrative Services</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ReliabilityFirstFunding</b>					
ERO Assessments	\$ 748,250	\$ 748,250	\$ -	\$ 310,942	\$ (437,308)
Penalty Sanctions	-	-	-	-	-
<b>Total ReliabilityFirst Funding</b>	<b>\$ 748,250</b>	<b>\$ 748,250</b>	<b>\$ -</b>	<b>\$ 310,942</b>	<b>\$ (437,308)</b>
Membership Dues	-	-	-	-	-
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding</b>	<b>748,250</b>	<b>748,250</b>	<b>-</b>	<b>310,942</b>	<b>(437,308)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 2,519,781	\$ 2,532,053	\$ 12,272	\$ 2,623,203	\$ 103,422
Payroll Taxes	131,242	122,952	(8,290)	135,504	4,262
Benefits	484,822	459,304	(25,518)	461,992	(22,830)
Retirement Costs	457,132	453,578	(3,554)	488,286	31,154
<b>Total Personnel Expenses</b>	<b>\$ 3,592,977</b>	<b>\$ 3,567,887</b>	<b>\$ (25,090)</b>	<b>\$ 3,708,984</b>	<b>\$ 116,007</b>
<b>Meeting Expenses</b>					
Meetings	\$ 76,900	\$ 76,900	\$ -	\$ 69,240	\$ (7,660)
Travel	109,300	109,300	-	90,950	(18,350)
Conference Calls	42,000	42,000	-	49,200	7,200
<b>Total Meeting Expenses</b>	<b>\$ 228,200</b>	<b>\$ 228,200</b>	<b>\$ -</b>	<b>\$ 209,390</b>	<b>\$ (18,810)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 145,230	\$ 145,230	\$ -	\$ 143,900	\$ (1,330)
Office Rent	534,619	534,619	-	520,176	(14,443)
Office Costs	333,435	333,435	-	402,941	69,506
Professional Services	488,989	488,989	-	471,105	(17,884)
Miscellaneous	32,620	32,620	-	37,322	4,702
Depreciation	329,320	329,320	-	322,249	(7,071)
<b>Total Operating Expenses</b>	<b>\$ 1,864,213</b>	<b>\$ 1,864,213</b>	<b>\$ -</b>	<b>\$ 1,897,694</b>	<b>\$ 33,481</b>
<b>Total Direct Expenses</b>	<b>\$ 5,685,390</b>	<b>\$ 5,660,300</b>	<b>\$ (25,090)</b>	<b>\$ 5,816,068</b>	<b>\$ 130,678</b>
<b>Indirect Expenses</b>	<b>\$ (5,687,872)</b>	<b>\$ (5,662,782)</b>	<b>\$ 25,090</b>	<b>\$ (5,816,068)</b>	<b>\$ (128,196)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ 2,482</b>	<b>\$ 2,482</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (2,482)</b>
<b>Total Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (0)</b>
<b>Change in Assets</b>	<b>\$ 748,250</b>	<b>\$ 748,250</b>	<b>\$ -</b>	<b>\$ 310,942</b>	<b>\$ (437,308)</b>
<b>Fixed Assets</b>					
Depreciation	(329,320)	(329,320)	-	(322,249)	7,071
Computer Hardware & Software CapEx	133,500	133,500	-	194,500	61,000
Furniture & Fixtures CapEx	40,000	40,000	-	-	(40,000)
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	50,000	50,000
	\$ (155,820)	\$ (155,820)	\$ -	\$ (77,749)	\$ 78,071
Allocation of Fixed Assets	\$ 155,820	\$ 155,820	-	\$ 77,749	\$ (78,071)
<b>Inc/(Dec) in Fixed Assets</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Budget</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (0)</b>
<b>Total Change in Working Capital</b>	<b>\$ 748,250</b>	<b>\$ 748,250</b>	<b>\$ -</b>	<b>\$ 310,942</b>	<b>\$ (437,308)</b>

## General and Administrative

### Program Scope and Functional Description

The General and Administrative Department consists of the President and CEO, Senior Vice President and Treasurer, and Executive Assistant. Responsibilities include leadership, oversight, and management of all of ReliabilityFirst Corporation's activities, interacting with the Board of Directors and other Regional Entity Management Groups, performing the Corporate Treasurer function, and managing relationships with governmental agencies, regulators, members, stakeholders, and other industry organizations.

### 2017 Key Assumptions & Deliverables

The General and Administrative Program incorporates the regional specific common business planning assumptions as described in *the ERO Enterprise 2016 – 2019 Shared Business Plan and Budget Assumptions document*. There are no additional assumptions or deliverables unique to the General and Administrative Program.

### Resource Requirements

- **Personnel**

No increase in personnel is budgeted in this year.

- **Contractors and Consultants**

Contractor and consultant support is budgeted for 2017 for leadership training and project management support of the Regional Entity Management Group.

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## Legal and Regulatory Affairs

### Program Scope and Functional Description

The Legal and Regulatory Affairs program is responsible for four key areas: (1) all legal issues germane to the corporation; (2) regulatory affairs (communication and outreach to FERC, NERC, and the States); (3) public affairs (communication and outreach to ReliabilityFirst stakeholders and the public); and (4) corporate governance of the ReliabilityFirst Board of Directors and its committees. Each of these functions is discussed in turn below.

First, the department is responsible for all legal issues germane to the corporation. This responsibility includes ensuring legal and regulatory compliance with all applicable laws, orders, rules, and regulations; serving as advisor to the President and CEO and the Board of Directors; providing legal support to all other departments of the corporation; and overseeing all regulatory filings and interactions.

Second, the department is responsible for ReliabilityFirst's regulatory affairs. This responsibility includes communication and outreach to FERC, NERC, and the States on specific issues relating to ReliabilityFirst and/or the performance of its delegated functions; working to ensure the consistent application of ERO-wide programs and initiatives across NERC and the Regions; advising senior executives on various strategic and tactical initiatives for the corporation in light of the regulatory landscape; and advocating and advancing ReliabilityFirst's mission and strategic initiatives in a clear and articulate manner to FERC, NERC, and the States as applicable.

Third, the department is responsible for ReliabilityFirst's external affairs. This responsibility includes communication and outreach to ReliabilityFirst's stakeholders, the general public, and media. This work concerns media relations, the issuance of announcements, newsletters, and reports on key issues facing the corporation and the industry. This work generally ensures that ReliabilityFirst clearly communicates its mission and strategic initiatives in a clear and articulate manner, and shares relevant and timely information to help enhance the reliability of the Bulk Electric System.

Finally, the department is responsible for the corporate governance of the ReliabilityFirst Board of Directors and its Committees. This responsibility includes the completion of all activities associated with the Corporate Secretary function (the General Counsel serves as the corporation's Corporate Secretary), such as ensuring that director elections, Board of Directors and Committee meetings, and Meetings of Members adhere to the ReliabilityFirst Bylaws and other relevant governing documents.

### 2017 Key Assumptions

The Legal and Regulatory Affairs Program incorporates the regional specific common business planning assumptions as described in the *ERO Enterprise 2016 - 2019 Shared Business Plan and Budget Assumptions* document, and includes the following regional assumptions:

1. Provide legal support to all other departments of the corporation to ensure that those departments and their activities are consistent with NERC directives, FERC orders, rules, and regulations, and other applicable law.

2. Provide legal support to all other departments to make all necessary regulatory filings with FERC, NERC, and any other applicable regulatory body or agency, as well as support NERC in its efforts to do the same.
3. Continue to lead interactions with the FERC, NERC, the States, and other governmental agencies regarding ReliabilityFirst and its mission.
4. Continue work to ensure the consistent application of ERO-wide programs and initiatives across NERC and the Regions, including its leadership role in the implementation of the Regional Consistency Tool and the Multi-Regional Registered Entity program.
5. Continue to lead public communications and outreach, including the ReliabilityFirst website and the issuance of the bimonthly corporate newsletter, reports on key issues facing the corporation and the industry, ReliabilityFirst's annual report, and quarterly reports to the NERC Board of Trustees.
6. Provide legal support and perform the Corporate Secretary function for the Board of Directors and support the corporate governance needs of the organization. This work includes creating and issuing the Board materials prior to Board meetings, providing legal advice as needed during the Board and Committee meetings, and recording minutes for the Board and Committee meetings.

**2017 Key Deliverables**

- Support all legal and regulatory needs of the corporation.

**Resource Requirements**

- **Personnel**

No increase in personnel is budgeted in this year.

- **Contractors and Consultants**

No contractor or consultant support is budgeted in this year.

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## Information Technology

### Program Scope and Functional Description

The Information Technology (IT) department provides users with cost-effective information technology tools and proactively delivers enabling technologies to assist the departments in meeting their goals, objectives, and deliverables. The IT department minimizes the outsourcing of any critical infrastructure services and as such must implement and manage controls to maintain a security posture that minimizes ReliabilityFirst's risks. The department provides the necessary technical services in the following categories:

- Data Center Management (Local/Remote)
- Website Hosting
- VOIP Phone System
- Voice Conferencing (outsource)
- Web Conferencing (outsource)
- Video Conferencing
- Vulnerability Management
- Mobile Device Management
- Wireless Network Management
- Audio/Video Management
- Document Management
- Email and Desktop Support
- Telecommuter Support
- Application Support and Development
- Business Analysis
- Information Security Awareness and Monitoring
- Business Continuity and Disaster Recovery

ReliabilityFirst supports the ERO's efforts to implement, operate and maintain software tools supporting common enterprise-wide IT operations. ReliabilityFirst is committed to working collaboratively with NERC and the other regions to minimize duplication of effort and investments, and improve operation efficiency. This collaboration continues to refine existing strategies, governance and procurement practices applicable to the development, operation and maintenance of enterprise architecture, software and data systems supporting combined NERC and Regional Entity operations.

NERC's business plan and budget will include ongoing funding support for the development, operation, and maintenance of NERC and Regional Entity approved enterprise wide applications. Funding for these applications will be subject to the budget and funding limits set forth in NERC's approved business plan and budget. If implementation of these applications are delayed or otherwise not available as planned, ReliabilityFirst could incur additional costs to conduct operations pending the availability of these applications. ReliabilityFirst assumes agreed upon ERO Enterprise applications will be available and has only included appropriate funding for applications and supporting systems necessary to satisfy its business needs that are not within the mutually agreed upon scope of the ERO Enterprise wide applications funded by NERC.

The implementation of an offsite Data Management Center will be in its fourth year of operation. Operational experience to date has been excellent and believed to be very effective in IT resource management. Initial data indicates substantial savings in the operation of our equipment, while affording the organization many benefits in security, utilities, and back-up capability.

### **2017 Key Assumptions**

The IT Program incorporates the regional specific common business planning assumptions as described in the *ERO Enterprise 2016 - 2019 Shared Business Plan and Budget Assumptions* document, specifically the support for building and implementing centralized enterprise applications for the ERO. The IT Program includes the following regional assumptions:

1. Provide IT support services to all corporate functions to ensure efficient and effective performance.
2. Continue monitoring and advancing of the security posture across the company-wide data infrastructure and remediate any vulnerability to protect sensitive data.
3. Maintain lower fixed asset costs (infrastructure servers) by continuing operations of virtualization technologies, therefore minimizing replacement costs.
4. Continue to improve departmental processes and efficiencies where automation is needed.
5. Continue departmental training exercises for implemented technologies in order to maintain proficiency.

### **2017 Key Deliverables**

- Perform necessary software upgrades including, but not limited to, the upgrade of various workstation and server applications and targeted server operating systems.
- Perform necessary hardware and software upgrades on phone system to replace aging hardware that is end-of-life.
- Continue the enhancements in the development, integration, and expansion of databases and applications into a unified company-wide Information Management System.
- Continue enhancements of the internal "intranet" website and related applications to further improve employee efficiency and provide better user experience. Focus will continue to be with the Document Management System, Dashboards, and Report Management System.
- Continue the advancement of data security and defense technologies to provide layered prevention/detection of the latest advanced cyber security threats.
- Continue refinement of security awareness program by providing training documents, questionnaires, simulated exercises, assessment campaigns, and/or seminars on existing workplace vulnerabilities.

- Continue supporting ERO initiatives of developing, testing, and deploying ERO enterprise solutions.

**Resource Requirements**

- **Personnel**

No increase in personnel is budgeted in this year.

- **Contractors and Consultants**

Contractors and consultant support is budgeted for 2017 as needed for network maintenance projects, and document/data management system implementation activities.



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## Human Resources

### Program Scope and Functional Description

ReliabilityFirst realizes that talented, experienced employees are its greatest assets, and that finding, nurturing, developing, and retaining that talent is one of its most important tasks. Therefore, the responsibilities of the Human Resources program center on ReliabilityFirst's greatest resource, the staff. These responsibilities include attraction and retention, employee development through performance management and training initiatives, policy and procedure development and adherence measures, as well as compensation and benefits administration. The Human Resources staff must be vigilant in understanding and complying with federal and state employment laws covering five states and the respective reporting requirements for each.

ReliabilityFirst will maintain its staff of 73 individuals including two part-time positions equaling one (1.3) FTE, which brings the total to an equivalent of 72.3 FTEs. The staff is comprised of qualified management, professional, and technical employees with the expertise necessary to serve its stakeholders and to support the ERO by properly carrying out the organization's delegated functions.

### 2017 Key Assumptions

The Human Resources Program incorporates the regional specific common business planning assumptions as described in the *ERO Enterprise 2016 - 2019 Shared Business Plan and Budget Assumptions* document. There are no additional assumptions unique to the ReliabilityFirst Human Resources Program.

### 2017 Key Deliverables

- Recruit highly skilled and excellent employees.
- Sustain competitiveness via the use of annual third party salary and market analyses.
- Provide training programs and career development.
  - ReliabilityFirst conducts a week of training for staff as part of its effort to provide cost-effective training. The training topics are selected to improve the knowledge of staff in areas relevant to staff members' functions and strategic business initiatives as specified in the Strategic Plan.
- Review and manage employee benefits.
- Review succession plans.

### Resource Requirements

- **Personnel**

No increase in personnel is budgeted in this year.

- **Contractors and Consultants**

Contractors and consultant support is budgeted in 2017 to implement a knowledge capture and management program.

## Finance and Accounting

### Program Scope and Functional Description

The Finance and Accounting department is responsible for linking the strategy of ReliabilityFirst and its major departments to their annual operating budgets, managing accounting practices to ensure the accuracy of reported results, and making meaningful financial information available to decision makers. The Finance and Accounting department is responsible for directing the complete cycle of the financial management activities of ReliabilityFirst Corporation, including:

- Processing the day to day activities such as travel and expense reporting, monthly financial reporting, accounts payables and receivables, and cash flow management;
- Leading the creation of the annual business plan and budget that adequately supports its delegated functions;
- Establishing and maintaining accounting policies, procedures, and internal controls to guide the preparation of ReliabilityFirst's internal and external financial statements in accordance with Generally Accepted Accounting Principles;
- Overseeing the annual external audit of ReliabilityFirst's financials and all required filings;
- Supporting the ERO's funding/collection mechanism, ReliabilityFirst will annually collect and supply the ERO with a list of LSEs within the ReliabilityFirst footprint and their associated Net Energy for Load (NEL) data as mandated by FERC; and
- Working with the ERO to develop common accounting practices throughout NERC and the Regions.

### 2017 Key Assumptions

The Finance and Accounting Program incorporates the regional specific common business planning assumptions as described in the *ERO Enterprise 2016 - 2019 Shared Business Plan and Budget Assumptions* document. There are no additional assumptions unique to the Finance and Accounting Program.

### 2017 Key Deliverables

- Work with all Regional Entities through the Electric Reliability Organization Finance Group (EROFG) to provide consistency in budget submittals to the ERO and to FERC.
- Provide all ReliabilityFirst program areas, the Board of Directors, the ERO, and ReliabilityFirst stakeholders with financial clarity and understanding of ReliabilityFirst's financial position.
- Direct the overall financial plans and accounting practices of the organization; oversee treasury, accounting, budget, tax, audit activities, and financial and accounting internal controls and standards.
- Participate with NERC on the annual Regional Entity true-up filing.

- In an effort to continuously improve the entire accounting and budgeting process, implement actions to monitor operating expenses at a more granular level with the management staff.
- Provide advice from the financial perspective on contracts into which the organization may enter.

## **Resource Requirements**

### **Personnel**

There is a 0.1 increase in FTEs budgeted in this year, to properly reflect the actual hours being expended to perform the activities in this department.

### **Contractors and Consultants**

No contractors or consultants are budgeted in this year.

## **Section B – Supplemental Financial Information**

**Table B-1: Working Capital and Operating Reserve Analysis**

<b>Working Capital and Operating Reserve Analysis 2016-2017</b>			
<b>STATUTORY</b>			
	<u>Total</u>	<u>Working Capital Reserve</u>	<u>Operating Reserve</u>
<b>Beginning Working Capital, December 31, 2015 Per Audited Financial Statements</b>	4,508,577		750,000
Less: Adjustment for Future Long-Term Liabilities	(1,078,718)		
Less: Temporarily Restricted Funds as of December 31, 2015	(1,200,250)		
Plus: Penalty Funds Released from Restriction January 1, 2016	748,250		250,000
Plus: 2016 ReliabilityFirst Funding (from LSEs or designees)	19,367,209		
Less: 2016 Projected expenses & capital expenditures	(18,940,505)		
Other Adjustments to Reserves <sup>1</sup>	(158,074)		
<b>Projected Working Capital and Operating Reserves, December 31, 2016</b>	<u>3,246,489</u>	<u>2,246,489</u>	<u>1,000,000</u>
Targeted Working Capital and Operating Reserves, December 31, 2017	3,399,357	2,399,357	1,000,000
Less: Projected Working Capital and Operating Reserves, December 31, 2016	(3,246,489)	(2,246,489)	(1,000,000)
<b>Increase/(Decrease) in Assessments to Achieve Working Capital and Operating Reserves</b>	<u>152,868</u>	<u>152,868</u>	<u>0</u>
2017 Expenses and Capital Expenditures	19,908,939		
Less: Penalty Sanctions <sup>2</sup>	(659,000)		
Less: Other Funding Sources	0		
Adjustment to achieve Working Capital and Operating Reserves	152,868		
Other Adjustments to Reserve <sup>1</sup>	158,074		
<b>2017 ReliabilityFirst Assessment</b>	<u>19,560,881</u>		

<sup>1</sup> Represents transactions recorded only on the Statement of Financial Position (balance sheet) that do not impact the Statement of Activities (income statement), including true-up of current versus non-current deferred rent obligation.

<sup>2</sup> Represents penalty sanctions collected from July 1, 2015 to June 30, 2016.

### Explanation of the Working Capital Reserve

Historically, the working capital reserve has consisted of the amount necessary to satisfy projected cash flow for daily operations. In an effort to better manage and stabilize future assessments, the targeted working capital reserve is being increased to \$2,399K. This increase is being funded by the 2015 budget under run and the penalty dollars that will be released in 2017. This excess in the working capital reserve will be utilized to stabilize and minimize large fluctuations in the annual assessments.

### Explanation of the Operating Reserve

The amount of the operating reserve is determined and recommended for approval by the Board of Directors during the annual budget process. On March 3, 2016, the ReliabilityFirst Board approved a \$1,000,000 operating reserve, which is consistent with ReliabilityFirst policy and historical experience and is believed to be appropriate for any unbudgeted and unexpected expenditures of the organization.

**Table B-2: Penalty Sanctions Received**

Penalty Sanctions Received Between July 1, 2015 and June 30, 2016	
Dates Received	Amount Received
7/7/2015	150,000
9/10/2015	30,000
11/17/2015	272,000
Collected July 1, 2015 to December 31, 2015	<u>452,000</u>
3/10/2016	57,000
3/30/2016	150,000
Collected January 1, 2016 to June 30, 2016	<u>207,000</u>
<b>Total</b>	<b><u>659,000</u></b>

Penalty monies received between July 1, 2015 and June 30, 2016, are totaled above and are to be used to offset assessments in the 2017 Budget, as documented in the NERC Policy – “Accounting, Financial Statement, and Budgetary Treatment of Penalties Imposed and Received for Violations of Reliability Standard.” Penalty monies received from July 1, 2016 through June 30, 2017 will be used to offset assessments in the 2018 Budget.

### Allocation Method

Penalty monies received have been allocated based upon the number of FTEs to the following direct programs to reduce assessments:

- Reliability Standards;
- Reliability Assurance and Compliance Monitoring;
- Enforcement;
- Reliability Assessments and Performance Analysis;
- Training, Education and Operator Certification; and
- Situation Awareness and Infrastructure Security

**Table B-3: Supplemental Funding**

Outside Funding Breakdown By Program (excluding ReliabilityFirst Assessments & Penalty Sanctions)	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget
Interest Income	\$ -	\$ -	\$ -	\$ -
Miscellaneous Income	-	-	-	-
<b>Total Outside Funding</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- No supplemental funding is being budgeted for 2017.

**Table B-4: Personnel Expenses**

Personnel Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
<b>Salaries</b>					
Salaries	\$ 11,381,430	\$ 11,176,563	\$ 11,846,534	\$ 465,104	4.09%
Employment Agency Fees	-	-	-	-	-
Temporary Office Services	-	-	-	-	-
Vacation Expense	45,876	45,876	49,247	3,371	7.35%
<b>Total Salaries</b>	<b>\$ 11,427,306</b>	<b>\$ 11,222,439</b>	<b>\$ 11,895,781</b>	<b>\$ 468,475</b>	<b>4.10%</b>
<b>Total Payroll Taxes</b>	<b>\$ 699,888</b>	<b>\$ 660,537</b>	<b>\$ 705,869</b>	<b>\$ 5,981</b>	<b>0.85%</b>
<b>Benefits</b>					
Workers Compensation	\$ 27,000	\$ 27,000	\$ 27,000	\$ -	0.00%
Medical Insurance	1,323,666	1,209,423	1,359,959	36,293	2.74%
Life-LTD Insurance	93,080	91,948	99,989	6,909	7.42%
Education	322,952	322,952	318,784	(4,168)	-1.29%
Relocation	20,000	20,000	-	(20,000)	-100.00%
<b>Total Benefits</b>	<b>\$ 1,786,698</b>	<b>\$ 1,671,323</b>	<b>\$ 1,805,733</b>	<b>\$ 19,035</b>	<b>1.07%</b>
<b>Retirement</b>					
Discretionary 401k Contribution	\$ 1,107,965	\$ 1,081,897	\$ 1,153,587	\$ 45,622	4.12%
Savings Plan	664,779	623,736	692,152	27,373	4.12%
Pension & Savings Admin	87,500	87,500	103,500	16,000	18.29%
<b>Total Retirement</b>	<b>\$ 1,860,244</b>	<b>\$ 1,793,133</b>	<b>\$ 1,949,240</b>	<b>\$ 88,996</b>	<b>4.78%</b>
<b>Total Personnel Costs</b>	<b>\$ 15,774,136</b>	<b>\$ 15,347,432</b>	<b>\$ 16,356,622</b>	<b>\$ 582,486</b>	<b>3.69%</b>
<b>FTEs</b>	72.20	71.43	72.30	0.10	0.14%
<b>Cost per FTE</b>					
Salaries	\$ 158,273	\$ 157,111	\$ 164,534	6,261	3.96%
Payroll Taxes	9,694	9,247	9,763	69	0.72%
Benefits	24,747	23,398	24,976	229	0.93%
Retirement	25,765	25,103	26,960	1,195	4.64%
<b>Total Cost per FTE</b>	<b>\$ 218,478</b>	<b>\$ 214,860</b>	<b>\$ 226,233</b>	<b>\$ 7,754</b>	<b>3.55%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- The changes in **Salaries** within the programs are due to a 3% general wage increase, market adjustments, and promotions.
- The **Payroll Taxes** variance is lower due to an adjustment in the budgeted FICA wage base limit.
- The changes in **Medical Insurance** are due to changes in the medical plan options selected by employees. These changes predominately occurred within the Enforcement program, causing a budget variance in Benefits for that program.
- The decrease in **Relocation** is due to the decision to not budget for this expense in 2017, because ReliabilityFirst expects to be fully staffed and anticipates minimal relocation expenses to occur during this time period. If any relocation expenses are incurred, they would be funded by any personnel dollars resulting from vacant positions. This decrease of \$20,000 is reflected in the \$22,830 (4.7%) decrease in Benefits expense in the Administrative Services budget.
- The increase in **Pension & Savings Admin** is due to the administrative costs relating to the management of the company's retirement plans. This increase of \$16,000 is reflected in the \$31,154 (6.8%) increase in Retirement Costs in the Administrative Services budget.



**Table B-5: Meeting Expenses**

Meeting Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Reliability Standards	\$ -	\$ -	\$ -	\$ -	
Reliability Assurance and Compliance Monitoring	585,850	585,850	531,250	(54,600)	-9.32%
Enforcement	45,500	45,500	18,500	(27,000)	-59.34%
Reliability Assessment and Performance Analysis	104,000	104,000	128,500	24,500	23.56%
Training and Education	113,000	113,000	135,000	22,000	19.47%
Situation Awareness and Infrastructure Security	25,000	25,000	36,000	11,000	44.00%
Administrative Services	228,200	228,200	209,390	(18,810)	-8.24%
<b>Total Meeting Expenses</b>	<b>\$ 1,101,550</b>	<b>\$ 1,101,550</b>	<b>\$ 1,058,640</b>	<b>\$ (42,910)</b>	<b>-3.90%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- The increase in **Training and Education** is due to the costs associated with the semiannual Reliability Workshops and an additional workshop for substation personnel.
- The increase in **Situation Awareness and Infrastructure Security** is due to the additional travel expected to support the development of advanced analytic capabilities.
- The variances in the **Reliability Assurance and Compliance Monitoring, Enforcement, Reliability Assessment and Performance Analysis and Administrative Services Programs** are a result of considering historical averages along with future travel expectations and assumptions.

**Table B-6: Consultants and Contracts**

Contractors	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Reliability Assurance and Compliance Monitoring Enforcement	243,600	243,600	152,400	(91,200)	-37.44%
Reliability Assessment and Performance Analysis Training and Education	91,280	91,280	110,012	18,732	20.52%
Situation Awareness and Infrastructure Security Administrative Services	60,000	60,000	25,000	(35,000)	-58.33%
	145,230	145,230	143,900	(1,330)	-0.92%
<b>Contractors Total</b>	<b>\$ 540,110</b>	<b>\$ 540,110</b>	<b>\$ 431,312</b>	<b>\$ (108,798)</b>	<b>-20.14%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- The decrease in **Reliability Assurance and Compliance Monitoring** is due to the process improvements and efficiency gains that are being achieved from implementing risk based compliance monitoring, resulting in less need for contractor services.
- The increase in **Reliability Assessment and Performance Analysis** is due to the additional assessments and studies projected by the ERAG Management Committee.
- The decrease in **Situational Awareness and Infrastructure Security** is due to the cost for the social engineering assessment that is planned in 2017, which is less than the cost of the vulnerability and penetration testing that was planned in 2016.

**Table B-7: Office Rent**

Office Rent	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Office Rent	\$ 437,530	\$ 437,530	437,530	\$ -	0.00%
Data Center Rent	63,789	63,789	63,789	-	0.00%
Utilities	33,300	33,300	18,858	(14,442)	-43.37%
	-	-	-	-	-
<b>Total Office Rent</b>	<b>\$ 534,619</b>	<b>\$ 534,619</b>	<b>\$ 520,177</b>	<b>\$ (14,442)</b>	<b>-2.70%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- The decrease in **Utilities** is due to actual lower monthly operating expenses than were anticipated with the new office.

**Table B-8: Office Costs**

Office Costs	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Telephone	\$ 76,993	\$ 76,993	\$ 82,915	\$ 5,922	7.69%
Internet	35,369	35,369	37,061	1,692	4.78%
Office Supplies	51,797	51,797	25,530	(26,267)	-50.71%
Computer Supplies and Maintenance	502,913	502,913	552,449	49,536	9.85%
Publications & Subscriptions	14,940	14,940	15,719	779	5.21%
Dues	15,377	15,377	20,403	5,026	32.69%
Postage	2,180	2,180	1,382	(798)	-36.61%
Express Shipping	850	850	-	(850)	-100.00%
Copying	14,040	14,040	15,204	1,164	8.29%
Reports	600	600	-	(600)	-100.00%
Stationary Forms	544	544	20	(524)	-96.32%
Equipment Repair/Service Contracts	980	980	7,880	6,900	704.08%
Bank Charges	600	600	600	-	0.00%
<b>Total Office Costs</b>	<b>\$ 717,183</b>	<b>\$ 717,183</b>	<b>\$ 759,162</b>	<b>\$ 41,979</b>	<b>5.85%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- The decrease in **Office Supplies** is due to the cost to replace the employees' desk chairs that was included in the 2016 budget.
- The increase in **Computer Supplies and Maintenance** is due to the following program variances.
  - The decrease in the **Reliability Assurance and Compliance Monitoring Program** is due to the anticipated reduction in change orders for the third party audit management tool.
  - The increase in the **Reliability Assessment and Performance Analysis Program** is due to an increase in the annual maintenance fee for the engineering software tool.
  - The increase in the **Training, Education, and Operator Certification Program** is due to an annual fee associated with an audience response system that would allow the audience to interact with the presenter during the semiannual Reliability Workshops.
  - The increase in the **Administrative Services Program** is due to the extended warranties on computer equipment and an annual fee for a new budgeting tool.

**Table B-9: Professional Services**

Professional Services	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Independent Trustee Fees	\$ 290,000	\$ 290,000	\$ 304,750	\$ 14,750	5.09%
Outside Legal	62,000	62,000	20,000	(42,000)	-67.74%
Accounting & Auditing Fees	57,989	57,989	65,430	7,441	12.83%
Insurance Commercial	79,000	79,000	80,925	1,925	2.44%
				-	
<b>Total Services</b>	<b>\$ 488,989</b>	<b>\$ 488,989</b>	<b>\$ 471,105</b>	<b>\$ (17,884)</b>	<b>-3.66%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- **Outside Legal** decreased due to the reduction in usage of outside legal support.

**Table B-10: Miscellaneous**

Miscellaneous Expense	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Miscellaneous	\$ 34,640	\$ 34,640	\$ 42,422	\$ 7,782	22.47%
	-	-	-	-	
<b>Total Miscellaneous Expense</b>	<b>\$ 34,640</b>	<b>\$ 34,640</b>	<b>\$ 42,422</b>	<b>\$ 7,782</b>	<b>22.47%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- The increase in **Miscellaneous** is due to employee wellness activities.

**Table B-11: Non-Operating Expenses**

Other Non-Operating Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Interest Expense	\$ 2,483	\$ -	\$ -	\$ (2,483)	-100.00%
Line of Credit Payment	-	-	-	-	
Office Relocation	-	-	-	-	
<b>Total Non-Operating Expenses</b>	<b>\$ 2,483</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (2,483)</b>	<b>-100.00%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- There is no **Interest Expense** being budgeted in 2017, due to the payoff of the note payable that was entered into to fund the purchase of laptop computers.

**Table B-12: Fixed Assets**

Fixed Assets	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Computer Hardware	\$ 103,500	\$ 103,500	\$ 174,500	\$ 71,000	68.60%
Computer Software	30,000	30,000	45,000	15,000	50.00%
Furniture & Fixtures	40,000	40,000	0	(40,000)	-100.00%
Leasehold Improvements	-	-	50,000	50,000	
<b>Total Fixed Assets</b>	<b>\$ 173,500</b>	<b>\$ 173,500</b>	<b>\$ 269,500</b>	<b>\$ 96,000</b>	<b>55.33%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- The increase in **Computer Hardware** is due to the upgrade of the phone system to replace aging hardware that is at end of life and the replacement of the scanner/copier equipment.
- The increase in **Computer Software** is due to the purchase of an analysis tool that will be used to quantify threats.
- The decrease in **Furniture & Fixtures** is due to the completion of furnishing all of the offices with new office furniture. Therefore, new office furniture is no longer a budgeted expense for 2017.
- The increase in **Leasehold Improvements** is due to the plan to upgrade the office restrooms.

Table B-13: 2018 and 2019 Projections

Statement of Activities 2017 and 2018 Projections							
	2017 Budget	2018 Projection	\$ Change 17 v 18	% Change 17 v 18	2019 Projection	\$ Change 17 v 18	% Change 17 v 18
<b>Funding</b>							
<b>ERO Funding</b>							
ERO Assessments	\$ 19,560,881	\$ 19,952,099	\$ 391,218	2.0%	\$ 20,550,662	\$ 598,563	3.0%
Penalty Sanctions	659,000	1,700,000	1,041,000	158%	200,000	(1,500,000)	-88.2%
<b>Total ERO Funding</b>	<b>\$ 20,219,881</b>	<b>\$ 21,652,099</b>	<b>\$ 1,432,218</b>	<b>7.1%</b>	<b>\$ 20,750,662</b>	<b>\$ (901,437)</b>	<b>-4.2%</b>
Membership Dues	\$ -	\$ -	\$ -		\$ -	\$ -	
Federal Grants	-	-	-		-	-	
Services & Software	-	-	-		-	-	
Workshops	-	-	-		-	-	
Interest	-	-	-		-	-	
Miscellaneous	-	-	-		-	-	
<b>Total Funding</b>	<b>\$ 20,219,881</b>	<b>\$ 21,652,099</b>	<b>\$ 1,432,218</b>	<b>7.1%</b>	<b>\$ 20,750,662</b>	<b>\$ (901,437)</b>	<b>-4.2%</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 11,895,781	\$ 12,252,654	\$ 356,873	3.0%	\$ 12,620,234	\$ 367,580	3.0%
Payroll Taxes	705,869	712,270	6,401	0.9%	720,527	8,257	1.2%
Benefits	1,805,733	2,000,227	194,494	10.8%	2,239,338	239,111	12.0%
Retirement Costs	1,949,240	2,004,611	55,371	2.8%	2,064,750	60,138	3.0%
<b>Total Personnel Expenses</b>	<b>\$ 16,356,622</b>	<b>\$ 16,969,762</b>	<b>\$ 613,141</b>	<b>3.7%</b>	<b>\$ 17,644,849</b>	<b>\$ 675,086</b>	<b>4.0%</b>
<b>Meeting Expenses</b>							
Meetings	\$ 243,490	\$ 245,925	\$ 2,435	1.0%	\$ 248,384	\$ 2,459	1.0%
Travel	765,950	792,758	26,808	3.5%	820,505	27,747	3.5%
Conference Calls	49,200	50,676	1,476	3.0%	52,196	1,520	3.0%
<b>Total Meeting Expenses</b>	<b>\$ 1,058,640</b>	<b>\$ 1,089,359</b>	<b>\$ 30,719</b>	<b>2.9%</b>	<b>\$ 1,121,085</b>	<b>\$ 31,726</b>	<b>2.9%</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 431,312	\$ 444,251	\$ 12,939	3.0%	\$ 457,579	\$ 13,328	3.0%
Office Rent	520,176	525,378	5,202	1.0%	530,632	5,254	1.0%
Office Costs	759,162	774,345	15,183	2.0%	789,832	15,487	2.0%
Professional Services	471,105	475,816	4,711	1.0%	480,574	4,758	1.0%
Miscellaneous	42,422	42,846	424	1.0%	43,275	428	1.0%
Depreciation	356,502	356,502	-	0.0%	356,502	-	0.0%
<b>Total Operating Expenses</b>	<b>2,580,679</b>	<b>2,619,139</b>	<b>38,460</b>	<b>1.5%</b>	<b>2,658,394</b>	<b>39,255</b>	<b>1.5%</b>
<b>Total Direct Expenses</b>	<b>\$ 19,995,941</b>	<b>\$ 20,678,260</b>	<b>\$ 682,319</b>	<b>3.4%</b>	<b>\$ 21,424,328</b>	<b>\$ 746,067</b>	<b>3.6%</b>
<b>Indirect Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>		<b>\$ -</b>	<b>\$ -</b>	
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>		<b>\$ -</b>	<b>\$ -</b>	
<b>Total Expenses</b>	<b>\$ 19,995,941</b>	<b>\$ 20,678,260</b>	<b>\$ 682,319</b>	<b>3.4%</b>	<b>\$ 21,424,328</b>	<b>\$ 746,067</b>	<b>3.6%</b>
<b>Change in Assets</b>	<b>\$ 223,940</b>	<b>\$ 973,839</b>	<b>\$ 749,898</b>	<b>334.9%</b>	<b>\$ (673,666)</b>	<b>\$ (1,647,504)</b>	<b>-169.2%</b>
<b>Fixed Assets</b>							
Depreciation	\$ (356,502)	\$ (356,502)	\$ -	0.0%	\$ (356,502)	\$ -	0.0%
Computer & Software CapEx	219,500	219,500	-	0.0%	250,000	30,500	13.9%
Furniture & Fixtures CapEx	-	-	-		-	-	
Equipment CapEx	-	-	-		-	-	
Leasehold Improvements	50,000	50,000	-	0.0%	-	(50,000)	-100.0%
	<b>\$ (87,002)</b>	<b>\$ (87,002)</b>	<b>\$ -</b>	<b>0.0%</b>	<b>\$ (106,502)</b>	<b>\$ (19,500)</b>	<b>22.4%</b>
Allocation of Fixed Assets	\$ -	\$ -	\$ -		\$ -	\$ -	
<b>Inc/(Dec) in Fixed Assets</b>	<b>\$ (87,002)</b>	<b>\$ (87,002)</b>	<b>\$ -</b>	<b>0.0%</b>	<b>\$ (106,502)</b>	<b>\$ (19,500)</b>	<b>22.4%</b>
<b>Total Budget</b>	<b>\$ 19,908,939</b>	<b>\$ 20,591,258</b>	<b>\$ 682,319</b>	<b>3.4%</b>	<b>\$ 21,317,826</b>	<b>\$ 726,567</b>	<b>3.5%</b>
<b>Change in Working Capital</b>	<b>\$ 310,942</b>	<b>\$ 1,060,841</b>	<b>\$ 749,898</b>	<b>241.2%</b>	<b>\$ (567,164)</b>	<b>\$ (1,628,004)</b>	<b>-153.5%</b>

## Explanation of 2018 and 2019 Projections

ReliabilityFirst projected budget increases for 2018 and 2019. The projected range for 2018 is 3.4% to 6.2%; and the projected range for 2019 is 3.5% to 4.9%. ReliabilityFirst identified a range for its 2018 and 2019 projections to reflect both its baseline projections (the lower end of the range) and its projections of significant at-risk initiatives (the higher end of the range).

These at-risk initiatives primarily concern projected staffing needs to support increased internal work load to implement various programs currently under way or under consideration. They also concern the need to mature ReliabilityFirst's document and data management capability and risk analytics and management applications. Below is an overview of each of these at-risk initiatives.

### Additional Staffing

- To advance the Reliability Assurance Program, ReliabilityFirst projects that a resource investment may be needed to increase regional staffing to yield significant savings for stakeholders. This staffing increase is intended to effectively reduce and otherwise shift the current administrative burden from the stakeholders to ReliabilityFirst. The staffing increase is intended to position ReliabilityFirst to perform meaningful internal control evaluations, entity development, risk management and outreach activities, and ensure ReliabilityFirst's activities are focused on reliability. The need for additional staffing will be solely driven by and dependent on demand for optional voluntary outreach, assist visits, CIP V5 activities, risk and reliability activities, and internal control/management practice evaluations.

### Fixed Asset Additions

- With the accumulation of significant amounts of documentation and data, the present documentation management tools need to be updated to assure improved controls, improved configuration management, and advanced data mining capabilities.
- Risk analytics and management software will enable more robust risk assessment capability in support of Reliability Assurance activities.
- Personal Computers will be required to be replaced across 2018 and 2019.

The following is a breakdown of the projected budget ranges for 2018 and 2019.

**2018 Lower Range: 3.4%**

- Personnel Expense: 3.7%
  - Salary Increase: 3%
  - Medical/Dental Premiums: 15%/8%
- Meeting Expense: 1%
- Travel Expense: 3.5%
- Operating Expense: 1.5%

**2018 Higher Range Increase to Address At-Risk Initiatives: 6.2%**

- Personnel Expense: 5.9%
  - Salary Increase: 3%
  - Medical/Dental Premiums: 15%/8%
  - Hire 2 FTEs: CIP
- Meeting Expense: 1%
- Travel Expense: 3.5%
- Operating Expense: 1.5%
- Fixed Asset Additions:
  - Document/Data Management Application: \$100,000
  - Personal Computers: \$100,000

**2019 Lower Range: 3.5%**

- Personnel Expense: 4%
  - Salary Increase: 3%
  - Medical/Dental/Vision Premiums: 15%/8%/8%
- Meeting Expense: 1%
- Travel Expense: 3.5%
- Operating Expense: 1.5%

**2019 Higher Range Increase to Address At-Risk Initiatives: 4.9%**

- Personnel Expense: 5.4%
  - Salary Increase: 3%
  - Medical/Dental/Vision Premiums: 15%/8%/8%
  - Hire 1 FTE: CIP
- Meeting Expense: 1%
- Travel Expense: 3.5%
- Operating Expense: 1.5%
- Fixed Asset Additions:
  - Risk Management Software: \$75,000

Notes:

1. 2018 projections are based on 2017 budget.
2. 2019 lower range projection is based on the 2018 lower range.
3. 2019 higher range projection includes the two FTEs proposed in 2018 higher range.



## **Section C – Non-Statutory Activities**

ReliabilityFirst performed only those functions delegated to it by the ERO in 2016 and the organization does not intend to perform any functions outside its ERO delegated activities in 2017, therefore Section C is not applicable.

**Section D – Additional Consolidated Financial  
Statements**

### 2017 Consolidated Statement of Activities by Program

	Total	Statutory Total	Reliability Standards (Section 300)	Reliability Assurance and Compliance Monitoring	Enforcement	Reliability Assessment and Performance Analysis (Section 900)	Training and Education (Section 900)	Situation Awareness and Infrastructure Security (Section 1000)	General and Administrative	Legal and Regulatory	Information Technology	Human Resources	Accounting and Finance
<b>Funding</b>													
<b>ReliabilityFirst Funding</b>													
ReliabilityFirst Assessments	19,560,881	19,560,881	-	12,821,050	2,088,764	2,829,661	940,686	569,779	310,942	-	-	-	-
Penalty Sanctions	659,000	659,000	-	417,595	94,388	95,532	34,323	17,161	-	-	-	-	-
<b>Total ReliabilityFirst Funding</b>	<b>20,219,881</b>	<b>20,219,881</b>	<b>-</b>	<b>13,238,645</b>	<b>2,183,152</b>	<b>2,925,193</b>	<b>975,009</b>	<b>586,940</b>	<b>310,942</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Non-statutory Funding	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal Grants	-	-	-	-	-	-	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-	-	-	-	-	-	-
Workshops	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Funding</b>	<b>20,219,881</b>	<b>20,219,881</b>	<b>-</b>	<b>13,238,645</b>	<b>2,183,152</b>	<b>2,925,193</b>	<b>975,009</b>	<b>586,940</b>	<b>310,942</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Expenses</b>													
<b>Personnel Expenses</b>													
Salaries	11,895,781	11,895,781	-	6,303,496	962,026	1,358,695	390,401	257,959	1,149,321	492,998	568,397	271,765	140,721
Payroll Taxes	705,869	705,869	-	374,528	69,066	83,237	27,842	15,692	37,531	23,075	42,433	20,463	12,002
Benefits	1,805,733	1,805,733	-	950,873	147,725	153,895	58,311	32,936	81,052	37,032	105,228	209,814	28,866
Retirement Costs	1,949,240	1,949,240	-	987,840	153,346	216,409	62,184	41,175	156,067	72,304	90,645	146,791	22,479
<b>Total Personnel Expenses</b>	<b>16,356,622</b>	<b>16,356,622</b>	<b>-</b>	<b>8,616,737</b>	<b>1,332,163</b>	<b>1,812,237</b>	<b>538,738</b>	<b>347,762</b>	<b>1,423,971</b>	<b>625,408</b>	<b>806,703</b>	<b>648,834</b>	<b>204,068</b>
<b>Meeting Expenses</b>													
Meetings	243,490	243,490	-	18,250	1,500	18,500	135,000	1,000	43,500	1,200	1,200	23,340	-
Travel	765,950	765,950	-	513,000	17,000	110,000	-	35,000	38,000	35,000	11,000	3,950	3,000
Conference Calls	49,200	49,200	-	-	-	-	-	-	-	-	49,200	-	-
<b>Total Meeting Expenses</b>	<b>1,058,640</b>	<b>1,058,640</b>	<b>-</b>	<b>531,250</b>	<b>18,500</b>	<b>128,500</b>	<b>135,000</b>	<b>36,000</b>	<b>81,500</b>	<b>36,200</b>	<b>61,400</b>	<b>27,290</b>	<b>3,000</b>
<b>Operating Expenses</b>													
Consultants & Contracts	431,312	431,312	-	152,400	-	110,012	-	25,000	55,800	-	20,000	68,100	-
Office Rent	520,176	520,176	-	-	-	-	-	-	456,387	-	63,789	-	-
Office Costs	759,162	759,162	-	297,897	9,694	42,487	2,400	3,743	68,799	17,396	267,710	3,655	45,381
Professional Services	471,105	471,105	-	-	-	-	-	-	304,750	20,000	-	95,755	50,600
Miscellaneous	42,422	42,422	-	4,100	900	100	-	-	11,082	-	-	4,040	-
Depreciation	356,502	356,502	-	24,144	-	2,377	-	7,732	171,601	-	150,848	-	-
<b>Total Operating Expenses</b>	<b>2,580,679</b>	<b>2,580,679</b>	<b>-</b>	<b>478,541</b>	<b>10,594</b>	<b>154,976</b>	<b>2,400</b>	<b>36,475</b>	<b>1,068,419</b>	<b>37,396</b>	<b>506,187</b>	<b>189,710</b>	<b>95,981</b>
<b>Total Direct Expenses</b>	<b>19,995,941</b>	<b>19,995,941</b>	<b>-</b>	<b>9,626,528</b>	<b>1,361,257</b>	<b>2,095,713</b>	<b>676,138</b>	<b>420,237</b>	<b>2,573,890</b>	<b>699,004</b>	<b>1,374,291</b>	<b>865,834</b>	<b>303,048</b>
<b>Indirect Expenses</b>	<b>0</b>	<b>0</b>	<b>-</b>	<b>3,685,529</b>	<b>833,031</b>	<b>843,128</b>	<b>302,920</b>	<b>151,460</b>	<b>(2,573,890)</b>	<b>(699,004)</b>	<b>(1,374,291)</b>	<b>(865,834)</b>	<b>(303,048)</b>
<b>Other Non-Operating Expenses</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Expenses</b>	<b>19,995,941</b>	<b>19,995,941</b>	<b>-</b>	<b>13,312,057</b>	<b>2,194,288</b>	<b>2,938,841</b>	<b>979,058</b>	<b>571,697</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Change in Assets</b>	<b>223,940</b>	<b>223,940</b>	<b>-</b>	<b>(73,412)</b>	<b>(11,136)</b>	<b>(13,648)</b>	<b>(4,049)</b>	<b>15,243</b>	<b>310,942</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Fixed Assets</b>													
Depreciation	(356,502)	(356,502)	-	(24,144)	-	(2,377)	-	(7,732)	(171,601)	-	(150,848)	-	-
Computer & Software CapEx	219,500	219,500	-	-	-	-	-	25,000	-	-	194,500	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-	-	-	-	-	-	-	-
Leasehold Improvements	50,000	50,000	-	-	-	-	-	-	50,000	-	-	-	-
	<b>(87,002)</b>	<b>(87,002)</b>	<b>-</b>	<b>(24,144)</b>	<b>-</b>	<b>(2,377)</b>	<b>-</b>	<b>17,268</b>	<b>(121,601)</b>	<b>-</b>	<b>43,852</b>	<b>-</b>	<b>-</b>
Allocation of Fixed Assets	-	-	-	(49,268)	(11,136)	(11,271)	(4,049)	(2,025)	121,601	-	(43,852)	-	-
<b>Inc/(Dec) Fixed Assets</b>	<b>(87,002)</b>	<b>(87,002)</b>	<b>-</b>	<b>(73,412)</b>	<b>(11,136)</b>	<b>(13,648)</b>	<b>(4,049)</b>	<b>15,243</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Budget</b>	<b>19,908,939</b>	<b>19,908,939</b>	<b>-</b>	<b>13,238,645</b>	<b>2,183,152</b>	<b>2,925,193</b>	<b>975,009</b>	<b>586,940</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Change in Working Capital</b>	<b>310,942</b>	<b>310,942</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>310,942</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>FTEs</b>	<b>72.30</b>	<b>72.30</b>	<b>-</b>	<b>36.50</b>	<b>8.25</b>	<b>8.35</b>	<b>3.00</b>	<b>1.50</b>	<b>3.00</b>	<b>2.00</b>	<b>5.00</b>	<b>3.00</b>	<b>1.70</b>

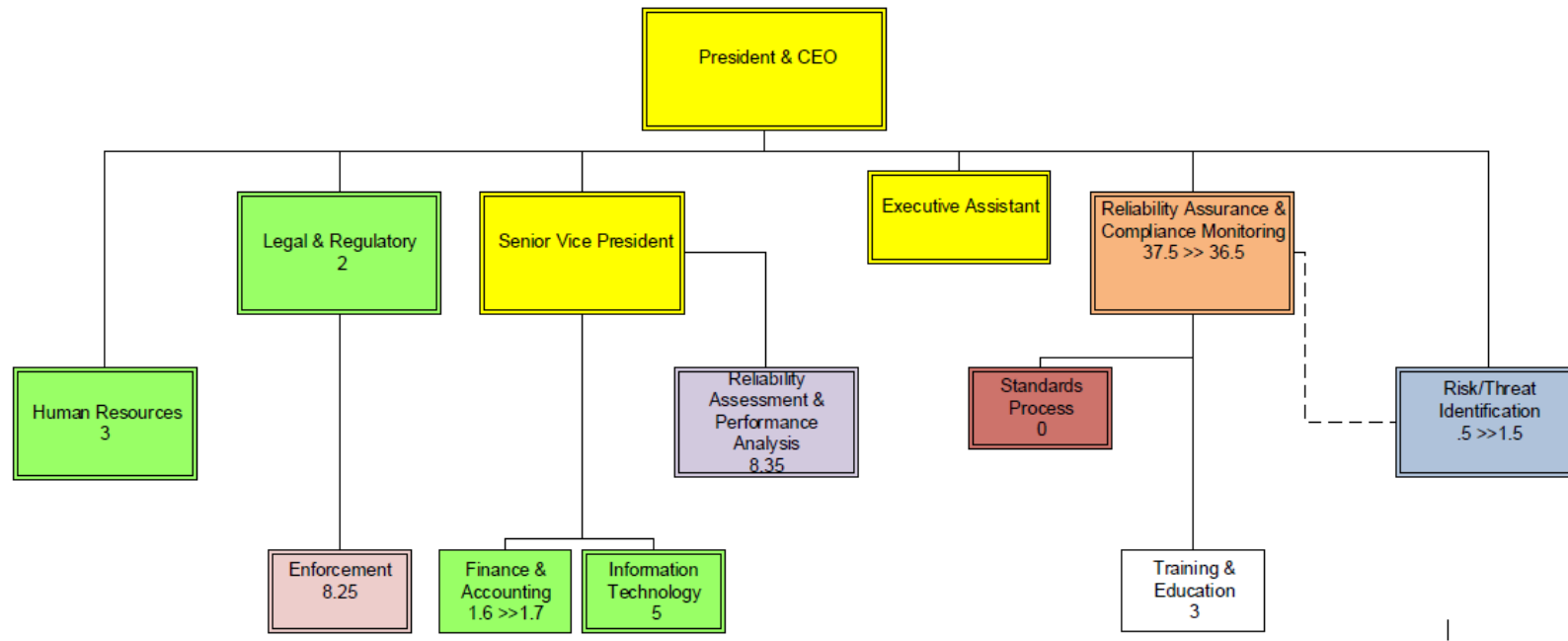
## Statement of Financial Position

### Statement of Financial Position 2015 Audited, 2016 Projection, and 2017 Budget

#### STATUTORY and NON-STATUTORY

	(Per Audit) 31-Dec-15	Projected 31-Dec-16	Budget 31-Dec-17
<b>ASSETS</b>			
Cash	7,891,836	8,780,710	9,195,232
Accounts receivable, net of allowance for uncollec	38,748	-	-
Lease Incentives	-	-	-
Prepaid expenses and other current assets	139,052	139,052	139,052
Property and equipment	2,408,392	2,229,224	2,142,222
Total Assets	<b>10,478,028</b>	<b>11,148,986</b>	<b>11,476,507</b>
<b>LIABILITIES AND NET ASSETS</b>			
Current Liabilities			
Accounts payable and accrued expenses	148,880	148,880	148,880
Accrued expenses	3,412,179	3,412,179	3,412,179
Notes Payable	-	-	-
Deferred Revenue	-	-	-
Total Current Liabilities	<b>3,561,059</b>	<b>3,561,059</b>	<b>3,561,059</b>
Long Term Liabilities			
Accrued expenses	473,172	749,812	417,523
Deferred Revenue	350,000	350,000	350,000
Deferred Rent	2,370,701	2,215,231	2,048,567
Total Long Term Liabilities	<b>3,193,873</b>	<b>3,315,043</b>	<b>2,816,090</b>
Net Assets - unrestricted	2,522,847	1,913,885	3,399,357
Net Assets - restricted	1,200,250	2,359,000	1,700,000
Total Liabilities and Net Assets	<b>10,478,028</b>	<b>11,148,987</b>	<b>11,476,506</b>

# Appendix A – 2017 Organization Chart



**DOCKET NO. RR16-\_\_-000**

**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**2017 BUSINESS PLAN AND BUDGET FILING**

**ATTACHMENT 7**

**SERC RELIABILITY CORPORATION**

**PROPOSED 2017 BUSINESS PLAN AND BUDGET**



SERC Reliability Corporation  
3701 Arco Corporate Drive, Suite 300  
Charlotte, NC 28273  
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# **SERC Reliability Corporation**

## **2017 Business Plan and Budget**

**FINAL**  
**July, 2016**

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## Introduction

The following table summarizes SERC Reliability Corporation's (SERC) budget for 2017.

	TOTAL RESOURCES (in whole dollars)			
	2017 Budget	U.S.	Canada	Mexico
Statutory FTEs	75.00			
Non-statutory FTEs**	-			
<b>Total FTEs</b>	75.00			
Statutory Expenses	\$ 17,474,285			
Non-Statutory Expenses**	\$ -			
<b>Total Expenses</b>	\$ 17,474,285			
Statutory Inc(Dec) in Fixed Assets	\$ 8,118			
Non-Statutory Inc(Dec) in Fixed Assets**	\$ -			
<b>Total Inc(Dec) in Fixed Assets</b>	\$ 8,118			
Statutory Working Capital Requirement*	\$ (1,020,855)			
Non-Statutory Working Capital Requirement**	\$ -			
<b>Total Working Capital Requirement</b>	\$ (1,020,855)			
Total Statutory Funding Requirement	\$ 16,461,548			
Total Non-Statutory Funding Requirement**	\$ -			
<b>Total Funding Requirement</b>	\$ 16,461,548			
<b>Statutory Funding Assessments</b>	\$ 15,706,023	\$ 15,706,023	\$ -	\$ -
<b>Non-Statutory Fees**</b>	\$ -	\$ -	\$ -	\$ -
NEL	1,025,559,971	1,025,559,971	-	-
NEL%	100.00%	100.00%	0.00%	0.00%

**Table 1. SERC Budget for 2017**

## Organizational Overview

SERC is a nonprofit corporation responsible for promoting and improving the reliability of the bulk power system (BPS) in all or portions of 16 central and southeastern states. The SERC Region covers an area of approximately 560,000 square miles. Electric systems in the Region serve approximately 25.7 percent of the net energy for load (NEL) in North America and 30.9 percent of the NEL in the Eastern Interconnection.

On May 2, 2007, SERC executed an agreement with the North American Electric Reliability Corporation (NERC) that delegated to SERC certain responsibilities and authorities of a Regional Entity as defined in these documents:

- Section 215 of the *Federal Power Act*, Chapter I, Title 18, *Code of Federal Regulations*, Part 39
- Other Federal Energy Regulatory Commission (FERC) regulations and directives
- *NERC Rules of Procedure*

SERC, originally called the Southeastern Electric Reliability Council, was formed in 1970 as a voluntary association of members comprising electric industry reliability stakeholders in the Southeast. Throughout its history, SERC has successfully promoted the reliability of the BPS

using an industry Electric Reliability Organization (ERO) model that relies on reciprocity, peer influence, and the mutual reliability focus of BPS owners, operators, and users to ensure that the system remains reliable and secure.

SERC was incorporated as a 501(c)(6) nonprofit corporation in the state of Alabama on April 29, 2005, to position SERC to become a Regional Entity with an appropriate stakeholder governance structure. In April 2006, SERC changed its name to SERC Reliability Corporation. Effective January 1, 2015, SERC incorporated in the state of North Carolina.

SERC has a 2017 targeted staffing level of 75.00 Full-Time Equivalent (FTEs) (2017 total headcount of 78.00) composed of power industry professionals and support personnel.

## Membership and Governance

As part of its delegated duties, SERC monitors 192 registered entities in the SERC Region for compliance with the NERC Reliability Standards. Membership in SERC is voluntary and free. SERC's member companies participate in the technical activities and governance of the organization. SERC currently has 54 member companies.

A Board of Directors (Board), composed of a representative from each member company, governs SERC. The Board delegates operational oversight of the corporation to an Executive Committee of 12 directors. The Board has formed the following committees:

- Board Compliance Committee (BCC): Oversees the program that monitors and enforces compliance of registered entities in the Region to FERC-approved Reliability Standards.
- Human Resources and Compensation Committee (HRCC): Advises the President, Board officers, and the Board about employee compensation and human resources.
- Finance and Audit Committee (FAC): Advises the President, Board officers and Board about the organization's finances and internal controls.
- Nominating Committee: Responsible for identifying, vetting, and recommending candidates for Board Officer and committee positions, as needed.

## Statutory Functional Scope

SERC provides statutory functions that support the ERO, in accordance with its delegation agreement between SERC and NERC. SERC provides the following functions:

- Analyzes events to identify Lessons Learned that will improve reliability.
- Promotes BPS reliability, adequacy, and security.
- Helps develop Reliability Standards for the North American BPS and the SERC Region.
- Monitors and enforces approved mandatory Reliability Standards.
- Registers and certifies responsible entities under the reliability Compliance program.
- Assesses the BPS past, present, and future risk profile in order to assure reliability, adequacy, and security.
- Trains operating personnel to assure competence.

SERC only performs functions called for in section 215 of the Federal Power Act that have been delegated from NERC to SERC.

## 2017 Key Assumptions

The NERC and Regional Entity business plans and budgets reflect a set of common assumptions developed jointly by NERC and the Regional Entities as part of the annual *Business Plan and Budget* process. The *2017 – 2019 Shared Business Plan and Budget Assumptions* document is located in Exhibit A of NERC's *2017 Business Plan and Budget*.

NERC and the Regional Entities implement joint coordination and collaboration processes to develop the multi-year ERO Enterprise Strategic Plan and performance metrics.

## 2017 Goals and Key Deliverables

1. Serve as an independent, objective, and fair enforcement authority, without conflicts of interest.
  - A. Register entities commensurate to the risk to the BPS and ensure all key reliability entities are certified to have essential capabilities.
  - B. Enforce compliance of registered entities with mandatory Reliability Standards, in accordance with the delegation agreement and Compliance Monitoring and Enforcement Program (CMEP). Perform timely and transparent reviews.
  - C. Ensure that all violations of mandatory Reliability Standards are mitigated in a timely, thorough, and comprehensive manner to prevent recurrence.
2. Promote a culture of compliance that addresses reliability risks across the SERC Region and the ERO.
  - A. Ensure that the industry understands the essential purpose of Standards and Compliance expectations.
  - B. Work with the industry to maintain effective risk control programs for Compliance, reliability, and security.
  - C. Use efficient processes and proportional exercise of discretion to verify that the industry meets Compliance objectives.
3. Identify the most significant risks to reliability in the SERC Region.
  - A. Identify and prioritize risks based on reliability impacts, cost/practicality assessments, projected resources, and emerging issues.
  - B. Analyze events and system performance consistently to determine sequence, cause, and remediation. Identify reliability risks and trends to inform Standards, Compliance, and other programs.
  - C. Ensure that the industry is well-informed of emerging trends, risk analysis, Lessons Learned, and expected actions.
4. Mitigate reliability risks.
  - A. Ensure that the industry understands security threats and addresses them effectively.
  - B. Facilitate information sharing among industry, Regions, ERO, and government.
  - C. Work with ERO to track industry accountability for critical reliability and security recommendations.
5. Promote a culture of reliability excellence.
  - A. Ensure reliable data modeling. Verify that the data represents system behavior accurately. Facilitate data sharing among registered entities.
  - B. Serve as a leading resource to industry and policy makers to supply reliability information.
6. Improve transparency, consistency, quality, and timeliness of results; collaborate with NERC and the other Regions; improve efficiencies and cost effectiveness.
  - A. Identify, understand, and manage internal risks.
  - B. Ensure processes are effective, efficient, and continually improving.

## 2017 Overview of Cost Impacts

SERC proposes to increase its operating budget from \$15,866,845 to \$17,482,403 in 2017, an increase of \$1,615,558 or 10.2 percent. The proposed 2017 assessment of \$15,706,023 is an increase of 14.4 percent from the 2016 assessment of \$13,730,986. SERC believes that in 2017 it will continue to realize material efficiencies that will allow the Region to remain an efficient provider of statutory functions, as SERC will continue to be one of the lowest-cost Regional Entities on the basis of cost per NEL. SERC's culture promotes consistent delivery of excellent results at a cost that respects the longstanding tradition of affordable and reliable electricity across SERC's geography.

SERC has applied its penalty funds as an offset to assessments.

The following is a list of targeted budget increases to allow SERC to accomplish the specific objectives outlined in the *2017 Business Plan and Budget* (dollars are stated as an increase in the 2017 budget compared to the 2016 budget). SERC will continue to perform Cross-Regional Compliance Monitoring and Enforcement for other Regions, if requested. The Regional Entity that contracts with SERC for its services will pay the costs in accordance with the contract. \$71,000 is included in the *2017 Business Plan and Budget* under Other Funding and various expense accounts for the performance of these services. Additionally, the costs associated with the Regional Entity Coordinator position will be shared equally with the other Regional Entities and included in Contracts and Consultant Expense in each of the Regional Entity's respective budgets, \$42,500 each, and the related offset of \$297,500 is included in SERC's Miscellaneous Income.

The most significant changes to the budget are in personnel, which includes two components:

- **Staff changes proposed in 2017** – The targeted staffing level for 2017 is 75.00 FTEs, a decrease of 3.12 FTEs (a decrease of 1.70 in headcount) as compared to the 2016 budget, due to staggering the hire dates for four FTEs, one FTE becoming full-time, and change in personnel strategy to use consultants in lieu of FTEs for Information Technology (IT) and Facilities. In 2016, SERC budgeted for three early in career engineering positions to assist in information transfer and succession planning. SERC has continued to fund these early in career positions.
- **Cost increase for maintaining staff budgeted in 2017** – The net increase in Personnel costs of \$815,566 compared to 2016 reflects a budgeted average increase in salary of 3 percent for existing staff, an increase in personnel costs for vacant executive-level positions, and an overall increase in employee benefit costs. As an offset, a 6 percent vacancy rate has been applied to all Personnel Expenses.

Other notable changes in the proposed budget from year to year include the following:

- **Meetings and Travel** – An increase of \$18,347 and \$46,511 or 7.4 percent and 9.5 percent, respectively, is due to an increase in the total number of meetings and an effort to bring remote staff to the SERC office more frequently. SERC continues the effort to have most meetings in SERC's office or member facilities.
- **Consultants and Contracts** – An increase of \$623,008 or 41.6 percent is primarily due to the change in staffing strategy of using consultants in lieu of FTEs. Additionally, SERC will be performing the Under Frequency Load Shedding study, which is performed every five years, and the Dynamic Reduction Study and a compensation and benefit study, both of which are performed every two years.
- **Office Rent** – An increase of \$73,066 or 14.1 percent is due to the additional space acquired. SERC continues to record rent on a straight-line basis, per Generally Accepted Accounting Standards. An offset to record the difference in the actual rent paid is recorded to a deferred rent account on the balance sheet.

- **Office Costs** – A decrease of \$28,868 or 9.3 percent is primarily due to a decrease in telephone and Internet costs for the SERC office.
- **Professional Fees** – An increase of \$20,539 or 13.2 percent is primarily due to increases in corporate insurance for the addition of a cyber policy; in accounting and auditing fees for additional software maintenance; and corporate training.
- **Depreciation** – A decrease of \$248,598 or 51.4 percent is due to an increase in the capital assets that are fully depreciated.

SERC's budget is defined and approved by the Board of Directors in aggregate. SERC works within the total budget to perform its delegated duties. Any variances will be explained in the quarterly variance reports.

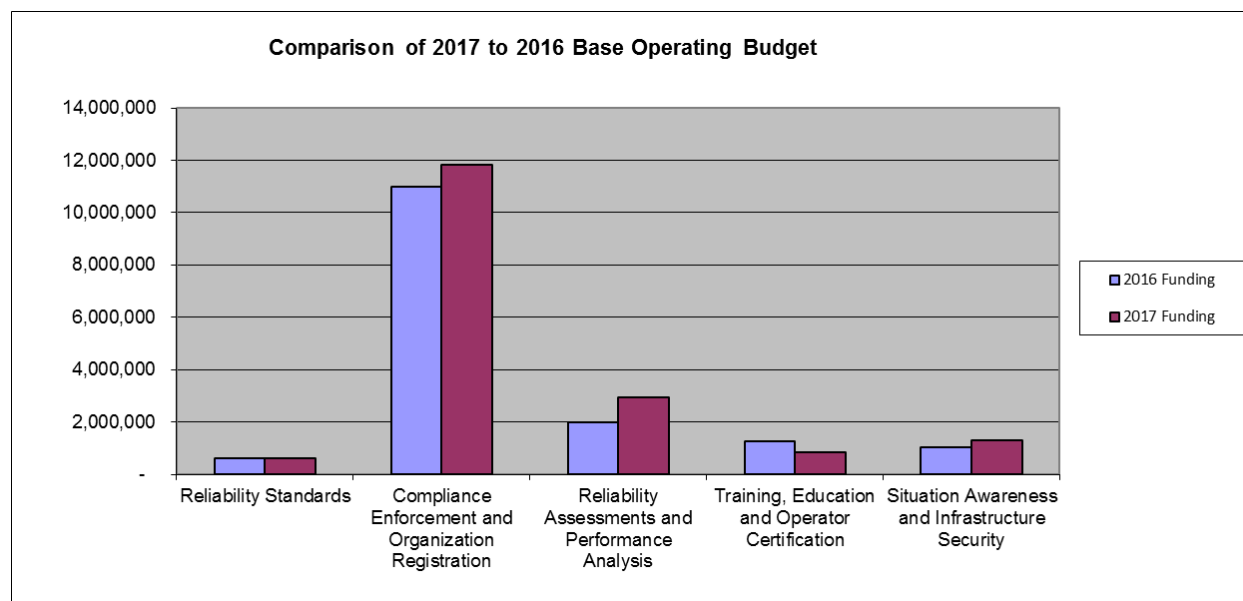
## Summary by Program

The following table and figure summarize and illustrate the SERC budget by program area.

Base Operating Budget	Budget	Projection	Budget	Change	
	2016	2016	2017	2017 Budget v 2016 Budget	% Change
Reliability Standards	613,891	648,459	614,004	113	0.0%
Compliance Enforcement and Organization Registration	10,995,642	12,092,038	11,816,885	821,243	7.5%
Reliability Assessments and Performance Analysis	1,975,482	1,929,190	2,927,001	951,519	48.2%
Training, Education and Operator Certification	1,259,915	503,123	838,985	(420,930)	-33.4%
Situation Awareness and Infrastructure Security	1,021,915	1,343,274	1,285,528	263,613	25.8%
<b>Total</b>	<b>15,866,845</b>	<b>16,516,084</b>	<b>17,482,403</b>	<b>1,615,558</b>	<b>10.2%</b>
Working Capital Reserve	(832,284)	(1,546,244)	(1,020,855)	(188,571)	
<b>Total Funding</b>	<b>15,034,561</b>	<b>14,969,840</b>	<b>16,461,548</b>	<b>1,426,987</b>	<b>9.5%</b>

This representation does not include an allocation of working capital requirements among the program areas.

**Table 2. Budget by Program Area**



This graphical representation does not include an allocation of working capital requirements among the program areas.

**Figure 1. Budget by Program Area Chart**

**Reliability Standards** – The \$113 increase in total funding, from \$613,891 in 2016 to \$614,004 budgeted in 2017, is due to a reduction of 0.28 FTEs as described in the Resource Requirements section of the program areas budget. This decrease is offset by the overall 6 percent vacancy rate that has been applied to personnel costs, based on historical data. This is a reduction from the vacancy rate applied in the 2016 budget, causing an increase.

**Compliance Enforcement and Organization Registration** – The 7.5 percent increase in total funding, from \$10,995,642 budgeted in 2016 to \$11,816,885 budgeted in 2017, results from an increase in indirect expenses being allocated to the Compliance Enforcement and Organization Registration program. This increase is due to the increase of total costs in Administrative Services. Additionally, a 6 percent vacancy rate has been applied to personnel costs, based on

historical data. This is a reduction from the vacancy rate applied in the 2016 budget, causing an increase. As an offsetting decrease, FTEs were reduced by 2.61 as described in the Resource Requirements section of the program areas budget.

**Reliability Assessments and Performance Analysis** – The 48.2 percent increase in total funding, from \$1,975,482 in 2016 to \$2,927,001 budgeted in 2017, is due to the increase of 1.52 FTEs as described in the Resource Requirements section of the program area budget. A 6 percent vacancy rate has been applied to personnel costs, based on historical data. This is a reduction from the vacancy rate applied in the 2016 budget, causing an additional increase. Additionally, an increase in indirect expenses being allocated to the Reliability Assessments and Performance Analysis program is due to the increase of FTEs in the Reliability Assessments and Performance Analysis program and the total costs in Administrative Services. Consultants and contracts also increased due to the Under Frequency Load Shedding study, which is performed every five years, and the Dynamic Reduction Study, which is performed every two years.

**Training, Education and Operator Certification** – The 33.4 percent decrease in total funding, from \$1,259,915 budgeted in 2016 to \$838,985 budgeted in 2017, is primarily due to a decrease in consultants due to one-time costs budgeted in 2016 to expand the Restoration Drill to include more simulation exercises; for system simulator development for the SERC system; and for contractor support to develop training materials, a qualification program, and to implement a systematic approach to training. Additionally, FTEs were reduced by 0.53 as described in the Resource Requirements section of the program areas budget. This decrease is offset by the overall 6 percent vacancy rate that has been applied to personnel costs, based on historical data. This is a reduction from the vacancy rate applied in the 2016 budget, causing an increase.

**Situation Awareness and Infrastructure Security** – The 25.8 percent increase in total funding, from \$1,021,915 budgeted in 2016 to \$1,285,528 budgeted in 2017, is due to the increase of 0.47 FTEs as described in the Resource Requirements section of the program area budget. A 6 percent vacancy rate has been applied to personnel costs, based on historical data. This is a reduction from the vacancy rate applied in the 2016 budget, causing an increase. The increase in indirect expenses being allocated to the Situation Awareness and Infrastructure Security program is due to the increase of FTEs and the increase of total costs in Administrative Services.



The following table displays total FTEs by program area.

Total FTE's by Program Area	Budget 2016	Projection 2016	Direct FTEs 2017 Budget	Shared FTEs <sup>1</sup> 2017 Budget	Total FTEs 2017 Budget	Change from 2016 Budget
<b>STATUTORY</b>						
<b>Operational Programs</b>						
Reliability Standards	1.98	1.61	1.70	-	1.70	(0.28)
Compliance Monitoring and Enforcement and Organization Registration and Certification	36.92	31.57	34.31	-	34.31	(2.61)
Reliability Assessment and Performance Analysis	6.60	5.11	8.12	-	8.12	1.52
Training and Education	2.23	0.61	1.70	-	1.70	(0.53)
Situation Awareness and Infrastructure Security	3.40	3.74	3.87	-	3.87	0.47
<b>Total FTEs Operational Programs</b>	<b>51.13</b>	<b>42.64</b>	<b>49.70</b>	<b>-</b>	<b>49.70</b>	<b>(1.43)</b>
<b>Administrative Programs</b>						
Technical Committees and Member Forums	5.99	4.61	4.70	-	4.70	(1.29)
General & Administrative	13.00	12.19	13.25	-	13.25	0.25
Legal and Regulatory	3.00	2.18	2.55	-	2.55	(0.45)
Information Technology	-	-	-	-	-	-
Human Resources	2.20	1.90	1.90	-	1.90	(0.30)
Finance and Accounting	2.80	2.90	2.90	-	2.90	0.10
<b>Total FTEs Administrative Programs</b>	<b>26.99</b>	<b>23.78</b>	<b>25.30</b>	<b>-</b>	<b>25.30</b>	<b>(1.69)</b>
<b>Total FTEs</b>	<b>78.12</b>	<b>66.42</b>	<b>75.00</b>	<b>-</b>	<b>75.00</b>	<b>(3.12)</b>

<sup>1</sup>A shared FTE is defined as an employee who performs both Statutory and Non-Statutory functions.

### Table 3. Total FTEs by Program Area

For an explanation of the variances, refer to the Resource Requirements section in each program area in Section A.

## 2016 Budget and Projection and 2017 Budget Comparisons

The following table lists the 2016 budget and projection compared to the 2017 budget.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital 2016 Budget & Projection, and 2017 Budget					
STATUTORY					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 13,730,986	\$ 13,730,986	\$ -	\$ 15,706,023	\$ 1,975,037
Penalty Sanctions	648,500	648,500	-	195,000	(453,500)
<b>Total NERC Funding</b>	<b>\$ 14,379,486</b>	<b>\$ 14,379,486</b>	<b>\$ -</b>	<b>\$ 15,901,023</b>	<b>\$ 1,521,537</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	210,075	183,090	(26,985)	176,025	(34,050)
Interest	1,000	2,853	1,853	1,000	-
Miscellaneous	444,000	505,204	61,204	383,500	(60,500)
<b>Total Funding (A)</b>	<b>\$ 15,034,561</b>	<b>\$ 15,070,633</b>	<b>\$ 36,072</b>	<b>\$ 16,461,548</b>	<b>\$ 1,426,987</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 9,457,718	\$ 9,506,805	\$ 49,087	\$ 10,095,783	\$ 638,065
Payroll Taxes	642,524	703,569	61,045	747,086	104,562
Benefits	993,030	1,020,270	27,240	1,087,450	94,420
Retirement Costs	1,299,662	1,168,163	(131,499)	1,278,181	(21,481)
<b>Total Personnel Expenses</b>	<b>\$ 12,392,934</b>	<b>\$ 12,398,807</b>	<b>\$ 5,873</b>	<b>\$ 13,208,500</b>	<b>\$ 815,566</b>
<b>Meeting Expenses</b>					
Meetings	\$ 247,421	\$ 258,892	\$ 11,471	\$ 265,768	\$ 18,347
Travel	488,466	487,347	(1,119)	534,977	46,511
Conference Calls	44,544	36,315	(8,229)	44,544	-
<b>Total Meeting Expenses</b>	<b>\$ 780,431</b>	<b>\$ 782,554</b>	<b>\$ 2,123</b>	<b>\$ 845,289</b>	<b>\$ 64,858</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 1,497,173	\$ 2,079,307	\$ 582,134	\$ 2,120,181	\$ 623,008
Office Rent	517,917	573,047	55,130	590,983	73,066
Office Costs	310,879	363,093	52,214	282,011	(28,868)
Professional Services	155,200	212,265	57,065	175,739	20,539
Miscellaneous	5,000	19,131	14,131	16,700	11,700
Depreciation	483,480	398,219	(85,261)	234,882	(248,598)
<b>Total Operating Expenses</b>	<b>\$ 2,969,649</b>	<b>\$ 3,645,062</b>	<b>\$ 675,413</b>	<b>\$ 3,420,496</b>	<b>\$ 450,847</b>
<b>Total Direct Expenses</b>	<b>\$ 16,143,014</b>	<b>\$ 16,826,423</b>	<b>\$ 683,409</b>	<b>\$ 17,474,285</b>	<b>\$ 1,331,271</b>
<b>Indirect Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 16,143,014</b>	<b>\$ 16,826,423</b>	<b>\$ 683,409</b>	<b>\$ 17,474,285</b>	<b>\$ 1,331,271</b>
<b>Change in Assets</b>	<b>\$ (1,108,453)</b>	<b>\$ (1,755,790)</b>	<b>\$ (647,337)</b>	<b>\$ (1,012,737)</b>	<b>\$ 95,716</b>
<b>Fixed Assets</b>					
Depreciation	\$ (483,480)	\$ (398,219)	\$ 85,261	\$ (234,882)	\$ 248,598
Computer & Software CapEx	207,311	55,568	(151,743)	100,000	(107,311)
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	143,000	143,000
Leasehold Improvements	-	133,105	133,105	-	-
Allocation of Fixed Assets	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>(276,169)</b>	<b>(209,546)</b>	<b>66,623</b>	<b>8,118</b>	<b>284,287</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 15,866,845</b>	<b>\$ 16,616,877</b>	<b>\$ 750,032</b>	<b>\$ 17,482,403</b>	<b>\$ 1,615,558</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (832,284)</b>	<b>\$ (1,546,244)</b>	<b>\$ (713,960)</b>	<b>\$ (1,020,855)</b>	<b>\$ (188,571)</b>
<b>FTEs</b>	78.12	66.42	(11.70)	75.00	(3.12)

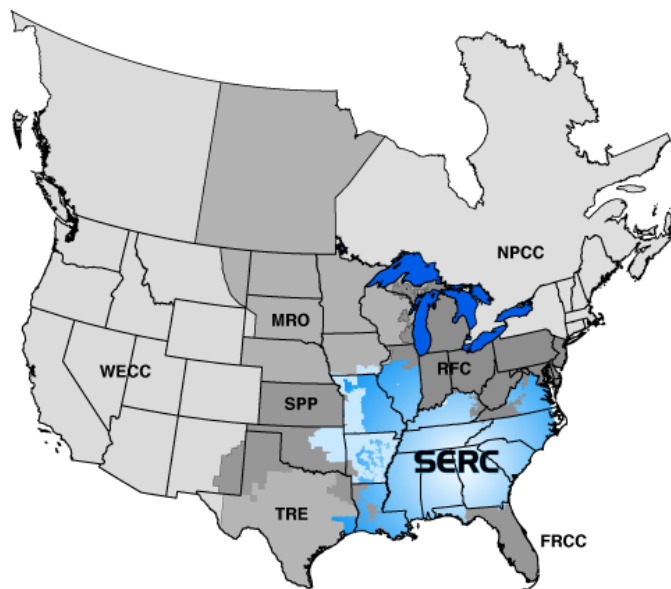
**Table 4. Budget and Projection Comparison, 2016 to 2017**

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# Section A – Statutory Programs

## 2017 Business Plan and Budget

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## Section A – Statutory Programs

### Reliability Standards Program

The following table shows funding sources and related expenses for the Reliability Standards program.

Reliability Standards Program (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	1.98	1.70	(0.28)
Direct Expenses	\$ 354,272	\$ 334,302	\$ (19,970)
Indirect Expenses	\$ 270,314	\$ 279,424	\$ 9,110
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ (10,695)	\$ 278	\$ 10,973
Total Funding Requirement	\$ 613,891	\$ 614,004	\$ 113

**Table A-1. Reliability Standards Budget**

### Program Scope and Functional Description

The SERC Reliability Standards program will develop regional Reliability Standards in accordance with the *Delegation Agreement* as well as develop regional criteria. The program will also promote the development and maintenance of NERC Reliability Standards that enable NERC and Regional Entities to measure the reliability performance of BPS owners, operators, and users.

### 2017 Key Assumptions

SERC's 2017 key assumptions are:

- The volume of NERC Reliability Standard changes is expected to decrease compared with prior years as the standards are expected to reach steady state.
- SERC resources will support ERO initiatives in the areas of:
  - Improvement in the timely and efficient development of clear, reasonable, and technically sound mandatory Reliability Standards.
  - Standards guidance including related training activities.
- Support for ERO activities necessary to incorporate regional standards into continent-wide standards as appropriate as the continent-wide Reliability Standards are reviewed through the Enhanced Periodic Review process.
- SERC regional standards development activity will continue to be limited.
- The ERO goal is to implement a cost-effectiveness analysis or assessment of proposed standards. This goal will require additional stakeholder review and input on developing standards.

## 2017 Goals and Key Deliverables

SERC's 2017 goals and key deliverables are the following:

- Manage the SERC Regional Reliability Standards and SERC Technical Committee Documents per the approved 2017 Review Work Plan.
- Review and update the SERC Regional Reliability Standards development procedure, as necessary.
- Support the ERO in development of clear, reasonable, and technically sound mandatory Reliability Standards in a timely and efficient manner.

## Resource Requirements

### Personnel

A decrease of 0.28 FTEs in Reliability Standards consists of the following:

- A decrease of 0.25 FTE. SERC repurposed a technical analyst position into General and Administrative as a business analyst. The previous technical analyst position was allocated to Reliability Standards, Training and Education, Situation Awareness and Infrastructure, and Technical Committees.
- A decrease of 0.03 FTE is due to a realignment of management positions.

Other changes in Personnel Expenses consist of the following:

- The 2017 budget includes an average payroll tax rate and benefit rate that have been applied to all FTEs, causing each expense to decrease from the previous year.
- SERC's insurance plan period is June 1 through May 31. SERC received an increase in premiums from the previous plan year, which will affect a portion of 2017. SERC is anticipating an additional increase in premiums for the second half of 2017 related to medical insurance, causing an increase in overall benefits. This increase is being offset by the average calculation noted above.

### Contractors and Consultants

There are no contractor and consultant resource requirements.

## Reliability Standards Budget Detail

The following table shows funding sources and related expenses for the Reliability Standards section of the 2017 Business Plan and Budget. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital					
2016 Budget & Projection, and 2017 Budget					
RELIABILITY STANDARDS					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 588,776	\$ 588,776	\$ -	\$ 607,334	\$ 18,558
Penalty Sanctions	25,115	25,115	-	6,670	(18,445)
<b>Total NERC Funding</b>	<b>\$ 613,891</b>	<b>\$ 613,891</b>	<b>\$ -</b>	<b>\$ 614,004</b>	<b>\$ 113</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 613,891</b>	<b>\$ 613,891</b>	<b>\$ -</b>	<b>\$ 614,004</b>	<b>\$ 113</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 264,723	\$ 263,466	\$ (1,257)	\$ 255,902	\$ (8,821)
Payroll Taxes	19,590	19,497	(93)	18,937	(653)
Benefits	31,619	27,813	(3,806)	23,841	(7,778)
Retirement Costs	37,277	33,392	(3,885)	33,222	(4,055)
<b>Total Personnel Expenses</b>	<b>\$ 353,209</b>	<b>\$ 344,168</b>	<b>\$ (9,041)</b>	<b>\$ 331,902</b>	<b>\$ (21,307)</b>
<b>Meeting Expenses</b>					
Meetings	\$ -	\$ 125	\$ 125	\$ -	\$ -
Travel	1,063	2,309	1,246	2,400	1,337
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 1,063</b>	<b>\$ 2,434</b>	<b>\$ 1,371</b>	<b>\$ 2,400</b>	<b>\$ 1,337</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -
Office Rent	-	-	-	-	-
Office Costs	-	-	-	-	-
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Direct Expenses</b>	<b>\$ 354,272</b>	<b>\$ 346,602</b>	<b>\$ (7,670)</b>	<b>\$ 334,302</b>	<b>\$ (19,970)</b>
<b>Indirect Expenses</b>	<b>\$ 270,314</b>	<b>\$ 309,769</b>	<b>\$ 39,455</b>	<b>\$ 279,424</b>	<b>\$ 9,110</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 624,586</b>	<b>\$ 656,371</b>	<b>\$ 31,785</b>	<b>\$ 613,726</b>	<b>\$ (10,860)</b>
<b>Change in Assets</b>	<b>\$ (10,695)</b>	<b>\$ (42,480)</b>	<b>\$ (31,785)</b>	<b>\$ 278</b>	<b>\$ 10,973</b>
<b>Fixed Assets</b>					
Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ (10,695)	(7,912)	2,783	278	10,973
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>(10,695)</b>	<b>(7,912)</b>	<b>2,783</b>	<b>278</b>	<b>10,973</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 613,891</b>	<b>\$ 648,459</b>	<b>\$ 34,568</b>	<b>\$ 614,004</b>	<b>\$ 113</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ -</b>	<b>\$ (34,568)</b>	<b>\$ (34,568)</b>	<b>\$ -</b>	<b>\$ -</b>
FTEs	1.98	1.61	(0.37)	1.70	(0.28)

Table A-2. Reliability Standards Budget Detail

## Compliance Monitoring and Enforcement and Organization Registration and Certification Program

The following table lists the budget for the Compliance Monitoring and Enforcement and Organization Registration and Certification program.

Compliance Monitoring and Enforcement and Organization Registration and Certification Program (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	36.92	34.31	(2.61)
Direct Expenses	\$ 6,155,109	\$ 6,171,838	\$ 16,729
Indirect Expenses	\$ 5,039,944	\$ 5,639,443	\$ 599,499
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ (199,411)	\$ 5,604	\$ 205,015
Total Funding Requirement	\$ 10,995,642	\$ 11,816,885	\$ 821,243

**Table A-3. Compliance Monitoring and Enforcement and Organization Registration and Certification Budget**

### Program Scope and Functional Description

The Compliance Monitoring and Enforcement and Organization Registration and Certification Program is implemented by SERC's Compliance and Enforcement personnel, who are independent of stakeholders and registered entities. To accomplish this objective, SERC's Compliance Monitoring and Enforcement and Organization Registration and Certification Program area is further divided into four areas: Compliance Monitoring, Compliance Programs and Services, Entity Assessment and Mitigation, and Enforcement.

### Compliance

SERC's Compliance staff implements the Compliance Monitoring processes and Organization Registration and Certification activities pursuant to the *Delegation Agreement* and Uniform CMEP. The Compliance Program consists of four functional areas:

- Compliance Monitoring
  - Conducts Compliance audits, spot checks, and investigations.
  - Personnel serve as subject matter experts for all standards and for implementing the process for Technical Feasibility Exceptions to the Critical Infrastructure Protection (CIP) Standards.
- Compliance Programs and Services
  - Implements and deploys CMEP-related analytics and Compliance Assessments.
- Entity Assessment and Mitigation
  - Conducts Entity Inherent Risk Assessments and Internal Control Evaluations.
  - Staff serves as the single point of contact for all non-Compliance issues discovered and/or self-reported to the Region.
  - Determines the scope of the violation and the actual and potential risk to the BPS reliability.
  - Reviews the registered entity's mitigating activities to ensure that the entity corrects the issue and prevents recurrence.
  - Analyzes self-logging applications and determines eligibility.

- Organization Registration and Certification
  - Registers owners, operators, and users of the BPS for compliance with Reliability Standards.
  - Certifies applicable entities.

### Enforcement

Enforcement personnel evaluate all Possible Violations of Reliability Standards and conduct a thorough assessment to determine if there is a violation. The Enforcement personnel follow these steps:

1. Notify the registered entity of the findings regarding the violation and any applicable penalties or sanctions.
2. Negotiate settlement with the registered entity.
3. Submit the proposed Enforcement action, along with any proposed penalty or sanctions, to NERC for review, approval, and subsequent submittal to FERC.
4. If a registered entity challenges the findings of the violation and/or penalty, the Enforcement staff prosecutes the case before the Board Compliance Committee, which acts as SERC's hearing body.

### 2017 Key Assumptions

#### Compliance

- SERC will collaborate with NERC in the development of procedures, IT platforms, and tools.
- SERC will address complaints submitted to the Regions that allege a violation of a Reliability Standard.
- Risk-Based Monitoring activities are expected to increase. SERC has modified its time-based six-year audit cycle to a Risk-Based Compliance Monitoring approach. Based on risk, there will be an increase in audits and spot checks for non-three-year entities. The three-year audit cycle remains unchanged.
- SERC will employ consistent audit practices and focus on higher-target reliability risks to increase the efficiency of Compliance Monitoring and mitigate overall Compliance costs.
- SERC will continue training Compliance staff on risk principles and enhanced audit practices, including credentialing and Risk-Based Compliance Monitoring and Enforcement processes. Training activity will affect staffing needs and costs (e.g., travel, lodging, and labor).
- Staff will obtain and/or maintain professional credentials, such as industry certifications, NERC System Operator Certification, Cyber Security certifications, Professional Engineering licenses, and certified auditor credentials, to ensure that staff skills remain current on industry trends and standards.
- SERC will continue to support the training requirements necessary to meet the criteria set forth by the *ERO Auditor Manual and Handbook* and the *Compliance Auditor Capabilities and Competency Guide*. SERC will demonstrate the following:
  - Compliance staff and other personnel, as necessary, understand guidance documents.
  - An annual process exists for personnel to acknowledge their commitment to Professional Standards, Ethical Principles, and Rules of Conduct.
  - An annual assessment process exists to evaluate audit team content and capability needs.



- A training program exists that addresses initial and continuing training for capability and competency development.
- The use of Compliance Monitoring methods other than audits is expected to increase as Risk-Based Compliance Monitoring is implemented. These other methods include spot checks and Guided Self-Certifications.
- Non-CIP violations are expected to remain low as most registered entities have been previously audited, and the standards and Reliability Standards Audit Worksheets (RSAWs) have matured.
  - Dedicated CIP Compliance personnel have been allocated to support registered entities undergoing a CIP audit.
- SERC estimates it will perform nine on-site CIP and Operations and Planning audits. The exact number of off-site audits or spot checks will depend on the results of an entity's Risk Assessment.
- The Technical Feasibility Exception (TFE) processing implementation will continue. This implementation will probably include equipment class-based exceptions, audit sampling, and a simpler process for reporting and reviewing.
- SERC will provide to NERC timely and accurate information about changes in registrations.
- SERC will review the analyses of system events to confirm that all necessary entities are registered, and registered entities initiate corrective actions, as appropriate.
- SERC will collaborate with NERC to determine if a certification review is appropriate or if a new certification is required to accommodate a change in a registered entity's status.
- In certifying registered entities, SERC will collaborate with NERC and implement the NERC-approved certification process to assess a registered entity's capability for performing its registered function(s) and to use the tools NERC provides.
- SERC will document the information obtained during the certification process and make recommendations to NERC regarding certification.
- SERC estimates that it will conduct five certification activities.
- The volume of documents for Joint Registration Organization, Coordinated Functional Registration, and Multi-Regional Entity Registration will increase as registered entities better delineate shared responsibilities and promote efficiency and effectiveness in Compliance. This increase will affect the workload for Registration and Compliance Monitoring within SERC.
- Consideration will be given to reallocating existing staff and/or contract resources, or using available reserves to provide the resource support necessary to support the successful implementation (or transition) of these major activities: Risk-Based Compliance Monitoring and Enforcement and Risk-Based Registration.
- As the Risk-Based Compliance Monitoring and Enforcement program matures, SERC will provide training to ensure that personnel have the necessary skills.
- SERC utilizes resources to design and implement Risk-Based Compliance Monitoring and Enforcement for minimal-risk non-compliance through the Compliance Exception process.

### **Enforcement**

- The rate of incoming Possible Violations may increase slightly in 2017 due to the transition to CIP Version 5.

- Actions to process or dismiss Possible Violations will be timely and transparent to the industry.
- There will be no significant increase in travel for Enforcement staff to process Possible Violations and Mitigation Plans.
- SERC’s goal is that no SERC BCC hearings will be held to resolve contested findings of a violation or penalty.

## 2017 Goals and Key Deliverables

### Compliance

- Conduct scheduled Compliance Monitoring activities pursuant to the 2017 Implementation Plan.
  - Compliance Monitoring engagements for 2017 are currently scheduled to include on-site audits, off-site audits, and spot checks. SERC anticipates nine CIP and Operations and Planning on-site audits. At this time, the Inherent Risk Assessments are being done for entities that could fall into the 2017 schedule for off-site audit or spot check engagements.
- Facilitate efficient and collaborative transition to new and revised standards through:
  - Workshops focused on upcoming enforceable standards.
  - Review of registered entities’ progress toward compliance with upcoming standards.
- Work with ERO to consolidate to a common set of RSAWs, or successors, for all standards.
- Work with the industry to provide information on effective procedures and programs to monitor, detect, correct, report, and prevent deficiencies in compliance, reliability, and security.
  - Mature Compliance reform through a Risk-Based Compliance Monitoring approach.
  - Mature Risk-Based Compliance Monitoring techniques and principles consistently.
  - Collaborate with the industry regarding best practices to encourage effective internal controls models.
  - Initiate Compliance phase-in learning periods for new standards.
- Monitor each registered entity, by role, for its standards and requirements commensurate with the reliability risk.
- Train Compliance staff on risk principles and implementation of enhanced audit practices, including credentialing for audit team leads and other audit team members, as appropriate, to manage employee development.
- Continue outreach to registered entities for implementation of CIP V5 transition.
- Develop and deliver Lessons Learned from all aspects of the Compliance Monitoring processes and corrective action activities resulting from entity performance.
- Continue implementing the Bulk Electric System (BES) exception process.
- Evaluate the certification program for sufficiency and effectiveness. Modify the program, as needed.
- Develop the Implementation Plan.
- Deploy the plan for registration commensurate with risk to the BPS.

- Work with the ERO to develop common and consistent registration processes, information systems, and methods among Regions.
- Ensure that all key registered entities are certified to have essential capabilities.
- Develop and implement the Compliance Monitoring and Enforcement reform through risk-based techniques, including the following:
  - Focus on serious risk violations to improve the effectiveness of SERC operations.
  - Reduce unnecessary costs of compliance on registered entities, while ensuring that reliability objectives are achieved.
- Review and accept Mitigation Plans that contain effective corrective actions.
- Ensure timely mitigation of all violations to restore compliance and prevent recurrence, thereby maintaining the reliability of the BPS. Timely mitigation will cause the aging curve to trend positively.
- Develop mature violation processing management tools and training based on the risk-based techniques to improve the efficiency, transparency, consistency, quality, and timeliness of violation processing.
- Identify trends in violations and their causes.
- Provide Lessons Learned and outreach to registered entities, including CIP V5 implementation training.

### **Enforcement**

- Manage all Enforcement activities in an unbiased, fair, and consistent manner to ensure due process for all registered entities.
- Hold the industry accountable for violations that create a serious risk to the BPS. Ensure resulting actions are timely and transparent to the industry, including appropriate use of Compliance Exceptions, Find, Fix, and Track (FFT), Spreadsheet Notice of Penalty (SNOP), and Full Notice of Penalty (NOP). To achieve this, SERC will do the following:
  - Increase the percentage of self-identified non-compliances (Self Reports and Self Certifications).
  - Decrease the Caseload Index and violation aging.
  - Allocate a higher percentage of lower and moderate risk violations to the BPS to be processed through Compliance Exceptions, FFT, or SNOP.
  - Expand the use of Compliance Exceptions.

### **Resource Requirements**

#### **Personnel**

A decrease of 2.61 FTEs in Compliance consists of the following:

- A net increase of 0.9 FTE. SERC reallocated existing positions previously recorded in Legal and Regulatory into Compliance for additional Enforcement support.
- A net decrease of 0.42 FTE. SERC reclassified existing positions previously recorded in Compliance into Situation Awareness due to the organizational realignment of a managerial position and an engineer to better align actual work performed.
- A decrease of 0.17 FTE. SERC reallocated an existing position previously recorded in Compliance into Reliability Assessment and Performance Analysis due to the organizational realignment of a managerial position.

- A net decrease of 1.92 FTEs related to staggering entry dates.
- A decrease of 1.0 FTE due to the elimination of an engineer position.

Other changes in Personnel Expenses consist of the following:

- The 2017 budget includes an average payroll tax rate and benefit rate that have been applied to all FTEs, causing each expense to increase from the previous year.
- SERC's insurance plan period is June 1 through May 31. SERC received an increase in premiums from the previous plan year, which will affect a portion of 2017. SERC is anticipating an additional increase in premiums for the second half of 2017 related to medical insurance, causing an increase in overall benefits.

### **Contractors and Consultants**

The 2017 budget includes contractor support in lieu of FTEs to supplement the Audit and Enforcement programs.

## Compliance Monitoring and Enforcement and Organization Registration and Certification Budget Detail

The following table shows funding sources and related expenses for the Compliance Monitoring and Enforcement and Organization Registration and Certification section of the *2017 Business Plan and Budget*. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>COMPLIANCE MONITORING, ENFORCEMENT and ORGANIZATION REGISTRATION and CERTIFICATION</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 10,377,385	\$ 10,377,385	\$ -	\$ 11,611,268	\$ 1,233,883
Penalty Sanctions	468,257	468,257	-	134,617	(333,640)
<b>Total NERC Funding</b>	<b>\$ 10,845,642</b>	<b>\$ 10,845,642</b>	<b>\$ -</b>	<b>\$ 11,745,885</b>	<b>\$ 900,243</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	150,000	197,718	47,718	71,000	(79,000)
<b>Total Funding (A)</b>	<b>\$ 10,995,642</b>	<b>\$ 11,043,360</b>	<b>\$ 47,718</b>	<b>\$ 11,816,885</b>	<b>\$ 821,243</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 4,396,706	\$ 4,279,867	\$ (116,839)	\$ 4,334,934	\$ (61,772)
Payroll Taxes	307,769	316,712	8,943	320,783	13,014
Benefits	471,441	497,536	26,095	526,268	54,827
Retirement Costs	604,302	551,046	(53,256)	564,671	(39,631)
<b>Total Personnel Expenses</b>	<b>\$ 5,780,218</b>	<b>\$ 5,645,161</b>	<b>\$ (135,057)</b>	<b>\$ 5,746,656</b>	<b>\$ (33,562)</b>
<b>Meeting Expenses</b>					
Meetings	\$ 23,140	\$ 27,677	\$ 4,537	\$ 13,500	\$ (9,640)
Travel	271,550	320,269	48,719	309,282	37,732
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 294,690</b>	<b>\$ 347,946</b>	<b>\$ 53,256</b>	<b>\$ 322,782</b>	<b>\$ 28,092</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 54,543	\$ 165,322	\$ 110,779	\$ 83,000	\$ 28,457
Office Rent	-	-	-	-	-
Office Costs	15,658	14,588	(1,070)	19,400	3,742
Professional Services	10,000	-	(10,000)	-	(10,000)
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 80,201</b>	<b>\$ 179,910</b>	<b>\$ 99,709</b>	<b>\$ 102,400</b>	<b>\$ 22,199</b>
<b>Total Direct Expenses</b>	<b>\$ 6,155,109</b>	<b>\$ 6,173,017</b>	<b>\$ 17,908</b>	<b>\$ 6,171,838</b>	<b>\$ 16,729</b>
<b>Indirect Expenses</b>	<b>\$ 5,039,944</b>	<b>\$ 6,074,165</b>	<b>\$ 1,034,221</b>	<b>\$ 5,639,443</b>	<b>\$ 599,499</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 11,195,053</b>	<b>\$ 12,247,182</b>	<b>\$ 1,052,129</b>	<b>\$ 11,811,281</b>	<b>\$ 616,228</b>
<b>Change in Assets</b>	<b>\$ (199,411)</b>	<b>\$ (1,203,822)</b>	<b>\$ (1,004,411)</b>	<b>\$ 5,604</b>	<b>\$ 205,015</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	(199,411)	(155,144)	44,267	5,604	205,015
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>\$ (199,411)</b>	<b>\$ (155,144)</b>	<b>\$ 44,267</b>	<b>\$ 5,604</b>	<b>\$ 205,015</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 10,995,642</b>	<b>\$ 12,092,038</b>	<b>\$ 1,096,396</b>	<b>\$ 11,816,885</b>	<b>\$ 821,243</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ -</b>	<b>\$ (1,048,678)</b>	<b>\$ (1,048,678)</b>	<b>\$ -</b>	<b>\$ -</b>
<b>FTEs</b>	<b>36.92</b>	<b>31.57</b>	<b>(5.35)</b>	<b>34.31</b>	<b>(2.61)</b>

**Table A-4. Compliance Monitoring and Enforcement and Organization Registration and Certification Budget Detail**

## Reliability Assessment and Performance Analysis Program

The following table lists the budget for the Reliability Assessments and Performance Analysis program (RAPA).

<b>Reliability Assessments and Performance Analysis</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	6.60	8.12	1.52
Direct Expenses	\$ 1,110,087	\$ 1,591,012	\$ 480,925
Indirect Expenses	\$ 901,046	\$ 1,334,663	\$ 433,617
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ (35,651)	\$ 1,326	\$ 36,977
Total Funding Requirement	\$ 1,975,482	\$ 2,927,001	\$ 951,519

**Table A-5. Reliability Assessments and Performance Analysis (RAPA) Budget**

### Program Scope and Functional Description

SERC's RAPA program provides data gathering and analysis of events on the BES. The RAPA function identifies reliability risks to the BES in the SERC footprint for the purpose of integrated risk analysis. RAPA's mission is to promote a culture of reliability excellence among the owners of BES assets. The program accomplishes this mission by identifying risks to reliability, analyzing performance, and prioritizing significant risks.

SERC conducts an independent reliability assessment of the BES within the SERC Region, including data gathering and analysis. The assessment program uses information from its internal data collection sources along with other programs, such as NERC Transmission Availability Data System (TADS), Generating Availability Data Systems (GADS), Demand Response Availability Data System (DADS), and the Misoperations Information Data Analysis System (MIDAS). SERC evaluates the overall reliability, performance, and adequacy of the SERC Region and reports its results to NERC. SERC's work supports NERC's obligation to perform similar analysis of the interconnected North American BPS.

### 2017 Key Assumptions

- Workloads will increase to support the ERO Reliability Assessment strategic goals. NERC and regional coordination is expected to increase to improve processes, data collections, and information required to implement enhanced regional analytical efforts.
- Workloads will increase to support internal training requirements for SERC's risk identification and mitigation effort. Internal and external outreach efforts will increase to promote awareness and reliability resolution discussions. SERC will use project management and analytical software to collaborate, balance workloads, and manage resources effectively.
- Workloads will increase to support regional and NERC initiatives associated with reliability impacts from the Environmental Protection Agency Clean Power Plan Rule and other special assessments that NERC and southeastern state representatives may require. Additional contractor and consulting services will be acquired as needed to manage resources effectively.

## 2017 Goals and Key Deliverables

- Increase regional analysis to support the NERC reliability analysis efforts and the SERC reliability risk management and performance analysis process.
- Continue to support ongoing improvements to SERC and Eastern Interconnection planning models and model data management.
- Increase staff capability to analyze projected, historical, and operational data to measure seasonal system reliability performance.
- Assess and improve the distribution methods of assessment work products to increase wide-spread dissemination of reliability information.
- Continue to support NERC Performance Analysis data collections, data validation, and analytical efforts.
- Complete reliability assessment studies and support through the NERC Reliability Assessment Subcommittee (RAS) and the ERO RAPA group. These studies include summer, winter, post-seasonal, long-term, scenario, and probabilistic reliability assessments. Regional planning requirements include SERC seasonal and long-term operational scenario studies.
- Complete annual FERC Form 715 and Energy Information Administration (EIA) submittals on behalf of SERC registered entities within specified time frames.
- Continue to support and implement the integrated reliability risk management program to determine risk control initiatives and necessary mitigation actions, and to inform the SERC Compliance functions.
- Publish 2017 SERC primary reliability risk identification reports for ERO and SERC committee discussions. In addition, report on risk control efforts to mitigate identified risk.

## Resource Requirements

### Personnel

An increase of 1.52 FTEs in Reliability Assessment and Performance Analysis consists of the following:

- A net increase of 1.50 FTE was reclassified from Technical Committees and Members Forum program and Situation Awareness and Infrastructure Security program, 0.75 FTE from each, into the Reliability Assessment and Performance Analysis program, to better align actual work performed.
- A net increase of 0.05 FTE results from staggering entry dates and changing a part-time FTE to a full-time FTE.
- A net decrease of 0.03 FTE. SERC reallocated an existing position previously recorded in Reliability Assessment and Performance Analysis into Compliance due to the organizational realignment of a managerial position.

Other changes in Personnel Expenses consist of the following:

- The 2017 budget includes an average payroll tax rate and benefit rate that have been applied to all FTEs, causing each expense to increase from the previous year.
- SERC's insurance plan period is June 1 through May 31. SERC received an increase in premiums from the previous plan year, which will affect a portion of 2017. SERC is anticipating an additional increase in premiums for the second half of 2017 related to medical insurance, causing an increase in overall benefits.

**Contractors and Consultants**

The 2017 budget includes contractor support for additional scenario analysis performed through the Resource Adequacy Working Group, modeling development and analysis performed by the Eastern Interconnection Reliability Assessment Group, and development of the Under-Frequency Load Shed study and dynamics reduction cases through the Dynamics Study Group.

In addition to contract services, consulting services will be used to support regional analysis efforts associated with environmental and reliability risk initiatives.



## Reliability Assessment and Performance Analysis Budget Detail

The following table lists funding sources and related expenses for the Reliability Assessment and Performance Analysis section of the *2017 Business Plan and Budget*. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital 2016 Budget & Projection, and 2017 Budget					
RELIABILITY ASSESSMENTS and PERFORMANCE ANALYSIS					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 1,891,766	\$ 1,891,766	\$ -	\$ 2,895,142	\$ 1,003,376
Penalty Sanctions	83,716	83,716	-	31,859	(51,857)
<b>Total NERC Funding</b>	<b>\$ 1,975,482</b>	<b>\$ 1,975,482</b>	<b>\$ -</b>	<b>\$ 2,927,001</b>	<b>\$ 951,519</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 1,975,482</b>	<b>\$ 1,975,482</b>	<b>\$ -</b>	<b>\$ 2,927,001</b>	<b>\$ 951,519</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 640,779	\$ 603,491	\$ (37,288)	\$ 865,697	\$ 224,918
Payroll Taxes	51,262	44,657	(6,605)	64,063	12,801
Benefits	86,294	78,556	(7,738)	112,726	26,432
Retirement Costs	90,051	75,828	(14,223)	110,591	20,540
<b>Total Personnel Expenses</b>	<b>\$ 868,386</b>	<b>\$ 802,532</b>	<b>\$ (65,854)</b>	<b>\$ 1,153,077</b>	<b>\$ 284,691</b>
<b>Meeting Expenses</b>					
Meetings	\$ 10,845	\$ 15,684	\$ 4,839	\$ 22,200	\$ 11,355
Travel	40,170	36,978	(3,192)	44,268	4,098
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 51,015</b>	<b>\$ 52,662</b>	<b>\$ 1,647</b>	<b>\$ 66,468</b>	<b>\$ 15,453</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 188,000	\$ 113,617	\$ (74,383)	\$ 369,000	\$ 181,000
Office Rent	-	-	-	-	-
Office Costs	2,686	2,311	(375)	2,467	(219)
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 190,686</b>	<b>\$ 115,928</b>	<b>\$ (74,758)</b>	<b>\$ 371,467</b>	<b>\$ 180,781</b>
<b>Total Direct Expenses</b>	<b>\$ 1,110,087</b>	<b>\$ 971,122</b>	<b>\$ (138,965)</b>	<b>\$ 1,591,012</b>	<b>\$ 480,925</b>
<b>Indirect Expenses</b>	<b>\$ 901,046</b>	<b>\$ 983,180</b>	<b>\$ 82,134</b>	<b>\$ 1,334,663</b>	<b>\$ 433,617</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 2,011,133</b>	<b>\$ 1,954,302</b>	<b>\$ (56,831)</b>	<b>\$ 2,925,675</b>	<b>\$ 914,542</b>
<b>Change in Assets</b>	<b>\$ (35,651)</b>	<b>\$ 21,180</b>	<b>\$ 56,831</b>	<b>\$ 1,326</b>	<b>\$ 36,977</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ (35,651)	\$ (25,112)	\$ 10,539	1,326	\$ 36,977
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ (35,651)</b>	<b>\$ (25,112)</b>	<b>\$ 10,539</b>	<b>\$ 1,326</b>	<b>\$ 36,977</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 1,975,482</b>	<b>\$ 1,929,190</b>	<b>\$ (46,292)</b>	<b>\$ 2,927,001</b>	<b>\$ 951,519</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ -</b>	<b>\$ 46,292</b>	<b>\$ 46,292</b>	<b>\$ -</b>	<b>\$ -</b>
<b>FTEs</b>	<b>6.60</b>	<b>5.11</b>	<b>(1.49)</b>	<b>8.12</b>	<b>1.52</b>

Table A-6. Reliability Assessment and Performance Analysis Budget Detail

## Training, Education, and Operator Certification Program

The following table summarizes the budget for Training, Education, and Operator Certification.

Training, Education and Operator Certification (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	2.23	1.70	(0.53)
Direct Expenses	\$ 967,517	\$ 559,283	\$ (408,234)
Indirect Expenses	\$ 304,444	\$ 279,424	\$ (25,020)
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ (12,046)	\$ 278	\$ 12,324
Total Funding Requirement	\$ 1,259,915	\$ 838,985	\$ (420,930)

**Table A-7. Training, Education, and Operator Certification Budget**

### Program Scope and Functional Description

The SERC Training, Education, and Operator Certification program provides education and training necessary to obtain essential knowledge of BPS operations. SERC Training and Education programs support the continuing education of NERC Certified System Operators in the SERC Region. The program's target audience is BPS operating personnel, system operators, operations support personnel, and training personnel.

SERC supports the development of SERC's staff training and education in power system operating topics.

### 2017 Key Assumptions

- Support the ERO goal to implement Risk-Based Compliance Monitoring. Achieving this goal will require structured training.
  - SERC will use common ERO training methods and curriculum for regional consistency of auditors and other key staff on the required qualification and competencies.
- SERC will provide training to operating personnel to promote the reliability of the BPS in North America.
  - SERC will educate utility personnel regarding changes to NERC Reliability Standards, ERO procedures, and programs that detect, monitor, report, correct, and prevent recurrence of issues with reliability and/or compliance.

### 2017 Goals and Key Deliverables

- The SERC Training program will maintain SERC's status as a NERC-certified Continuing Education Provider.
- The SERC Training program will support the following goals:
  - Develop and deliver training on required technical knowledge, skills, and abilities for auditors and other key staff positions within SERC.
  - Develop and deliver four System Operator Conferences that promote BES reliability by assuring the competence of real-time operating personnel through continuing education on power system operating topics.
  - Deliver a Power System Restoration Drill that provides the opportunity for real-time operating personnel and operations support personnel to practice the use of

their restoration plans, communications protocol, and to return the BES to a stable interconnected operating state after a simulated system disturbance.

- Deliver NERC Reliability Standards workshops or webinars to BPS system operators, operating support personnel, compliance, and training personnel to explain changed expectations within new or revised Reliability Standards and related procedures and programs.

## Resource Requirements

### Personnel

A decrease of 0.53 FTEs in Training and Education consists of the following:

- A decrease of 0.25 FTE was reclassified from the Training and Education program into the Situation Awareness and Infrastructure Security program to better align actual work performed.
- A decrease of 0.25 FTE. SERC repurposed a technical analyst position into General and Administrative as a business analyst. The previous technical analyst position was allocated to Reliability Standards, Training and Education, Situation Awareness and Infrastructure, and Technical Committees.
- A net decrease of 0.03 FTE. SERC reallocated an existing position previously recorded in Training, Education, and Operator Certification into General and Administrative, and an existing position previously recorded in Situation Awareness and Infrastructure Security into Training, Education, and Operator Certification due to the organizational realignment of managerial positions.

Other changes in Personnel Expenses consist of the following:

- The 2017 budget includes an average payroll tax rate and benefit rate that have been applied to all FTEs, causing each expense to decrease from the previous year.
- SERC's insurance plan period is June 1 through May 31. SERC received an increase in premiums from the previous plan year, which will affect a portion of 2017. SERC is anticipating an additional increase in premiums for the second half of 2017 related to medical insurance, causing an increase in overall benefits. This is offset by the decrease in FTEs.

### Contractors and Consultants

The 2017 budget includes contractor support for the System Operator Conferences and Restoration Drill exercises.

## Training, Education, and Operator Certification Budget Detail

The following table shows funding sources and related expenses for the Training, Education, and Operator Certification section of the 2017 Business Plan and Budget. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>TRAINING, EDUCATION and OPERATOR CERTIFICATION</b>					
	<b>2016</b>	<b>2016</b>	<b>Variance</b>	<b>2017</b>	<b>Variance</b>
<b>Funding</b>	<b>Budget</b>	<b>Projection</b>	<b>2016 Projection</b>	<b>Budget</b>	<b>2017 Budget</b>
			<b>v 2016 Budget</b>		<b>v 2016 Budget</b>
			<b>Over(Under)</b>		<b>Over(Under)</b>
<b>ERO Funding</b>					
NERC Assessments	\$ 1,021,554	\$ 1,021,554	\$ -	\$ 656,290	\$ (365,264)
Penalty Sanctions	28,286	28,286	-	6,670	(21,616)
<b>Total NERC Funding</b>	<b>\$ 1,049,840</b>	<b>\$ 1,049,840</b>	<b>\$ -</b>	<b>\$ 662,960</b>	<b>\$ (386,880)</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	210,075	183,090	(26,985)	176,025	(34,050)
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 1,259,915</b>	<b>\$ 1,232,930</b>	<b>\$ (26,985)</b>	<b>\$ 838,985</b>	<b>\$ (420,930)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 271,998	\$ 114,821	\$ (157,177)	\$ 191,593	\$ (80,405)
Payroll Taxes	19,040	8,497	(10,543)	14,178	(4,862)
Benefits	30,113	18,747	(11,366)	25,141	(4,972)
Retirement Costs	37,373	14,003	(23,370)	24,775	(12,598)
<b>Total Personnel Expenses</b>	<b>\$ 358,524</b>	<b>\$ 156,068</b>	<b>\$ (202,456)</b>	<b>\$ 255,687</b>	<b>\$ (102,837)</b>
<b>Meeting Expenses</b>					
Meetings	\$ 137,196	\$ 112,653	\$ (24,543)	\$ 137,496	\$ 300
Travel	15,597	7,974	(7,623)	11,100	(4,497)
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 152,793</b>	<b>\$ 120,627</b>	<b>\$ (32,166)</b>	<b>\$ 148,596</b>	<b>\$ (4,197)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 455,000	\$ 112,060	\$ (342,940)	\$ 155,000	\$ (300,000)
Office Rent	-	-	-	-	-
Office Costs	1,200	-	(1,200)	-	(1,200)
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 456,200</b>	<b>\$ 112,060</b>	<b>\$ (344,140)</b>	<b>\$ 155,000</b>	<b>\$ (301,200)</b>
<b>Total Direct Expenses</b>	<b>\$ 967,517</b>	<b>\$ 388,755</b>	<b>\$ (578,762)</b>	<b>\$ 559,283</b>	<b>\$ (408,234)</b>
<b>Indirect Expenses</b>	<b>\$ 304,444</b>	<b>\$ 117,366</b>	<b>\$ (187,078)</b>	<b>\$ 279,424</b>	<b>\$ (25,020)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 1,271,961</b>	<b>\$ 506,121</b>	<b>\$ (765,840)</b>	<b>\$ 838,707</b>	<b>\$ (433,254)</b>
<b>Change in Assets</b>	<b>\$ (12,046)</b>	<b>\$ 726,809</b>	<b>\$ 738,855</b>	<b>\$ 278</b>	<b>\$ 12,324</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ (12,046)	\$ (2,998)	9,048	278	\$ 12,324
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ (12,046)</b>	<b>\$ (2,998)</b>	<b>\$ 9,048</b>	<b>\$ 278</b>	<b>\$ 12,324</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 1,259,915</b>	<b>\$ 503,123</b>	<b>\$ (756,792)</b>	<b>\$ 838,985</b>	<b>\$ (420,930)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ -</b>	<b>\$ 729,807</b>	<b>\$ 729,807</b>	<b>\$ -</b>	<b>\$ -</b>
<b>FTEs</b>	<b>2.23</b>	<b>0.61</b>	<b>(1.62)</b>	<b>1.70</b>	<b>(0.53)</b>

Table A-8. Training, Education, and Operator Certification Budget Detail

## Situation Awareness and Infrastructure Security Program

The following table lists the budget for Situation Awareness and Infrastructure Security.

Situation Awareness and Infrastructure Security (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	3.40	3.87	0.47
Direct Expenses	\$ 576,106	\$ 648,794	\$ 72,688
Indirect Expenses	\$ 464,175	\$ 636,102	\$ 171,927
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	(18,366)	632	18,998
Total Funding Requirement	\$ 1,021,915	\$ 1,285,528	\$ 263,613

**Table A-9. Situation Awareness and Infrastructure Security Budget**

### Program Scope and Functional Description

The Situation Awareness and Events Analysis (SAEA) program identifies and analyzes conditions that impact or might impact reliable operations. The SERC Situation Awareness and Infrastructure Security program accomplishes this by monitoring sources of information and maintaining communications with stakeholders, NERC, and other organizations. This program identifies initiatives to mitigate and improve reliability by analyzing significant BES events and existing technical reliability guidance for risks and vulnerabilities that could recur elsewhere within the BPS.

### 2017 Key Assumptions

- SERC will continue to work with NERC’s Electricity-Information Sharing and Analysis Center (E-ISAC) and SERC Registered Entities to identify opportunities for improving information sharing on CIP-related events, threats, and vulnerabilities to improve reliability within the BES.
- SERC will expand its outreach program efforts to communicate externally events from Situation Awareness (SA), Events Analysis (EA), and Compliance Assessment (CA) analysis.
- SERC will continue to review, track, and trend reliability events to support events reduction and outreach efforts in the SERC Region.
- SERC will share mitigating measures and other BES improvements with SERC entities and the ERO.
- SERC will continue to work with other Regional SAEA groups to identify conditions or best practices that improve reliability within the BES.

### 2017 Goals and Key Deliverables

- Continue to increase the utilization of data collection tools (CIPSA, The Events Analysis Management System, etc.) to support analysis and reporting requirements.
- Evaluate events information to identify risk trends and benchmarking efforts.
- Develop SERC Reliability Bulletins and support NERC Lessons Learned initiatives.
- Continue stakeholder outreach efforts that support the SAEA program.

- Facilitate and promote post-event collaboration and coordination with NERC and applicable governmental agencies.
- Identify and prioritize risks based on reliability impacts, practicality assessments, projected resources, and emerging issues.
- Monitor and evaluate CIP-related threats, vulnerabilities, and events for information sharing internally (SERC staff) and externally (registered entities).

## Resource Requirements

### Personnel

An increase of 0.47 FTEs in Situation Awareness and Infrastructure Security consists of the following:

- A net increase of 0.75 FTE was reclassified from Technical Committees and Members Forum program; Training, Education, and Operator Certification program; and Compliance (0.25 FTE from each) into the Situation Awareness and Infrastructure Security program.
- A decrease of 0.75 FTE was reclassified from Situation Awareness and Infrastructure Security into Reliability Assessment and Performance Analysis to better align actual work performed.
- An increase of 0.75 FTEs relates to staggering entry dates.
- A net decrease of 0.03 FTE. SERC reallocated three positions affecting Situation Awareness and Infrastructure Security due to the organizational realignment of managerial positions: 1) an existing position previously recorded in Compliance was realigned into Situation Awareness and Infrastructure Security; 2) an existing position previously recorded in Situation Awareness and Infrastructure Security was realigned into Standards; Technical Committees and Member Forums; and Training, Education, and Operator Certification, proportionately; and 3) an existing position previously recorded in General and Administrative was realigned into Situation Awareness and Infrastructure Security.
- A decrease of 0.25 FTE. SERC repurposed a technical analyst position into General and Administrative as a business analyst. The previous technical analyst position was allocated to Reliability Standards, Training and Education, Situation Awareness and Infrastructure, and Technical Committees.

Other changes in Personnel Expenses consist of the following:

- The 2017 budget includes an average payroll tax rate and benefit rate that have been applied to all FTEs, causing each expense to increase from the previous year.
- SERC's insurance plan period is June 1 through May 31. SERC received an increase in premiums from the previous plan year, which will affect a portion of 2017. SERC is anticipating an additional increase in premiums for the second half of 2017 related to medical insurance, causing an increase in overall benefits.

### Contractors and Consultants

There are no contractor and consultant resource requirements.

## Situation Awareness and Infrastructure Security Budget Detail

The following table shows funding sources and related expenses for the Situation Awareness and Infrastructure Security section of the *2017 Business Plan and Budget*. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital					
2016 Budget & Projection, and 2017 Budget					
SITUATION AWARENESS and INFRASTRUCTURE SECURITY					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 978,789	\$ 978,789	\$ -	\$ 1,270,344	\$ 291,555
Penalty Sanctions	43,126	43,126	-	15,184	(27,942)
<b>Total NERC Funding</b>	<b>\$ 1,021,915</b>	<b>\$ 1,021,915</b>	<b>\$ -</b>	<b>\$ 1,285,528</b>	<b>\$ 263,613</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 1,021,915</b>	<b>\$ 1,021,915</b>	<b>\$ -</b>	<b>\$ 1,285,528</b>	<b>\$ 263,613</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 410,959	\$ 478,039	\$ 67,080	\$ 471,864	\$ 60,905
Payroll Taxes	28,767	35,375	6,608	34,917	6,150
Benefits	45,864	50,480	4,616	54,791	8,927
Retirement Costs	56,399	61,630	5,231	61,522	5,123
<b>Total Personnel Expenses</b>	<b>\$ 541,989</b>	<b>\$ 625,524</b>	<b>\$ 83,535</b>	<b>\$ 623,094</b>	<b>\$ 81,105</b>
<b>Meeting Expenses</b>					
Meetings	\$ -	\$ 760	\$ 760	\$ -	\$ -
Travel	33,717	15,383	(18,334)	25,000	(8,717)
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 33,717</b>	<b>\$ 16,143</b>	<b>\$ (17,574)</b>	<b>\$ 25,000</b>	<b>\$ (8,717)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -
Office Rent	-	-	-	-	-
Office Costs	400	400	-	700	300
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 400</b>	<b>\$ 400</b>	<b>\$ -</b>	<b>\$ 700</b>	<b>\$ 300</b>
<b>Total Direct Expenses</b>	<b>\$ 576,106</b>	<b>\$ 642,067</b>	<b>\$ 65,961</b>	<b>\$ 648,794</b>	<b>\$ 72,688</b>
<b>Indirect Expenses</b>	<b>\$ 464,175</b>	<b>\$ 719,587</b>	<b>\$ 255,412</b>	<b>\$ 636,102</b>	<b>\$ 171,927</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 1,040,281</b>	<b>\$ 1,361,654</b>	<b>\$ 321,373</b>	<b>\$ 1,284,896</b>	<b>\$ 244,615</b>
<b>Change in Assets</b>	<b>\$ (18,366)</b>	<b>\$ (339,739)</b>	<b>\$ (321,373)</b>	<b>\$ 632</b>	<b>\$ 18,998</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ (18,366)	\$ (18,380)	(14)	632	18,998
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ (18,366)</b>	<b>\$ (18,380)</b>	<b>\$ (14)</b>	<b>\$ 632</b>	<b>\$ 18,998</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 1,021,915</b>	<b>\$ 1,343,274</b>	<b>\$ 321,359</b>	<b>\$ 1,285,528</b>	<b>\$ 263,613</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ -</b>	<b>\$ (321,359)</b>	<b>\$ (321,359)</b>	<b>\$ -</b>	<b>\$ -</b>
<b>FTEs</b>	<b>3.40</b>	<b>3.74</b>	<b>0.34</b>	<b>3.87</b>	<b>0.47</b>

Table A-10. Situation Awareness and Infrastructure Security Budget Detail

## Administrative Services

The following table lists the budget for Administrative Services.

Administrative Services (in whole dollars)						
	Direct Expenses and Fixed Assets			FTEs		
	2016 Budget	2017 Budget	Inc(Dec)	2016 Budget	2017 Budget	Inc(Dec)
Technical Committees and Member Forums	\$ 1,075,524	\$ 919,634	\$ (155,890)	5.99	4.70	(1.29)
General and Administrative	\$ 5,119,580	\$ 4,394,920	\$ (724,660)	13.00	13.25	0.25
Legal and Regulatory	\$ 53,270	\$ 743,639	\$ 690,369	3.00	2.55	(0.45)
Information Technology	\$ 649,640	\$ 1,144,511	\$ 494,871	-	-	-
Human Resources	\$ 21,209	\$ 497,747	\$ 476,538	2.20	1.90	(0.30)
Finance and Accounting	\$ 60,700	\$ 476,723	\$ 416,023	2.80	2.90	0.10
Total Administrative Services	\$ 6,979,923	\$ 8,177,174	\$ 1,197,251	26.99	25.30	(1.69)

**Table A-11. Administrative Services Budget**

### Program Scope and Functional Description

SERC's Administrative Services area includes the budget for all business and administrative functions of the organization, including (1) Technical Committees and Member Forums; (2) General and Administrative; (3) Legal and Regulatory; (4) Information Technology; (5) Human Resources; and (6) Finance and Accounting. Administrative Services also includes expenses for the organization, including conference calls, office rent, supplies, and other general administrative expenses necessary to support program area activities. These functions are necessary to the existence and functioning of the organization and support the performance of SERC's ERO statutory activities. The resource requirements and comparative budget information for each of these functions is described further below.

### Methodology for Allocation of Administrative Services Expenses to Programs

Expenses related to indirect programs are allocated proportionally to the direct programs for 2017 based on the number of FTEs in those programs.

The following sections describe the six Administrative Services functional areas and their individual budgets: (1) Technical Committees and Member Forums; (2) General and Administrative; (3) Legal and Regulatory; (4) Information Technology; (5) Human Resources; and (6) Finance and Accounting.



## Technical Committees and Member Forums

### Program Scope and Functional Description

The Technical Committees and Member Forums programs serve to strengthen capabilities within the Region to plan and operate the BES reliably and in compliance with Reliability Standards. The success of SERC's reliability programs depends on the active and direct participation of its members. The forums are also a source of expertise in the industry for enhancing reliability through technical excellence.

### 2017 Key Assumptions

- SERC will continue its standing committee and subgroup structure for effective stakeholder involvement in 2017 with each committee maintaining a work plan.
- SERC will continue to invest in technology and innovation to allow efficient collaboration on technical issues related to reliability.
- SERC's Reliability Risk Team will continue to identify and educate SERC staff and regional members of the reliability risk to the BPS in the SERC Region from an engineering, operations, and security perspective.
- SERC will continue to leverage its members as volunteer technical resources to support the Region's mission and initiatives. As needs change, SERC will assess committee structure and optimize, as required.

### 2017 Goals and Key Deliverables

- The SERC Technical Committees and Member Forums programs will manage committee work according to the *Organization and Procedures Manual for SERC Technical Committees*.
- The SERC Technical Committees and Member Forums programs will promote an expanded available toolkit that addresses reliability risks by doing the following:
  - Convene regular meetings of the standing committees each year and of the subordinate groups, as necessary.
  - Communicate to the SERC Board of Directors and SERC staff on issues pertaining to operation, planning, and engineering of electric systems, and the advancement of the physical and cyber security of the BPS.
  - Provide a forum for representatives to share experience and discuss issues of operating, planning, and engineering, and physical and cyber security.
  - Perform special projects at the request of the SERC Board of Directors.
  - Participate in the establishment of Reliability Standards.
  - Participate in the measurement of performance relative to Reliability Standards.
  - Promote compliance with Reliability Standards through review and discussion of compliance and performance statistics.
  - Develop and exchange information about operating, planning and engineering, and physical and cyber security that affect the reliability and adequacy of the BPS.
  - Review activities within the SERC Region impacting reliability and adequacy, as necessary, to meet Reliability Standards.
  - Perform technical functions through the assignment of specific tasks to subordinate groups.
- SERC's Reliability Risk Team provides key input to the 2018 CMEP Implementation Plan.

## Resource Requirements

### Personnel

A decrease of 1.29 FTEs in Technical Committees and Member Forums consists of the following:

- A decrease of 1.0 FTE was reclassified from the Technical Committees and Member Forums program into Situation Awareness and Infrastructure Security program and Reliability Assessment and Performance Analysis, 0.25 FTE and 0.75 respectively, to better align actual work performed.
- A net decrease of 0.04 FTE. SERC reallocated an existing position previously recorded in Situation Awareness and Infrastructure Security into Technical Committees and Member Forums, and an existing position previously recorded in Technical Committees and Member Forums into General and Administrative, due to the organizational realignment of managerial positions.
- A decrease of 0.25 FTE. SERC repurposed a technical analyst position into General and Administrative as a business analyst. The previous technical analyst position was allocated to Reliability Standards, Training and Education, Situation Awareness and Infrastructure, and Technical Committees.

Other changes in Personnel Expenses consist of the following:

- The 2017 budget includes an average payroll tax rate and benefit rate that have been applied to all FTEs, causing each expense to increase from the previous year.
- SERC's insurance plan period is June 1 through May 31. SERC received an increase in premiums from the previous plan year, which will affect a portion of 2017. SERC is anticipating an additional increase in premiums for the second half of 2017 related to medical insurance, causing an increase in overall benefits.

### Contractors and Consultants

There are no contractor and consultant resource requirements.

## General and Administrative

### Program Scope and Functional Description

The SERC General and Administrative function provides executive management of the corporation, management of the SERC office and other administrative support programs, and provides coordinated and consistent outreach to stakeholders, members, and regulators.

### 2017 Key Assumptions

- Emphasize effective execution, efficiency, transparency, and consistency.
- Facilitate reliability-enhancing activities.
- Increase outreach and communication with members/stakeholders to ensure SERC's effectiveness.

### 2017 Goals and Key Deliverables

- Continue high-quality performance of delegated functions while maintaining a level resource requirement.
- Provide training and education to members/stakeholders to improve efficiency of interactions with SERC staff.

### Resource Requirements

#### Personnel

An increase of 0.25 FTE in General and Administrative consists of the following:

- A net increase of 0.50 FTE. SERC reallocated existing positions previously recorded in Situation Awareness and Infrastructure Security, Reliability Assessment and Performance Analysis, Technical Committees and Member Forums, Standards, and Training and Education into General and Administrative due to the organizational realignment of managerial positions.
- An increase of 1.0 FTE. SERC repurposed an Information Technology position into General and Administrative. This liaison role will be responsible for increasing SERC's engagement in the ERO.
- An increase of 1.0 FTE. SERC repurposed a technical analyst position into General and Administrative as a business analyst. The previous technical analyst position was allocated to Reliability Standards, Training and Education, Situation Awareness and Infrastructure Security, and Technical Committees.
- A decrease of 0.25 FTE. SERC reallocated an existing position previously recorded in General and Administrative into Legal and Regulatory to support Board committees.
- SERC changed its staffing strategy to use consultants in lieu of FTEs by outsourcing the information technology and facility support for a reduction of 2.0 FTE.

Other changes in Personnel Expenses consist of the following:

- The 2017 budget includes an average payroll tax rate and benefit rate that have been applied to all FTEs, causing each expense to increase from the previous year.
- SERC's insurance plan period is June 1 through May 31. SERC received an increase in premiums from the previous plan year, which will affect a portion of 2017. SERC is anticipating an additional increase in premiums for the second half of 2017 related to medical insurance, causing an increase in overall benefits.

All personnel costs for the other administrative functions, including Information Technology, Legal, Finance, and Human Resources, were previously recorded within General and Administrative to protect the confidentiality of individual compensation information of employees

in these programs. Only Information Technology support is included within General and Administrative in the 2017 budget.

**Contractors and Consultants**

The 2017 budget includes contractor support for corporate goals, business continuity, continued development of a communications plan, and a change in staffing strategy of using consultants in lieu of FTEs for Information Technology and Facility support.

## Legal and Regulatory

### Program Scope and Functional Description

SERC maintains in-house legal staff and hires outside legal consultants, as needed. These legal resources provide the following services:

- Provide legal advice to the CEO, Board of Directors, and staff on legal and regulatory matters that affect SERC.
- Review items filed with governmental agencies for legal sufficiency.
- Review contracts and corporate documents, as needed.
- Ensure continuing recognition of SERC as a Regional Entity.
- Obtain regulatory approvals for new and revised regional Reliability Standards on a timely basis.
- Review legal documents, including Notices of Penalty, required to be filed with FERC.
- Provide legal support for contested Compliance actions and other assistance, as needed.
- Provide legal counsel during Compliance and Enforcement proceedings, as needed.
- Interface with the appropriate authorities regarding responses/filings to related governmental/regulatory directives/orders.
- Review corporate policies and procedures, as needed.
- Coordinate outside legal support.

### 2017 Key Assumptions

- Support the Enforcement action cycle time.
- Limit (or keep unchanged) the number of incoming violations.
- No hearings will be conducted.

### 2017 Goals and Key Deliverables

- Work with Enforcement to support processing violations.
- Support corporate legal needs.
- Work with NERC and other Regions on changes to the Rules of Procedure, as needed.

### Resource Requirements

#### Personnel

A decrease of 0.45 FTE in Legal and Regulatory consists of the following:

- A net increase of 0.55 FTE. SERC reallocated an existing position previously recorded in General and Administrative, Finance and Accounting, Human Resources, and Compliance into Legal and Regulatory to support Board committees.
- A net decrease of 0.90 FTE. SERC reallocated existing positions previously recorded in Legal and Regulatory into Compliance for additional Enforcement support.

Other changes in Personnel Expenses consist of the following:

- The 2017 budget includes an average payroll tax rate and benefit rate that have been applied to all FTEs, causing each expense to increase from the previous year.
- SERC's insurance plan period is June 1 through May 31. SERC received an increase in premiums from the previous plan year, which will affect a portion of 2017. SERC is anticipating an additional increase in premiums for the second half of 2017 related to medical insurance, causing an increase in overall benefits.

### **Contractors and Consultants**

The 2017 budget includes contractor support for regulatory affairs, a consultant to the Board, and a Board survey, which is performed bi-annually.

## Information Technology

### Program Scope and Functional Description

The Information Technology (IT) department of SERC offers network services including design and maintenance for the SERC IT and infrastructure, as well as project and vendor management for all current and future technology-related contracts. IT performs these functions:

- Work with external vendors to host, maintain, develop, and improve the following platforms:
  - SERC Internal/External Portals
  - CITS
  - SharePoint
  - Documentum
  - Network Infrastructure
- Maintain equipment for the Operating Committee Hotline.
- Maintain telecommunication and Internet circuits.
- Maintain the backup and recovery solution for SERC information systems. This includes AppAssure software and two Storage Area Networks (SAN).

Several years ago, NERC and the eight Regional Entities formed an executive management group (known as the Electric Reliability Organization Executive Management Group (ERO EMG)) that works to develop enterprise-wide IT applications to improve efficiency and consistency across NERC and the Regional Entities. As the ERO EMG identifies and prioritizes enterprise-wide projects, these projects are managed through a single Project Management Office (PMO) at NERC. As an example, the ERO EMG collectively prioritized the BES exception project and developed an application that is a single interface for NERC and the Regional Entities, promoting consistency and reducing cost duplications. SERC will coordinate with other IT departments to ensure they are benchmarking themselves against peer Regions. SERC, Northeast Power Coordinating Council (NPCC), and Florida Reliability Coordinating Council (FRCC) together develop and maintain the Compliance Portal and CITS. This allows for a common system and cost sharing.

SERC supports the NERC PMO in its efforts to provide IT tools across the ERO Enterprise. SERC's budget assumes the availability of new and existing IT tools from the PMO and other sources. If the required IT tools are not available as planned, SERC could incur additional costs to ensure its core responsibilities are fulfilled.

NERC and the Regional Entities will collaborate to refine existing strategies, governance, and procurement practices applicable to the development, operation, and maintenance of enterprise architecture, and software and data systems supporting both NERC and Regional Entity operations. NERC's *Business Plan and Budget* will include ongoing funding support for the development, operation, and maintenance of NERC- and Regional Entity-approved enterprise applications. Enterprise application funding in any given year will be subject to the budget and funding limits set forth in NERC's approved *Business Plan and Budget*.

### 2017 Key Assumptions

- FRCC, NPCC, and SERC will continue to work together on the Compliance Portal, enabling SERC to share the total costs of maintenance and development.

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## 2017 Goals and Key Deliverables

- Evaluate consolidation to one knowledge document management platform.
- Evaluate other hosting services to improve the turnaround time on projects/initiatives and increase the level of service for maintenance functions.
- Continue to perform cyber security assessments to benchmark the company's security posture.
- Continue to improve SERC's Protected Entity Information infrastructure to allow efficient and secure data transfers to and from SERC's registered entities.
- Determine the appropriate IT service levels required for SERC to maintain effective operations and evaluate service relative to cost.

## Resource Requirements

### Personnel

There are no significant changes requiring an explanation. All personnel for Information Technology are included under the General and Administrative program. SERC changed its staffing strategy to use consultants in lieu of FTEs by outsourcing the information technology and facility support as noted above in General and Administrative.

### Contractors and Consultants

The 2017 budget includes contractor support for infrastructure hosting, software development, database administration, internal and external security assessment, and a change in staffing strategy of using consultants in lieu of FTEs.



## Human Resources

### Program Scope and Functional Description

The SERC Human Resources function partners with the organization to boost its ability to be successful by maintaining a satisfied workforce, bringing the brightest talent to the company, and protecting it against liability. By its nature, the Human Resources department takes on a variety of responsibilities including strategic and succession planning, employee engagement, compensation analysis, benefits administration, and recruitment.

### 2017 Key Assumptions

- Assume a 6 percent vacancy rate to total Personnel Expenses.
- Provide competitive compensation and benefits packages.
- Assume an increased expectation for staff skills training in areas such as analytics.
- Ensure that staff attains elevated professional credentials to become a leader in the industry.
- Provide a 3 percent average salary increase. This assumption is reflected in the salary expense budget for all program areas.

### 2017 Goals and Key Deliverables

- Increase employee engagement and empowerment.
- Attract, develop, and retain highly competent and motivated staff.
- Review compensation and benefits continually to ensure organization and industry competitiveness.
- Increase employee retention.
- Provide payroll and expense administration.

### Resource Requirements

#### Personnel

A decrease of 0.30 FTE in Human Resources consists of the following:

- A decrease of 0.10 FTE is due to a change in allocation to support the Board Human Resources and Compensation Committee, which is recorded in the Legal program area.
- A decrease of 0.20 FTE was reclassified from Human Resources into Finance and Accounting, due to the organizational realignment of managerial positions and the creation of a management role in Human Resources.

Other changes in Personnel Expenses consist of the following:

- The 2017 budget includes an average payroll tax rate and benefit rate that have been applied to all FTEs, causing each expense to increase from the previous year.
- SERC's insurance plan period is June 1 through May 31. SERC received an increase in premiums from the previous plan year, which will affect a portion of 2017. SERC is anticipating an additional increase in premiums for the second half of 2017 related to medical insurance, causing an increase in overall benefits.

#### Contractors and Consultants

The 2017 budget includes contractor support for a compensation and benefit study, leadership development, and corporate goals.

## Finance and Accounting

### Program Scope and Functional Description

The objectives are to provide the financial and accounting services for SERC by doing the following:

- Prepare quarterly financial statements.
- Develop SERC's *Business Plan and Budget*.
- Review and improve fiscal controls and complete a year-end external audit.
- File federal and state tax forms and other forms required of non-profit corporations.

### 2017 Key Assumptions

- Current accounting systems and controls are adequate.
- There are no major changes in accounting regulations.

### 2017 Goals and Key Deliverables

- Maintain, review, and improve fiscal controls and gain efficiencies.
- Prepare and review monthly, quarterly, and annual financial statements.
- Exercise fiscal prudence.
- Continue improvements in the annual business planning process within SERC and the ERO.

### Resource Requirements

#### Personnel

An increase of 0.10 FTE in Finance and Accounting consists of the following:

- An increase of 0.20 FTE was reclassified from the Human Resources program into Finance and Accounting, due to the organizational realignment of managerial positions and the creation of a management role in Human Resources.
- A decrease of 0.10 FTE is due to a change in allocation to support the Board Finance and Audit Committee, which is recorded in the legal program area.

Other changes in Personnel Expenses consist of the following:

- The 2017 budget includes an average payroll tax rate and benefit rate that have been applied to all FTEs, causing each expense to increase from the previous year.
- SERC's insurance plan period is June 1 through May 31. SERC received an increase in premiums from the previous plan year, which will affect a portion of 2017. SERC is anticipating an additional increase in premiums for the second half of 2017 related to medical insurance, causing an increase in overall benefits.

#### Contractors and Consultants

There are no contractor and consultant resource requirements.

## Administrative Services Budget Detail

The following table shows funding sources and related expenses for the Administrative Services section of the 2017 Business Plan and Budget. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital					
2016 Budget & Projection, and 2017 Budget					
ADMINISTRATIVE SERVICES					
Funding	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>ERO Funding</b>					
NERC Assessments	\$ (1,127,284)	\$ (1,127,284)	\$ -	\$ (1,334,355)	\$ (207,071)
Penalty Sanctions	-	-	-	-	-
<b>Total NERC Funding</b>	<b>\$ (1,127,284)</b>	<b>\$ (1,127,284)</b>	<b>\$ -</b>	<b>\$ (1,334,355)</b>	<b>\$ (207,071)</b>
Membership Dues	-	-	-	-	-
Testing Fees	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	1,000	2,853	1,853	1,000	-
Miscellaneous	294,000	307,486	13,486	312,500	18,500
<b>Total Funding (A)</b>	<b>\$ (832,284)</b>	<b>\$ (816,945)</b>	<b>\$ 15,339</b>	<b>\$ (1,020,855)</b>	<b>\$ (188,571)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 3,472,553	\$ 3,767,121	\$ 294,568	\$ 3,975,793	\$ 503,240
Payroll Taxes	216,096	278,831	62,735	294,208	78,112
Benefits	327,699	347,138	19,439	344,683	16,984
Retirement Costs	474,260	432,264	(41,996)	483,400	9,140
<b>Total Personnel Expenses</b>	<b>\$ 4,490,608</b>	<b>\$ 4,825,354</b>	<b>\$ 334,746</b>	<b>\$ 5,098,084</b>	<b>\$ 607,476</b>
<b>Meeting Expenses</b>					
Meetings	\$ 76,240	\$ 101,993	\$ 25,753	\$ 92,572	\$ 16,332
Travel	126,369	104,434	(21,935)	142,927	16,558
Conference Calls	44,544	36,315	(8,229)	44,544	-
<b>Total Meeting Expenses</b>	<b>\$ 247,153</b>	<b>\$ 242,742</b>	<b>\$ (4,411)</b>	<b>\$ 280,043</b>	<b>\$ 32,890</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 799,630	\$ 1,688,308	\$ 888,678	\$ 1,513,181	\$ 713,551
Office Rent	517,917	573,047	55,130	590,983	73,066
Office Costs	290,935	345,794	54,859	259,444	(31,491)
Professional Services	145,200	212,265	67,065	175,739	30,539
Miscellaneous	5,000	19,131	14,131	16,700	11,700
Depreciation	483,480	398,219	(85,261)	234,882	(248,598)
<b>Total Operating Expenses</b>	<b>\$ 2,242,162</b>	<b>\$ 3,236,764</b>	<b>\$ 994,602</b>	<b>\$ 2,790,929</b>	<b>\$ 548,767</b>
<b>Total Direct Expenses</b>	<b>\$ 6,979,923</b>	<b>\$ 8,304,860</b>	<b>\$ 1,324,937</b>	<b>\$ 8,169,056</b>	<b>\$ 1,189,133</b>
<b>Indirect Expenses</b>	<b>\$ (6,979,923)</b>	<b>\$ (8,204,067)</b>	<b>\$ (1,224,144)</b>	<b>\$ (8,169,056)</b>	<b>\$ (1,189,133)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ -</b>	<b>\$ 100,793</b>	<b>\$ 100,793</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Change in Assets</b>	<b>\$ (832,284)</b>	<b>\$ (917,738)</b>	<b>\$ (85,454)</b>	<b>\$ (1,020,855)</b>	<b>\$ (188,571)</b>
<b>Fixed Assets</b>					
Depreciation	(483,480)	(398,219)	85,261	(234,882)	248,598
Computer & Software CapEx	207,311	55,568	(151,743)	100,000	(107,311)
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	143,000	143,000
Leasehold Improvements	-	133,105	133,105	-	-
Allocation of Fixed Assets	\$ 276,169	\$ 209,546	\$ (66,623)	\$ (8,118)	\$ (284,287)
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ -</b>	<b>\$ 100,793</b>	<b>\$ 100,793</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (832,284)</b>	<b>\$ (917,738)</b>	<b>\$ (85,454)</b>	<b>\$ (1,020,855)</b>	<b>\$ (188,571)</b>
<b>FTEs</b>	26.99	23.78	-3.21	25.30	-1.69

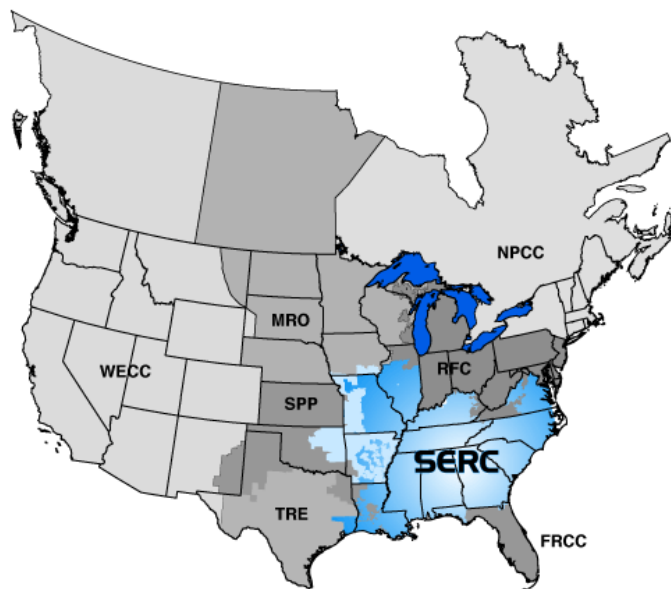
Table A-12. Administrative Services Budget Detail

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# Section B – Supplemental Financial Information

## 2017 Business Plan and Budget

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## Section B – Supplemental Financial Information

### Reserve Balance

Table B-1 analyzes the working capital reserve for 2016 through 2017.

Working Capital Reserve Analysis 2016-2017	
STATUTORY	
Beginning Working Capital Reserve (Deficit), December 31, 2015	\$ 3,567,099
Plus: 2016 Funding (from LSEs or designees)	14,379,486
Plus: 2016 Other funding sources	691,147
Less: 2016 Projected expenses & capital expenditures	(16,616,877)
<b>Projected Working Capital Reserve (Deficit), December 31, 2016</b>	<b>\$ 2,020,855</b>
Desired Working Capital Reserve, December 31, 2017	<sup>1</sup> \$ 1,000,000
Minus: Projected Working Capital Reserve, December 31, 2016	2,020,855
<b>Increase(decrease) in funding requirement to achieve Working Capital Reserve</b>	<b>\$ (1,020,855)</b>
2017 Expenses and Capital Expenditures	\$ 17,482,403
Less: Penalty Sanctions <sup>2</sup>	(195,000)
Less: Other Funding Sources	(560,525)
Adjustment to achieve desired Working Capital Reserve	(1,020,855)
<b>2017 ERO Assessment</b>	<b>\$ 15,706,023</b>

<sup>1</sup> As documented in the April 23, 2008 minutes, the SERC Board of Directors has approved the establishment of a cash reserve equal to up to 10% of its budgeted annual statutory operating costs, with the understanding that should it become necessary to spend any of the reserve funds, the President shall provide a report detailing such expenditures at the next regular meeting of the Board of Directors. The reserve was established for contingencies.

In July 2013, the SERC Board approved the establishment of a working capital policy. Any excess income greater than two months of statutory operating costs will be treated as a temporary increase in SERC's operating reserve. Any expenditures from the increased working capital are subject to SERC's applicable policies and procedures, including approval limits, signature authorities, and disclosure in SERC's quarterly variance report.

<sup>2</sup> Represents collections on or prior to June 30, 2016.

**Table B-1. Working Capital Reserve Analysis 2016- 2017**

### Explanation of Changes in Reserve Policy from Prior Years

Pursuant to SERC's Working Capital and Operating Reserve policies, the desired working capital reserve included in the *2017 Business Plan and Budget* totals \$1,000,000. As an offset to the increase in assessments, SERC used the remaining stabilization funds included as a temporary increase to the operating reserve, and reduced the desired reserve balance from \$1,600,000 to \$1,000,000.

## Breakdown by Statement of Activity Sections

The following detailed schedules support the Statement of Activities and Capital Expenditures, page 12, of the *2017 RE Business Plan and Budget*. All significant variances have been disclosed by program area on the preceding pages.

### Penalty Sanctions

Penalty monies received prior to June 30, 2016, are to be used to offset assessments in the 2017 Budget, as documented in the *NERC Policy – ACCOUNTING, FINANCIAL STATEMENT AND BUDGETARY TREATMENT OF PENALTIES IMPOSED AND RECEIVED FOR VIOLATIONS OF RELIABILITY STANDARD*. Penalty monies received from July 1, 2016 through June 30, 2017 will be used to offset assessments in the 2017 Budget.

All penalties received prior to July 1, 2016, are detailed below, including the amount and date received.

Allocation Method: Penalty sanctions received have been allocated to the following statutory programs to reduce assessments: Reliability Standards; Compliance Monitoring and Enforcement and Organization Registration and Certification; Reliability Assessments and Performance Analysis; Training, Education and Operator Certification; and Situation Awareness and Infrastructure Security. Penalty sanctions are allocated based upon the number of FTEs in the program divided by the aggregate total FTEs in the programs receiving the allocation.

Table B-2 lists all penalties, including date received and amount, received prior to June 30, 2016.

Penalty Sanctions Received On or Prior to June 30, 2016	Date Received	Amount Received
Penalty payment 1	9/25/2015	\$ 55,000
Penalty payment 2	3/22/2016	10,000
Penalty payment 3	4/4/2016	35,000
Penalty payment 4	4/27/2016	5,000
Penalty payment 5	4/27/2016	20,000
Penalty payment 6	6/13/2016	5,000
Penalty payment 7	6/17/2016	20,000
Penalty payment 8	6/20/2016	45,000
<b>Total Penalties Received</b>		<b>\$ 195,000</b>

**Table B-2. Penalty Sanctions Received**

Table B-3 lists the budget for Supplemental Funding.

Outside Funding Breakdown By Program (Excluding Penalty Sanction)	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget
<b>Compliance Monitoring, Enforcement &amp; Org. Registration</b>				
Miscellaneous - CEA function in FRCC	\$ 75,000	\$ 49,035	\$ 30,000	\$ (45,000)
Miscellaneous - CEA function in SPP	75,000	148,683	41,000	(34,000)
<b>Total</b>	<b>\$ 150,000</b>	<b>\$ 197,718</b>	<b>\$ 71,000</b>	<b>\$ (79,000)</b>
<b>Reliability Assessment and Performance Analysis</b>				
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Training and Education</b>				
Workshops	210,075	183,090	176,025	(34,050)
<b>Total</b>	<b>\$ 210,075</b>	<b>\$ 183,090</b>	<b>\$ 176,025</b>	<b>\$ (34,050)</b>
<b>Situation Awareness and Infrastructure Security</b>				
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>General and Administrative</b>				
Interest Income	\$ 1,000	\$ 2,853	\$ 1,000	\$ -
Miscellaneous Income - Regional Entity Coordinator	294,000	294,846	297,500	3,500
Miscellaneous Income - Other	-	12,640	15,000	15,000
<b>Total</b>	<b>\$ 295,000</b>	<b>\$ 310,339</b>	<b>\$ 313,500</b>	<b>\$ 18,500</b>
<b>Total Outside Funding</b>	<b>\$ 655,075</b>	<b>\$ 691,147</b>	<b>\$ 560,525</b>	<b>\$ (94,550)</b>

**Table B-3. Supplemental Funding**

### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

*Compliance Monitoring, Enforcement and Organization Registration* – Other Funding includes the costs associated with SERC performing Cross-Regional Compliance Monitoring of registered entity functions performed by other Regional Entity organizations. The costs associated with any Cross-Regional Compliance Monitoring performed by SERC with respect to affiliated registered entity functions of another Regional Entity are to be funded by payments from the Regional Entity contracting with SERC for such services, in accordance with the contract between SERC and the other Regional Entities. The 2017 budgeted amount includes projected direct costs plus an appropriate allocation of SERC's General and Administrative costs, as required by the contracts with FRCC and Southwest Power Pool (SPP).

*Training and Education* – SERC continues to hold most meetings in the Charlotte office location, which has a large meeting space, or at a member's facilities. By using these facilities, SERC is able to reduce the costs associated with hosting a meeting, enabling SERC to lower registration fees, causing a decrease in workshop revenue.

*General and Administrative* – Other funding includes the reimbursement from the other Regional Entities for the costs associated with the Regional Entity coordinator position as well as revenue received from SERC's landlord per the lease agreement that pays for shuttle services to the SERC office from local hotels.

Table B-4 summarizes Personnel Expenses.

Personnel Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Total Salaries	\$ 9,457,718	\$ 9,506,805	\$ 10,095,783	\$ 638,065	6.7%
Total Payroll Taxes	642,524	703,569	747,086	104,562	16.3%
Total Benefits	993,030	1,020,270	1,087,450	94,420	9.5%
Total Retirement	1,299,662	1,168,163	1,278,181	(21,481)	-1.7%
<b>Total Personnel Costs</b>	<b>\$ 12,392,934</b>	<b>\$ 12,398,807</b>	<b>\$ 13,208,500</b>	<b>\$ 815,566</b>	<b>6.6%</b>
FTEs	78.12	66.42	75.00	(3.12)	-4.0%
<b>Cost per FTE</b>					
Salaries	\$ 121,072	\$ 143,132	\$ 134,610	13,538	11.2%
Payroll Taxes	8,225	10,593	9,961	1,736	21.1%
Benefits	12,712	15,361	14,499	1,787	14.1%
Retirement	16,637	17,588	17,042	405	2.4%
<b>Total Cost per FTE</b>	<b>\$ 158,646</b>	<b>\$ 186,674</b>	<b>\$ 176,112</b>	<b>\$ 17,466</b>	<b>11.0%</b>

**Table B-4. Personnel Expenses**

### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

The budget reflects a 3 percent merit increase and 6 percent vacancy rate applied to all personnel costs. Total Personnel Expenses increased due to the reduction of the vacancy rate to be more in line with historical rates and an increase in salaries for vacant executive-level positions, an increase in the payroll tax percentage applied to salaries to better align payroll taxes with historical actuals, an increase in benefits costs to account for increases in premiums, and a decrease in retirement costs due to the reduction of FTEs.



Table B-5 lists the budget for Meeting Expenses.

Meeting Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Meetings	\$ 247,421	\$ 258,892	\$ 265,768	\$ 18,347	7.42%
Travel	488,466	487,347	534,977	46,511	9.77%
Conference calls	44,544	36,315	44,544	-	22.66%
<b>Total Meeting Expenses</b>	<b>\$ 780,431</b>	<b>\$ 782,554</b>	<b>\$ 845,289</b>	<b>\$ 64,858</b>	<b>8.31%</b>

**Table B-5. Meeting Expenses**

### **Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

SERC's office location has a large meeting space. SERC continues to schedule most meetings in-house or at a member's facilities, allowing meetings costs to remain relatively flat. The increase is due to additional meetings that have been budgeted or a format change of a previously held meeting based on historical event success.

The increase in travel is primarily related to the additional meetings that were added and the focus on bringing remote employees to SERC's office more frequently.

There are no significant changes related to conference calls requiring an explanation.

Table B-6 lists the budget for Consultants and Contracts.

Consultants and Contracts	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Reliability Standards	\$ -	\$ -	\$ -	\$ -	
Compliance Monitoring and Enforcement and Organization					
Registration and Certification	54,543	165,322	83,000	28,457	52%
Reliability Assessment and Performance Analysis	188,000	113,617	369,000	181,000	96%
Training and Education	455,000	112,060	155,000	(300,000)	-66%
Situation Awareness and Infrastructure Security					
Situation Awareness	-	-	-	-	
Critical Infrastructure Protection	-	-	-	-	
Total Situation Awareness and Infrastructure Security	-	-	-	-	
Committee and Member Forums	-	110,000	-	-	
General and Administrative	237,500	467,150	357,725	120,225	51%
Legal and Regulatory	-	20,727	42,400	42,400	100%
Information Technology	552,130	1,021,144	962,556	410,426	74%
Human Resources	10,000	22,600	150,500	140,500	1405%
Accounting and Finance	-	46,687	-	-	
<b>Consultants Total</b>	<b>\$ 1,497,173</b>	<b>\$ 2,079,307</b>	<b>\$ 2,120,181</b>	<b>\$ 623,008</b>	<b>42%</b>

**Table B-6. Consultants and Contracts**

### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

*Compliance* – An increase of \$28,457 is due to utilizing contract support in lieu of FTEs to supplement the Enforcement program. The 2017 budget continues to fund contractor support to supplement the Audit program.

*Reliability Assessments* – An increase of \$181,000 in the program consists of 1) an increase for the Dynamic Study that is performed biennially and was last performed in 2015, the Under-Frequency Load Study that is performed every five years and was last performed in 2012, additional modeling services, and to support regional analysis efforts associated with environmental and reliability risk initiatives; and 2) a decreasing offset for the Eastern Interconnection Assessment Group (ERAG) to align with historical costs.

*Training and Education* – A decrease of \$300,000 from the 2016 budget consists of 1) a decrease to the Restoration Drill to be more in line with historical costs; and 2) a decrease from a one-time cost included in the 2016 budget for contractor support to develop training materials, a qualification program, and to implement a systematic approach to training.

*General and Administrative* – An increase of \$120,225 consists of 1) the utilization of contractors in support of corporate goals and business continuity, which have previously not been budgeted; and as an offset; 2) a reduction in the amount of contract support in lieu of FTEs for project management and communications; and 3) budgeted items were reclassified out of General and Administrative: items for consultant support for the continued training and development of SERC's management team were moved to Human Resources, and Board activities were moved to Legal and Regulatory.

*Legal and Regulatory* – An increase of \$42,400 consists of 1) utilizing contractors for regulatory affairs, Board strategic planning, and for a Board survey that is performed biennially; and 2) the use of Board consultants was reclassified from General and Administrative into Legal and Regulatory.

*Information Technology* – An increase of \$410,426 consists of 1) an increase in contract support in lieu of FTEs, security assessment testing, and database administration; and 2) as an

offsetting decrease, a reduction in contract support for the document management system, infrastructure development, and software licensing.

*Human Resources* – An increase of \$140,500 consists of 1) an increase for a compensation and benefit study that is performed biennially and was last performed in 2015, corporate goal initiatives, and mandatory staff training; 2) an increase in ongoing training and development of SERC’s management team, which was previously recorded in General and Administrative; and 3) as an offsetting decrease, a reduction for contract support in lieu of FTEs, as the position was made a permanent FTE.

Table B-7 lists the budget for Office Rent.

Rent	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Office Rent	\$ 517,917	\$ 573,047	\$ 590,983	\$ 73,066	14.11%
Utilities	-	-	-	-	
Maintenance	-	-	-	-	
<b>Total Office Rent</b>	<b>\$ 517,917</b>	<b>\$ 573,047</b>	<b>\$ 590,983</b>	<b>\$ 73,066</b>	<b>14.11%</b>

**Table B-7. Office Rent**

### **Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

An increase of \$73,066 is due to the additional space leased. Rent is recorded on a straight-line basis, consistent with Generally Accepted Accounting Standards. An offset to record the difference in the actual rent paid is recorded to a deferred rent account on the balance sheet.

Table B-8 lists the budget for Office Costs.

Office Costs	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Telephone	\$ 131,814	\$ 88,737	\$ 96,885	\$ (34,929)	-26.50%
Telephone Answering Srv	-	-	-	-	-
Internet	7,104	-	-	(7,104)	-100.00%
Office Supplies	31,650	173,092	32,044	394	1.24%
Computer Supplies and Maintenance					
Computers	34,300	30,000	80,000	45,700	133.24%
Computer Supplies	40,600	16,840	20,000	(20,600)	-50.74%
Maintenance & Service Agreements	-	-	-	-	-
Software	10,850	-	1,060	(9,790)	-96.91%
Network Supplies	-	-	-	-	-
Publications & Subscriptions	7,499	3,334	3,600	(3,899)	-51.99%
Dues	10,883	10,691	14,703	3,820	35.10%
Postage	500	502	500	-	0.00%
Express Shipping	2,500	2,000	2,120	(380)	-15.20%
Copying	5,000	2,423	1,800	(3,200)	-64.00%
Reports	-	-	-	-	-
Stationery/Forms	-	-	-	-	-
Equipment Repair/Service Contracts	9,679	7,102	7,404	(2,275)	-23.50%
Bank Charges	500	4,140	2,895	2,395	479.00%
Taxes	10,000	17,668	12,500	2,500	25.00%
Merchant Card Fees	8,000	6,564	6,500	(1,500)	-18.75%
<b>Total Office Costs</b>	<b>\$ 310,879</b>	<b>363,093</b>	<b>\$ 282,011</b>	<b>\$ (28,868)</b>	<b>-9.29%</b>

**Table B-8. Office Costs**

### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

The decrease of \$34,929 in Telephone is due to a renegotiation of the office and cellular contracts into more cost-effective plans.

A net increase in Computer Supplies and Maintenance consists of the following:

- An increase of \$45,700 in computers due to an increase in the number of replacement computers and monitors.
- A decrease in computer supplies of \$20,600 for one-time purchases in 2016 related to video conferencing technology.

Table B-9 lists the budget for Professional Services.

Professional Services	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Candidate Search	\$ 10,000	\$ 33,795	\$ 7,000	\$ (3,000)	-30.00%
Outside Legal	60,000	72,773	40,000	(20,000)	-33.33%
Accounting & Auditing Fees	42,200	36,398	37,288	(4,912)	-11.64%
Insurance Commercial	43,000	58,856	60,644	17,644	41.03%
Human Resources Fees	-	10,443	30,807	30,807	100.00%
<b>Total Professional Services</b>	<b>\$ 155,200</b>	<b>\$ 212,265</b>	<b>\$ 175,739</b>	<b>\$ 20,539</b>	<b>13.23%</b>

**Table B-9. Professional Services**

### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

A decrease in Outside Legal of \$20,000 is to better align with historical costs. The 2015 actual expenses and 2016 projected expenses include one-time costs that are not expected to continue. Additionally, legal costs were previously split between Legal and Compliance. In 2017, all legal costs are now included in the Legal program area, causing a decrease in Compliance professional fees.

The decrease in Accounting and Auditing Fees of \$4,912 is due to the reclassification of payroll, Human Resources Information System (HRIS), time reporting, and applicant tracking systems to Human Resources Fees. As an offset, software licenses increased related to software to eliminate manual processes in financial statement, budgeting, and accounts payable. Additionally, due to the expanded office space and assets included in the space, SERC budgeted for an increase in property taxes.

An increase in Insurance Commercial of \$17,644 is due to an increase in the premium for the general liability policy related to the expanded office space and additional assets and a new cyber policy.

An increase in Human Resources Fees of \$30,807 is due to a reclassification from Accounting and Auditing Fees of payroll, HRIS, time reporting, and applicant tracking systems. Additionally, SERC budgeted for employee eLearning training and administration of SERC's benefit programs.

Table B-10 lists the budget for Miscellaneous.

Miscellaneous Expense	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Miscellaneous Expense	\$ 5,000	\$ 19,131	\$ 16,700	\$ 11,700	100.00%
<b>Total Miscellaneous Expense</b>	<b>\$ 5,000</b>	<b>\$ 19,131</b>	<b>\$ 16,700</b>	<b>\$ 11,700</b>	<b>234%</b>

**Table B-10. Miscellaneous**

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

The increase in Miscellaneous Expense of \$16,700 is to better align with historical costs.

Table B-11 lists the budget for other Non-Operating Expenses.

Other Non-Operating Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Interest Expense	\$ -	\$ -	\$ -	\$ -	-
Line of Credit Payment	-	-	-	-	-
Office Relocation	-	-	-	-	-
<b>Total Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>

**Table B-11. Other Non-Operating Expenses**

### **Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

There are no costs budgeted for these items in 2016 or 2017.



Table B-12 lists the budget for Fixed Assets.

Fixed Assets	Budget 2016	Projection 2016	Budget 2017	Variance	
				2017 Budget v 2016 Budget	Variance %
Depreciation	\$ (483,480)	\$ (398,219)	\$ (234,882)	\$ 248,598	-51.42%
Computer & Software CapEx	207,311	55,568	100,000	(107,311)	-51.76%
Furniture & Fixtures CapEx	-	-	-	-	
Equipment CapEx	-	-	143,000	143,000	
Leasehold Improvements	-	133,105	-	-	
Allocation of Fixed Assets	-	-	-	-	
<b>Total Fixed Assets</b>	<b>\$ (276,169)</b>	<b>\$ (209,546)</b>	<b>\$ 8,118</b>	<b>\$ 284,287</b>	<b>-103%</b>

**Table B-12. Fixed Assets**

### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

A decrease of \$248,598 in Depreciation is due to an increase in the capital assets that are fully depreciated.

The Computer and Software capital expenditures included in the 2017 budget are split among the other members of the Consortium User Group (FRCC and NPCC), resulting in a decrease from 2016.

An increase in Equipment capital expenditures is due to the budget of additional servers and other equipment for the Protected Entity Information (PEI) system and SERC's infrastructure.

Table B-13 compares the 2017 budget with projections for 2018-2019.

The following table showing 2018 and 2019 budget projections is based on the following assumptions:

**Personnel Expenses**

- No changes in FTEs
- A 3 percent increase in personnel costs for merit in 2018 and 2019
- A 3 percent vacancy rate applied in 2018 and no vacancy rate in 2019
- Estimated a 10 percent increase in insurance premiums

**Meeting Expenses**

- Meetings and travel costs remain flat for both 2018 and 2019.
- A 3 percent increase in conference calls for inflation in both 2018 and 2019

**Operating Expenses**

- Consultants and contracts were reduced in 2018 for the off-cycle year on the biennial and five-year studies that are not being performed. The biannual studies are included in 2019, causing the increase.
- A 1 percent inflation rate was applied to office costs and professional services.
- Office rent and Miscellaneous remain flat for both 2018 and 2019.

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital 2017 Budget & Projected 2018 and 2019 Budgets								
	2017 Budget	2018 Projection	\$ Change 18 v 17	% Change 18 v 17	2019 Projection	\$ Change 19 v 18	% Change 19 v 18	
<b>Funding</b>								
<b>ERO Funding</b>								
NERC Assessments	\$ 15,706,023	\$ 16,201,438	\$ 495,415	3.15%	\$ 17,098,966	\$ 897,528	5.2%	
Penalty Sanctions	195,000	-	(195,000)	-100.00%	-	-		
<b>Total NERC Funding</b>	<b>\$ 15,901,023</b>	<b>\$ 16,201,438</b>	<b>\$ 300,415</b>	<b>1.9%</b>	<b>\$ 17,098,966</b>	<b>\$ 897,528</b>	<b>5.2%</b>	
Membership Dues	-	-	-	-	-	-		
Testing Fees	-	-	-	-	-	-		
Services & Software	-	-	-	-	-	-		
Workshops	176,025	176,025	-	0.00%	176,025	-	0.0%	
Interest	1,000	1,000	-	0.00%	1,000	-	0.0%	
Miscellaneous	383,500	402,675	19,175	5.00%	422,809	20,134	5.0%	
<b>Total Funding (A)</b>	<b>\$ 16,461,548</b>	<b>\$ 16,781,138</b>	<b>\$ 319,590</b>	<b>1.9%</b>	<b>\$ 17,698,800</b>	<b>\$ 917,662</b>	<b>5.5%</b>	
<b>Expenses</b>								
<b>Personnel Expenses</b>								
Salaries	\$ 10,095,783	\$ 10,701,530	\$ 605,747	6.0%	\$ 11,022,576	\$ 321,046	3.0%	
Payroll Taxes	747,086	791,911	44,825	6.0%	815,668	23,757	3.0%	
Benefits	1,087,450	1,196,195	108,745	10.0%	1,315,815	119,620	10.0%	
Retirement Costs	1,278,181	1,354,872	76,691	6.0%	1,395,518	40,646	3.0%	
<b>Total Personnel Expenses</b>	<b>\$ 13,208,500</b>	<b>\$ 14,044,508</b>	<b>\$ 836,008</b>	<b>6.3%</b>	<b>\$ 14,549,576</b>	<b>\$ 505,069</b>	<b>3.6%</b>	
<b>Meeting Expenses</b>								
Meetings	\$ 265,768	\$ 265,768	\$ -	0.0%	\$ 265,768	\$ -	0.0%	
Travel	534,977	534,977	-	0.0%	534,977	-	0.0%	
Conference Calls	44,544	45,880	1,336	3.0%	47,257	1,376	3.0%	
<b>Total Meeting Expenses</b>	<b>\$ 845,289</b>	<b>\$ 846,625</b>	<b>\$ 1,336</b>	<b>0.2%</b>	<b>\$ 848,002</b>	<b>\$ 1,376</b>	<b>0.2%</b>	
<b>Operating Expenses</b>								
Consultants & Contracts	\$ 2,120,181	\$ 1,987,190	(132,991)	-6.3%	\$ 2,245,550	258,360	13.0%	
Office Rent	590,983	590,983	-	0.0%	590,983	-	0.0%	
Office Costs	282,011	284,831	2,820	1.0%	287,679	2,848	1.0%	
Professional Services	175,739	177,496	1,757	1.0%	179,271	1,775	1.0%	
Miscellaneous	16,700	16,700	-	0.0%	16,700	-	0.0%	
Depreciation	234,882	239,524	4,642	2.0%	174,117	(65,407)	-27.3%	
<b>Total Operating Expenses</b>	<b>\$ 3,420,496</b>	<b>\$ 3,296,725</b>	<b>\$ (123,772)</b>	<b>-3.6%</b>	<b>\$ 3,494,301</b>	<b>\$ 197,576</b>	<b>6.0%</b>	
<b>Total Direct Expenses</b>	<b>\$ 17,474,285</b>	<b>\$ 18,187,858</b>	<b>\$ 713,573</b>	<b>4.1%</b>	<b>\$ 18,891,879</b>	<b>\$ 704,021</b>	<b>3.9%</b>	
<b>Indirect Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>		<b>\$ -</b>	<b>\$ -</b>		
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>		<b>\$ -</b>	<b>\$ -</b>		
<b>Total Expenses (B)</b>	<b>\$ 17,474,285</b>	<b>\$ 18,187,858</b>	<b>\$ 713,573</b>	<b>4.1%</b>	<b>\$ 18,891,879</b>	<b>\$ 704,021</b>	<b>3.9%</b>	
<b>Change in Assets</b>	<b>\$ (1,012,737)</b>	<b>\$ (1,406,720)</b>	<b>\$ (393,983)</b>	<b>38.9%</b>	<b>\$ (1,193,079)</b>	<b>\$ 213,641</b>	<b>-15.2%</b>	
<b>Fixed Assets</b>								
Depreciation	\$ (234,882)	\$ (239,524)	\$ (4,642)	2.0%	\$ (174,117)	\$ 65,407	-27.3%	
Computer & Software CapEx	100,000	100,000	-	0.0%	100,000	-	0.0%	
Furniture & Fixtures CapEx	-	-	-	-	-	-		
Equipment CapEx	143,000	-	(143,000)	-100.0%	-	-		
Leasehold Improvements	-	-	-	-	-	-		
Allocation of Fixed Assets	-	-	-	-	-	-		
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>\$ 8,118</b>	<b>\$ (139,524)</b>	<b>\$ (147,642)</b>	<b>-1818.7%</b>	<b>\$ (74,117)</b>	<b>\$ 65,407</b>	<b>0.0%</b>	
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 17,482,403</b>	<b>\$ 18,048,334</b>	<b>\$ 565,931</b>	<b>3.2%</b>	<b>\$ 18,817,762</b>	<b>\$ 769,428</b>	<b>4.3%</b>	
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (1,020,855)</b>	<b>\$ (1,267,196)</b>	<b>\$ (246,341)</b>	<b>100.0%</b>	<b>\$ (1,118,962)</b>	<b>\$ 148,234</b>	<b>-11.7%</b>	
FTEs	75.00	75.00	-	-	75.00	-	-	

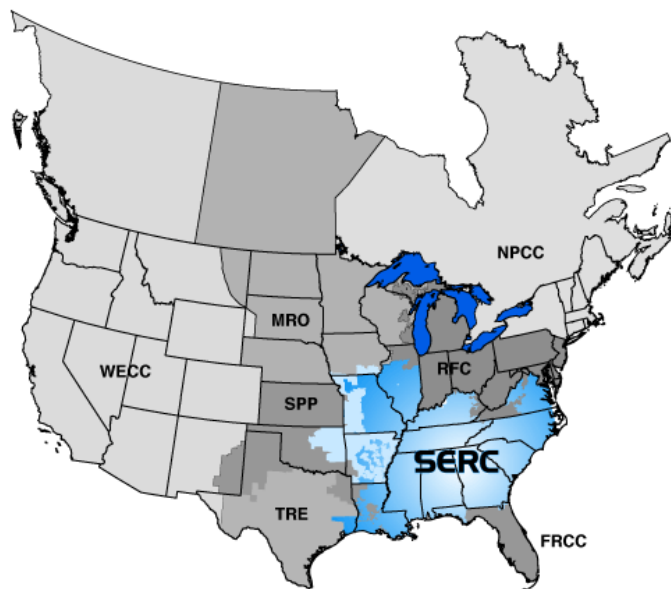
Table B-13. Budget 2017 Compared with 2018-2019 Projections

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# Section C – Non-Statutory Activities

## 2017 Business Plan and Budget

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## Section C – Non-Statutory Activities

### 2017 Non-Statutory Business Plan and Budget

SERC does not provide any non-statutory functions at this time, although SERC may in the future consider providing non-statutory functions from time to time as appropriate and as permitted by its Board and applicable statutes and regulations.

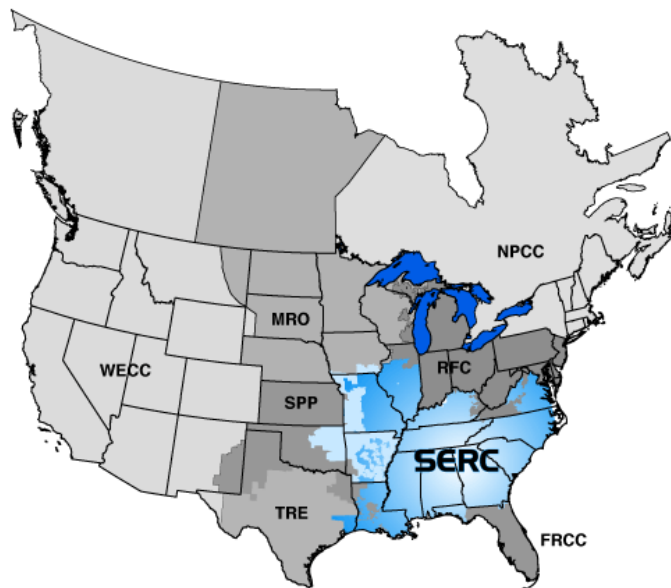
**Table C-1. Non-Statutory Activities Budget**

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# Section D – Additional Consolidated Financial Statements

## 2017 Business Plan and Budget

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# Section D – Additional Consolidated Financial Statements

## 2017 Consolidated Statement of Activities by Program, Statutory and Non-Statutory

Statement of Activities and Capital Expenditures by Program 2017 Budget	Total	Statutory Total	Non-Statutory Total	Statutory Activities													
				Statutory Total	Reliability Standards (Section 300)	Compliance and Organization Registration and Certification (Section 400 & 500)	Reliability Assessment and Performance Analysis (Section 800)	Training and Education (Section 900)	Situation Awareness and Infrastructure Security (Section 1000)	Committee and Member Forums	General and Administrative	Legal and Regulatory	Information Technology	Human Resources	Accounting and Finance		
<b>Funding</b>																	
<b>ERO Funding</b>																	
NERC Assessments	15,706,023	15,706,023	-	15,706,023	607,334	11,611,268	2,895,142	656,290	1,270,344	-	(1,334,355)	-	-	-	-	-	-
Penalty Sanctions	195,000	195,000	-	195,000	6,670	134,617	31,859	6,670	15,184	-	-	-	-	-	-	-	-
<b>Total NERC Funding</b>	<b>15,901,023</b>	<b>15,901,023</b>	<b>-</b>	<b>15,901,023</b>	<b>614,004</b>	<b>11,745,885</b>	<b>2,927,001</b>	<b>662,960</b>	<b>1,285,528</b>	<b>-</b>	<b>(1,334,355)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Membership Dues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Workshops	176,025	176,025	-	176,025	-	-	-	176,025	-	-	-	-	-	-	-	-	-
Interest	1,000	1,000	-	1,000	-	-	-	-	-	-	-	-	-	-	-	-	1,000
Miscellaneous	383,500	383,500	-	383,500	-	71,000	-	-	-	-	312,500	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>16,461,548</b>	<b>16,461,548</b>	<b>-</b>	<b>16,461,548</b>	<b>614,004</b>	<b>11,816,885</b>	<b>2,927,001</b>	<b>838,985</b>	<b>1,285,528</b>	<b>-</b>	<b>(1,021,855)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,000</b>
<b>Expenses</b>																	
<b>Personnel Expenses</b>																	
Salaries	10,095,783	10,095,783	-	10,095,783	255,902	4,334,934	865,697	191,593	471,864	647,648	2,319,639	461,191	-	236,165	311,150	-	-
Payroll Taxes	747,086	747,086	-	747,086	18,937	320,783	64,063	14,178	34,917	47,926	171,653	34,128	-	17,476	23,025	-	-
Benefits	1,087,450	1,087,450	-	1,087,450	23,841	526,268	112,726	25,141	54,791	68,201	174,915	38,911	-	23,218	39,438	-	-
Retirement Costs	1,278,181	1,278,181	-	1,278,181	33,222	564,671	110,591	24,775	61,522	84,273	272,395	56,654	-	29,501	40,577	-	-
<b>Total Personnel Expenses</b>	<b>13,208,500</b>	<b>13,208,500</b>	<b>-</b>	<b>13,208,500</b>	<b>331,902</b>	<b>5,746,656</b>	<b>1,153,077</b>	<b>255,687</b>	<b>623,094</b>	<b>848,048</b>	<b>2,938,602</b>	<b>590,884</b>	<b>-</b>	<b>306,360</b>	<b>414,190</b>	<b>-</b>	<b>-</b>
<b>Meeting Expenses</b>																	
Meetings	265,768	265,768	-	265,768	-	13,500	22,200	137,496	-	13,600	30,200	46,722	-	1,700	350	-	-
Travel	534,977	534,977	-	534,977	2,400	309,282	44,268	11,100	25,000	57,986	59,478	20,263	1,000	1,200	3,000	-	-
Conference Calls	44,544	44,544	-	44,544	-	-	-	-	-	-	44,544	-	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>845,289</b>	<b>845,289</b>	<b>-</b>	<b>845,289</b>	<b>2,400</b>	<b>322,782</b>	<b>66,468</b>	<b>148,596</b>	<b>25,000</b>	<b>71,586</b>	<b>134,222</b>	<b>66,985</b>	<b>1,000</b>	<b>2,900</b>	<b>3,350</b>	<b>-</b>	<b>-</b>
<b>Operating Expenses</b>																	
Consultants & Contracts	2,120,181	2,120,181	-	2,120,181	-	83,000	369,000	155,000	-	-	357,725	42,400	962,556	150,500	-	-	-
Office Rent	590,983	590,983	-	590,983	-	-	-	-	-	-	590,983	-	-	-	-	-	-
Office Costs	282,011	282,011	-	282,011	-	19,400	2,467	-	700	-	53,044	3,370	180,955	180	21,895	-	-
Professional Services	175,739	175,739	-	175,739	-	-	-	-	-	-	60,644	40,000	-	37,807	37,288	-	-
Miscellaneous	16,700	16,700	-	16,700	-	-	-	-	-	-	16,700	-	-	-	-	-	-
Depreciation	234,882	234,882	-	234,882	-	-	-	-	-	-	234,882	-	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>3,420,496</b>	<b>3,420,496</b>	<b>-</b>	<b>3,420,496</b>	<b>-</b>	<b>102,400</b>	<b>371,467</b>	<b>155,000</b>	<b>700</b>	<b>-</b>	<b>1,313,978</b>	<b>85,770</b>	<b>1,143,511</b>	<b>188,487</b>	<b>59,183</b>	<b>-</b>	<b>-</b>
<b>Total Direct Expenses</b>	<b>17,474,285</b>	<b>17,474,285</b>	<b>-</b>	<b>17,474,285</b>	<b>334,302</b>	<b>6,171,838</b>	<b>1,591,012</b>	<b>559,283</b>	<b>648,794</b>	<b>919,634</b>	<b>4,386,802</b>	<b>743,639</b>	<b>1,144,511</b>	<b>497,747</b>	<b>476,723</b>	<b>-</b>	<b>-</b>
<b>Indirect Expenses</b>																	
	-	-	-	-	279,424	5,639,443	1,334,663	279,424	636,102	(919,634)	(4,386,802)	(743,639)	(1,144,511)	(497,747)	(476,723)	-	-
<b>Other Non-Operating Expenses</b>																	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Expenses (B)</b>	<b>17,474,285</b>	<b>17,474,285</b>	<b>-</b>	<b>17,474,285</b>	<b>613,726</b>	<b>11,811,281</b>	<b>2,925,675</b>	<b>838,707</b>	<b>1,284,896</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Change in Assets</b>	<b>(1,012,737)</b>	<b>(1,012,737)</b>	<b>-</b>	<b>(1,012,737)</b>	<b>278</b>	<b>5,604</b>	<b>1,326</b>	<b>278</b>	<b>632</b>	<b>-</b>	<b>(1,021,855)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,000</b>
<b>Fixed Assets</b>																	
Depreciation	(234,882)	(234,882)	-	(234,882)	-	-	-	-	-	-	(234,882)	-	-	-	-	-	-
Computer & Software CapEx	100,000	100,000	-	100,000	-	-	-	-	-	-	100,000	-	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment CapEx	143,000	143,000	-	143,000	-	-	-	-	-	-	143,000	-	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Allocation of Fixed Assets	-	-	-	-	278	5,604	1,326	278	632	-	(8,118)	-	-	-	-	-	-
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>8,118</b>	<b>8,118</b>	<b>-</b>	<b>8,118</b>	<b>278</b>	<b>5,604</b>	<b>1,326</b>	<b>278</b>	<b>632</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>17,482,403</b>	<b>17,482,403</b>	<b>-</b>	<b>17,482,403</b>	<b>614,004</b>	<b>11,816,885</b>	<b>2,927,001</b>	<b>838,985</b>	<b>1,285,528</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>(1,020,855)</b>	<b>(1,020,855)</b>	<b>-</b>	<b>(1,020,855)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(1,021,855)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,000</b>
<b>FTEs</b>	<b>75.00</b>	<b>75.00</b>	<b>-</b>	<b>75.00</b>	<b>1.70</b>	<b>34.31</b>	<b>8.12</b>	<b>1.70</b>	<b>3.87</b>	<b>4.70</b>	<b>13.25</b>	<b>2.55</b>	<b>-</b>	<b>1.90</b>	<b>2.90</b>	<b>-</b>	<b>-</b>

Table D-1. Consolidated Statements of Activities by Program, Statutory and Non-Statutory

## Statement of Financial Position

The following table provides SERC Statement of Financial Position as of these dates:

- As of December 31, 2015, per audit
- As of December 31, 2016, projected
- As of December 31, 2017, as budgeted

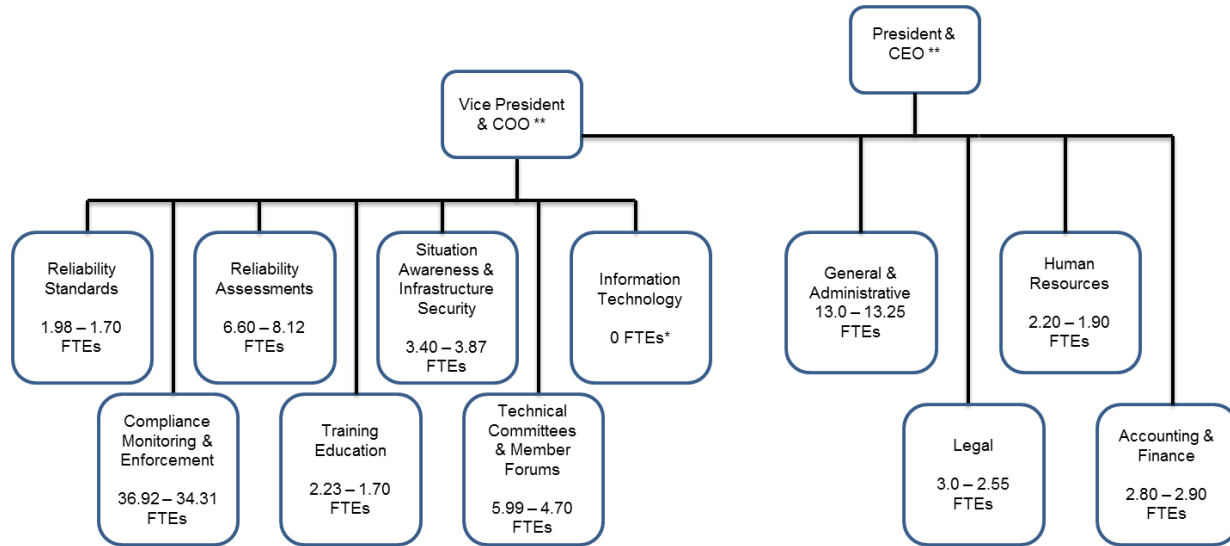
Statement of Financial Position			
2015 Audited, 2016 Projection, and 2017 Budget			
STATUTORY			
	(Per Audit)	Projected	Budget
	31-Dec-15	31-Dec-16	31-Dec-17
<b>ASSETS</b>			
Cash	6,778,480	5,365,343	5,265,343
Trade Accounts receivable, net of allowance for uncollectible accounts of \$0	223,667	223,667	223,667
Other Receivables	-	-	-
Prepaid expenses and other current assets	262,529	262,529	262,529
Security deposit	-	-	-
Cash value of insurance policies	-	-	-
Property and equipment	909,946	1,119,492	1,111,374
Total Assets	<b>8,174,622</b>	<b>6,971,031</b>	<b>6,862,913</b>
<b>LIABILITIES AND NET ASSETS</b>			
Liabilities			
Accounts payable and accrued expenses	404,084	404,084	404,084
Deferred income	37,049	37,049	37,049
Deferred penalty income	705,910	195,000	-
Deferred rent	438,341	472,676	464,201
Regional assessments	-	-	-
Deferred compensation	-	-	-
Accrued personnel benefits other	533,055	-	-
Accrued retirement liabilities	373,068	514,372	571,593
Accrued incentive compensation	1,206,070	1,241,229	1,346,435
Total Liabilities	<b>3,697,577</b>	<b>2,864,410</b>	<b>2,823,362</b>
Net Assets - unrestricted	4,477,045	4,106,621	4,039,551
Total Liabilities and Net Assets	<b>8,174,622</b>	<b>6,971,031</b>	<b>6,862,913</b>

**Table D-2. Statement of Financial Position, Three-Year Comparison**



## Appendix A Organization Chart

The SERC Organization Chart is shown below.



\*FTEs for Information Technology are recorded within General and Administrative  
\*\* Executive positions are recorded within General and Administrative

**Figure 2. SERC Organization Chart**

## Appendix B Acronyms

This section lists and defines acronyms used in this document.

Acronym	Definition
BCC	Board Compliance Committee
BES	Bulk Electric System
BPS	Bulk Power System
CA	Compliance Assessment
CIP	Critical Infrastructure Protection
CIPSA	CIPSA is a data collection tool.
CITS	Compliance Issues Tracking System
CMEP	Compliance Monitoring and Enforcement Program
DADS	Demand Response Availability Data System
EA	Events Analysis
EIA	Energy Information Administration
EMG	Executive Management Group
ERAG	Eastern Interconnection Assessment Group
ERO	Electric Reliability Organization
ES-ISAC	NERC's Electric Sector – Information Sharing and Analysis Center
FAC	Finance and Audit Committee
FERC	Federal Energy Regulatory Commission
FFT	Find, Fix, and Track
FRCC	Florida Reliability Coordinating Council
FTE	Full-Time Equivalent
GADS	Generating Availability Data System
HRCC	Human Resources and Compensation Committee
HRIS	Human Resources Information System
IT	Information Technology
MIDAS	Misoperations Information Data Analysis System
NEL	Net Energy for Load
NERC	North American Electric Reliability Corporation
NOP	Full Notice of Penalty
NPCC	Northeast Power Coordinating Council
PEI	Protected Entity Information
PMO	Project Management Office
RAPA	Reliability Assessments and Performance Analysis
RAS	NERC Reliability Assessment Subcommittee
RSAW	Reliability Standards Audit Worksheet
SA	Situation Awareness
SAEA	Situation Awareness and Events Analysis
SAN	Storage Area Network
SERC	SERC Reliability Corporation
SNOP	Spreadsheet Notice of Penalty
SPP	Southwest Power Pool
TADS	NERC Transmission Availability Data System
TFE	Technical Feasibility Exception

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**DOCKET NO. RR16-\_\_-000**

**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**2017 BUSINESS PLAN AND BUDGET FILING**

**ATTACHMENT 8**

**SOUTHWEST POWER POOL REGIONAL ENTITY**

**PROPOSED 2017 BUSINESS PLAN AND BUDGET**



Helping our members work together to keep the lights on ... today and in the future

---

## **2017 Business Plan and Budget Southwest Power Pool Regional Entity**

**Approved by SPP Regional Entity Trustees**

**June 13, 2016**

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## Introduction

TOTAL RESOURCES (in whole dollars)				
	2017 Budget	U.S.	Canada	Mexico
Statutory FTEs	33.25			
Non-statutory FTEs	-			
<b>Total FTEs</b>	<b>33.25</b>			
Statutory Expenses	\$ 10,865,511			
Non-Statutory Expenses	\$ -			
<b>Total Expenses</b>	<b>\$ 10,865,511</b>			
Statutory Inc(Dec) in Fixed Assets	\$ -			
Non-Statutory Inc(Dec) in Fixed Assets	\$ -			
<b>Total Inc(Dec) in Fixed Assets</b>	<b>\$ -</b>			
Statutory Working Capital Requirement Adjustment	\$ (1,403,208)			
Non-Statutory Working Capital Requirement	\$ -			
<b>Total Working Capital Requirement</b>	<b>\$ (1,403,208)</b>			
Total Statutory Funding Requirement	\$ 9,462,303			
Total Non-Statutory Funding Requirement	\$ -			
<b>Total Funding Requirement</b>	<b>\$ 9,462,303</b>			
<b>Statutory Funding Assessments</b>	\$ 9,092,553	\$ 9,092,553		
<b>Non-Statutory Fees</b>	\$ -	\$ -		
NEL	225,657,039	225,657,039		
NEL%	100%	100%		

### Organizational Overview

Southwest Power Pool, Inc. (SPP), founded in 1941 and based in Little Rock, Arkansas, is a nonprofit organization whose primary mission is maintaining electric reliability. SPP is one of nine Federal Energy Regulatory Commission (FERC) approved Independent System Operators/Regional Transmission Organizations and one of eight North American Electric Reliability Corporation (NERC) Regional Entities.

Southwest Power Pool Regional Entity (SPP RE), an independent and functionally separate division of SPP, was created to fulfill the functions and duties specified in the SPP Regional Delegation Agreement with NERC originally approved by FERC in 2007 and again in October 2011. The current RDA was approved by FERC in March of 2016.<sup>1</sup> As a NERC Regional Entity, SPP RE promotes and works to improve the reliability of the bulk power system (BPS). Specifically, SPP RE is responsible for developing regional reliability standards, monitoring and enforcing registered entity compliance with reliability standards, and assessing and evaluating BPS

<sup>1</sup> [http://www.nerc.com/FilingsOrders/us/FERCOrdersRules/LetterOrder\\_RDAs\\_20160323\\_RR15-12.pdf](http://www.nerc.com/FilingsOrders/us/FERCOrdersRules/LetterOrder_RDAs_20160323_RR15-12.pdf);  
[http://www.nerc.com/FilingsOrders/us/Regional%20Delegation%20Agreements%20DL/SPP\\_RDA\\_Effective\\_2016\\_0101.pdf](http://www.nerc.com/FilingsOrders/us/Regional%20Delegation%20Agreements%20DL/SPP_RDA_Effective_2016_0101.pdf)

reliability. SPP RE provides technical expertise and assistance to BPS owners, operators and users, in particular to the approximately 115 registered entities located within the SPP RE's footprint, an eight-state area that includes all or a portion of Arkansas, Kansas, Louisiana, Mississippi, Missouri, New Mexico, Oklahoma, and Texas.

Sections A and B of this business plan and budget (BP&B) detail the programs and costs for the activities the SPP RE performs to fulfill the duties specified in the Regional Entity Delegation Agreement between SPP and NERC.

The SPP's RTO activities, which are listed in Section C of this BP&B, are non-statutory, and as such, are not included in the SPP RE's BP&B.

### **Membership and Governance**

Pursuant to the SPP bylaws, SPP RE is governed by up to four independent Regional Entity Trustees,<sup>2</sup> who are not on the SPP Board and operate separately from the SPP Board. The SPP RE Trustees have autonomy over decisions in fund allocation and approval of the SPP RE budget, as well as oversight of SPP RE decisions on regional standards, compliance enforcement actions, and penalties. The SPP RE's General Manager reports directly to the SPP RE Trustees. Only the SPP RE Trustees and certain SPP RE Staff members have the authority to make compliance and enforcement decisions. SPP RE direct staff is independent of all BPS users, owners, and operators.

To avoid the appearance of any conflicts of interest, SPP RE has engaged SERC Reliability Corporation to serve as the compliance enforcement authority for SPP's registered functions in the SPP RE region.

SPP RE's governance meets the requirements of the Energy Policy Act of 2005.

### **Statutory Functional Scope**

SPP RE performs various activities in the execution of its delegated functions and in support of NERC's responsibilities as the electric reliability organization (ERO). These activities include:

- Reliability Standard Development
- Compliance Enforcement
- Organization Registration and Certification
- Reliability Assessment and Performance Analysis
- Training and Education
- Situation Awareness and Infrastructure Security

### **2017 Key Assumptions**

The key assumptions underlying the SPP RE 2017 Business Plan and Budget (BP&B) are consistent with ERO BP&B Assumptions as found in NERC's 2017 BP&B. The assumptions that are of particular importance to the SPP RE's 2017 BP&B include the expectation that:

1. NERC and the Regional Entities will continue to work collaboratively to promote and improve the reliability of the BPS.

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<sup>2</sup> FERC Docket No. ER16-430-000, Letter Order approving a Revision to the Bylaws expanding the RE Board of Trustees by one additional seat.



2. NERC and the Regional Entities will continue to work under the regulatory framework governing the establishment and enforcement of reliability standards for the BPS established by the Energy Policy Act of 2005.
3. SPP RE's delegated authorities and responsibilities will remain relatively constant.
4. NERC and the Regional Entities will work collaboratively to refine and revise processes and procedures to eliminate duplication, increase operational efficiencies, enhance ERO-wide consistency, and achieve measureable reliability outcomes.
5. Cyber and critical asset security will continue to be a priority in the United States, with significant oversight by applicable government authorities.
6. Cost pressures may affect stakeholder resources available to participate in NERC and Regional Entity activities. NERC and the Regional Entities' business plans, budgets, and resource requirements will continue to be established based upon the assumption of continued industry participation in support of key program areas, including but not limited to event analysis, reliability assessments, and standards development.
7. NERC and the Regional Entities will continue to implement the risk-based Compliance Monitoring and Enforcement Program (CMEP) to focus on higher reliability risks to increase efficiency and mitigate overall compliance costs for registered entities.
8. NERC and the Regional Entities will work collaboratively to implement the registration and certification process through Risk-Based Registration. NERC and the Regions will work to ensure entities are properly registered and have been assigned the proper compliance responsibilities.

In addition to the above assumptions, which are shared among NERC and the Regional Entities, assumptions that are unique to SPP RE include:

1. SPP RE continues to operate as an independent and functionally separate division of SPP.
2. SPP RE continues to utilize SPP Shared staff to conduct certain activities in the SPP RE's Reliability Assessment and Performance Analysis program.
3. SPP RE will continue to engage SERC to perform the compliance enforcement authority activities for the SPP registered functions that would otherwise be performed by SPP RE.

Key assumptions specific to individual programs are provided in Section A of this BP&B.

### Goals and Key Deliverables

As part of the implementation of the Electric Reliability Organization Strategic Goals through 2019 (ERO Strategic Plan)<sup>3</sup>, NERC and the Regional Entities developed a set of Common

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<sup>3</sup> <http://www.nerc.com/gov/Annual%20Reports/ERO%20Enterprise%20Strategic%20Plan%202016-2019.pdf>

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Assumptions<sup>4</sup> that are now used to guide budget resource projections for each regional entity and the ERO overall.

SPP RE-specific goals and deliverables include:

- Effectively and efficiently perform the delegated functions of registration, compliance monitoring and enforcement, reliability assessments, performance analysis, and situational awareness with independence, without conflict of interest, with objectivity and fairness.
- Conduct outreach activities, including compliance workshops, training seminars and videos, and newsletters, that facilitate a learning environment and promote a strong culture of reliability excellence and compliance.
- Participate in NERC-sponsored ERO compliance auditor and enforcement staff training.

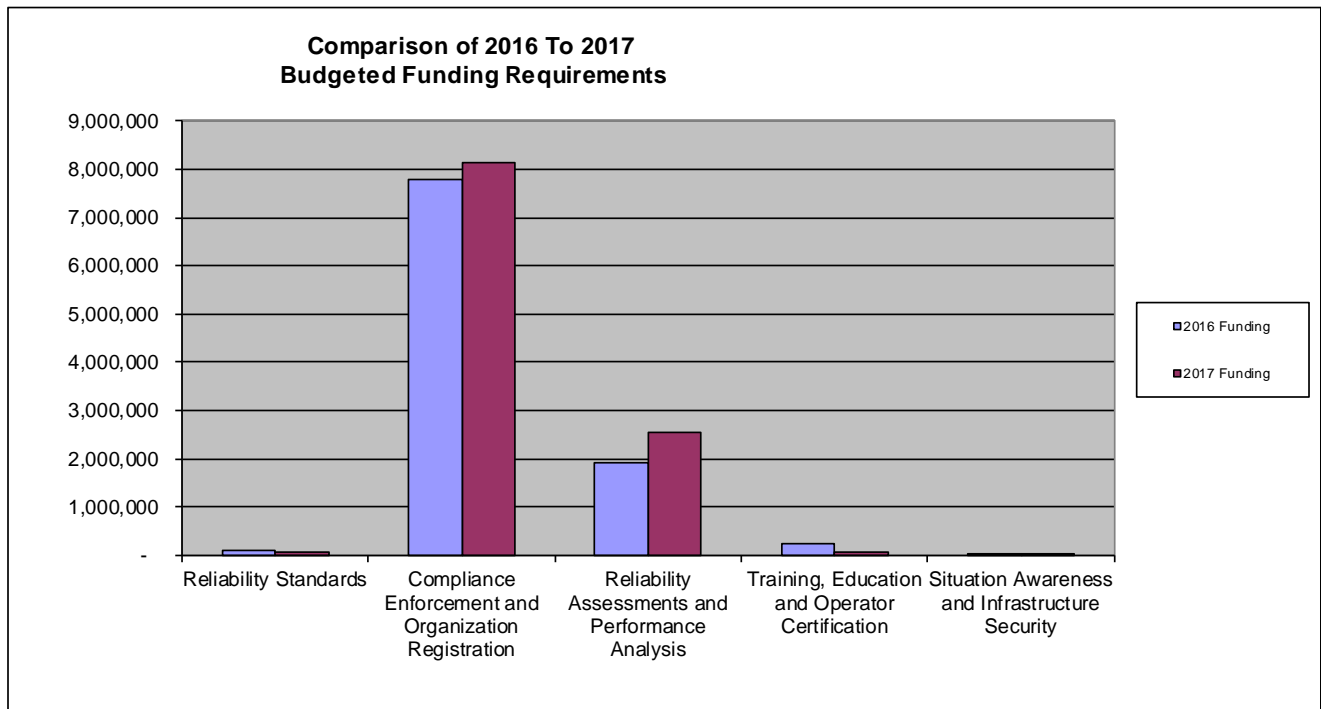
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<sup>4</sup> See NERC 2017 Business Plan and Budget, Exhibit A.

**2017 Overview of Cost Impacts**

The \$10.9 million operating budget reflects an approximate \$0.77 million increase or 7.6%. Funding assessments increased by \$466 thousand or 5.4%, from \$8.63 million to \$9.09 million. A summary of the funding by program area is shown in the chart below.

Program	Budget 2016	Projection 2016	Budget 2017	Change 2017 Budget v 2016 Budget	% Change
Reliability Standards	109,518	76,937	76,377	(33,141)	-30.3%
Compliance Enforcement and Registration	7,787,038	7,792,968	8,126,399	339,361	4.4%
Reliability Assess and Perf Analysis	1,912,600	1,914,013	2,540,152	627,552	32.8%
Training and Education	245,432	245,639	79,211	(166,222)	-67.7%
Situation Awareness	41,232	41,262	43,372	2,141	5.2%
	<b>10,095,819</b>	<b>10,070,819</b>	<b>10,865,511</b>	<b>769,691</b>	<b>7.6%</b>
Working Capital Reserve	\$ -	\$ -	\$ -	\$ -	
<b>Total Funding</b>	<b>10,095,819</b>	<b>10,070,819</b>	<b>10,865,511</b>	<b>769,691</b>	<b>7.6%</b>



As shown in the chart that follows, there is a net increase of 1.0 in budgeted Full Time Equivalents (FTE). The increase in Shared Staff is needed to accommodate the increasing RAPA reliability

assessment and special study requirements. Some minor changes have also been made between the program areas to reflect the time spent by RE staff members on reliability standards and the RAPA data groups and the time spent by the RAPA employee on Situational Awareness. In addition, the time spent by CIP audit staff performing CIP V5 transition outreach is expected to diminish in 2017.

Total FTEs by Program Area	Budget	Projection	Direct	Shared	Total FTEs	Change
	2016	2016	FTEs 2017 Budget	FTEs <sup>1</sup> 2017 Budget	2017 Budget	from 2016 Budget
<b>STATUTORY</b>						
<b>Operational Programs</b>						
Reliability Standards	0.15	0.15	0.13	0.00	0.13	-0.03
Compliance and Organization Registration and Certification	21.35	21.35	21.75	0.00	21.75	0.40
Training and Education	0.50	0.50	0.00	0.00	0.00	-0.50
Reliability Assessment and Performance Analysis	5.63	5.63	1.50	5.25	6.75	1.13
Situation Awareness and Infrastructure Security	0.13	0.13	0.13	0.00	0.13	0.00
<b>Total FTEs Operational Programs</b>	<b>27.75</b>	<b>27.75</b>	<b>23.50</b>	<b>5.25</b>	<b>28.75</b>	<b>1.00</b>
<b>Administrative Programs</b>						
Technical Committees and Member Forums	0.00	0.00	0.00	0.00	0.00	0.00
General & Administrative	4.50	4.50	4.50	0.00	4.50	0.00
Information Technology	0.00	0.00	0.00	0.00	0.00	0.00
Legal and Regulatory	0.00	0.00	0.00	0.00	0.00	0.00
Human Resources	0.00	0.00	0.00	0.00	0.00	0.00
Finance and Accounting	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total FTEs Administrative Programs</b>	<b>4.50</b>	<b>4.50</b>	<b>4.50</b>	<b>0.00</b>	<b>4.50</b>	<b>0.00</b>
<b>Total FTEs</b>	<b>32.25</b>	<b>32.25</b>	<b>28.00</b>	<b>5.25</b>	<b>33.25</b>	<b>1.00</b>

<sup>1</sup>A shared FTE is defined as an employee who performs both Statutory and Non-Statutory functions.

Compared to the 2016 budget, the net increase in direct expenses and the net increase in the SPP, Inc. indirect expenses are approximately \$499 thousand and \$270 thousand, respectively. The increase in direct expenses is principally due to an annual merit increase in salaries, an increase in the RAPA Shared Staff FTEs and the inclusion of funds for completion of the Engineering Data Validation tool. The increase in SPP, Inc. indirect expenses is due to a nominal inflationary increase and the increased RAPA Shared Staff FTE.<sup>5</sup> Additional information regarding the changes to the SPP RE operating budget is detailed in the Statutory Statement of Activities and Capital Expenditures table on the next page.

<sup>5</sup> A table showing the derivation of the Indirect Expense is presented in Section E.

### Statement of Activities and Capital Expenditures 2016 Budget & Projection, and 2017 Budget

	2016 Budget	2016 Projection	Variance 2016 Projection v 2017 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>SPP RE Funding</b>					
SPP RE Assessments	\$ 8,626,751	\$ 8,626,751	\$ -	\$ 9,092,553	\$ 465,802
Penalty Sanctions	\$ 193,000	193,000	-	369,750	176,750
<b>Total SPP RE Funding</b>	<b>\$ 8,819,751</b>	<b>\$ 8,819,751</b>	<b>\$ -</b>	<b>\$ 9,462,303</b>	<b>\$ 642,552</b>
Membership Dues	-	-	-	-	-
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 8,819,751</b>	<b>\$ 8,819,751</b>	<b>\$ -</b>	<b>\$ 9,462,303</b>	<b>\$ 642,552</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 3,896,492	\$ 3,896,492	\$ -	\$ 4,385,605	\$ 489,113
Payroll Taxes	\$ 298,082	298,082	-	335,499	37,417
Benefits	\$ 333,564	333,564	-	358,263	24,699
Retirement Costs	\$ 155,860	155,860	-	175,424	19,565
<b>Total Personnel Expenses</b>	<b>\$ 4,683,997</b>	<b>\$ 4,683,997</b>	<b>\$ -</b>	<b>\$ 5,254,791</b>	<b>\$ 570,793</b>
<b>Meeting Expenses</b>					
Meetings	\$ 90,000	\$ 90,000	\$ -	\$ 120,000	\$ 30,000
Travel	\$ 680,200	655,200	(25,000)	537,000	(143,200)
Conference Calls	\$ -	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 770,200</b>	<b>\$ 745,200</b>	<b>\$ (25,000)</b>	<b>\$ 657,000</b>	<b>\$ (113,200)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 965,042	\$ 965,042	\$ -	\$ 1,020,710	\$ 55,668
Office Rent	\$ -	-	-	-	-
Office Costs	\$ 8,000	8,000	-	10,000	2,000
Professional Services	\$ 153,450	153,450	-	212,100	58,650
Miscellaneous	\$ 74,445	74,445	-	-	(74,445)
Depreciation	\$ -	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 1,200,937</b>	<b>\$ 1,200,937</b>	<b>\$ -</b>	<b>\$ 1,242,810</b>	<b>\$ 41,873</b>
<b>Total Direct Expenses</b>	<b>\$ 6,655,134</b>	<b>\$ 6,630,134</b>	<b>\$ (25,000)</b>	<b>\$ 7,154,601</b>	<b>\$ 499,466</b>
SPP Inc. Indirect Expenses	\$ 3,440,685	3,440,685	\$ -	\$ 3,710,910	\$ 270,225
SPP RE Indirect Expenses <sup>(1)</sup>	-	-	-	-	-
<b>Total Indirect Expenses</b>	<b>\$ 3,440,685</b>	<b>\$ 3,440,685</b>	<b>\$ -</b>	<b>\$ 3,710,910</b>	<b>\$ 270,225</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 10,095,819</b>	<b>\$ 10,070,819</b>	<b>\$ (25,000)</b>	<b>\$ 10,865,511</b>	<b>\$ 769,691</b>
<b>Change in Assets</b>	<b>\$ (1,276,068)</b>	<b>\$ (1,251,068)</b>	<b>\$ 25,000</b>	<b>\$ (1,403,208)</b>	<b>\$ (127,140)</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	\$ -	\$ -	\$ -	-	-
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 10,095,819</b>	<b>\$ 10,070,819</b>	<b>\$ (25,000)</b>	<b>\$ 10,865,511</b>	<b>\$ 769,691</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (1,276,068)</b>	<b>\$ (1,251,068)</b>	<b>\$ 25,000</b>	<b>\$ (1,403,208)</b>	<b>\$ (127,140)</b>

(1) SPP RE Indirect Expenses which represent direct expenses for SPP RE Administrative Services, are included in direct expenses.

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Section A – Statutory Programs  
2017 Business Plan and Budget

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## Section A — 2017 Business Plan

### Reliability Standards Program

<b>Reliability Standards Program</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	0.150	0.125	(0.025)
Direct Expenses	\$ 71,613	\$ 47,286	\$ (24,327)
Indirect Expenses- SPP Inc.	\$ 16,003	\$ 13,951	\$ (2,052)
Indirect Expenses- SPP RE	\$ 21,902	\$ 15,140	\$ (6,762)
Inc(Dec) in Fixed Assets	\$ -	\$ -	\$ -
Total Funding Requirement	\$ 109,518	\$ 76,377	\$ (33,141)

#### Program Scope and Functional Description

The Reliability Standards Program is required under the Regional Entity Delegation Agreement, as well as NERC Rules of Procedure, Section 300.

The 0.125 FTEs represents the time spent by an Enforcement Group staff member on reliability standards development activities. Specifically, SPP RE Staff coordinate with NERC to develop and maintain technically sound, fair and balanced reliability standards that enable NERC and Regional Entities to measure the reliability performance of bulk power system owners, operators, and users.

#### 2017 Key Assumptions

The key assumptions concerning the SPP RE's Reliability Standards Program are consistent with the assumptions contained in the ERO BP&B Assumptions.

#### 2017 Goals and Key Deliverables

- Meet directives of ERO governmental authorities regarding standards development and procedures;
- Communicate with stakeholders and regulators regarding standards development;
- Participate and represent SPP region in NERC standard development activities that may have significant influence on the planning and business practices of the entities registered with SPP RE; and
- Participate on in-depth reviews to further improve the Reliability Standards as needed.

## Resource Requirements

There is a minor change to the budgeted FTEs for this program area (0.15 reduced to 0.125).



## Reliability Standards Program

<b>Statement of Activities and Capital Expenditures</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>Reliability Standards</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>SPP RE Funding</b>					
SPP RE Assessments	\$ 108,474	\$ 108,474	\$ -	\$ 74,769	\$ (33,705)
Penalty Sanctions	1,043	1,043	-	1,608	564
<b>Total SPP RE Funding</b>	<b>\$ 109,518</b>	<b>\$ 109,518</b>	<b>\$ -</b>	<b>\$ 76,377</b>	<b>\$ (33,141)</b>
Membership Dues	-	-	-	-	-
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 109,518</b>	<b>\$ 109,518</b>	<b>\$ -</b>	<b>\$ 76,377</b>	<b>\$ (33,141)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 18,010	\$ 18,010	\$ -	\$ 18,969	\$ 959
Payroll Taxes	1,378	1,378	-	1,451	73
Benefits	1,505	1,505	-	1,107	(398)
Retirement Costs	720	720	-	759	38
<b>Total Personnel Expenses</b>	<b>\$ 21,613</b>	<b>\$ 21,613</b>	<b>\$ -</b>	<b>\$ 22,286</b>	<b>\$ 673</b>
<b>Meeting Expenses</b>					
Meetings	\$ -	\$ -	\$ -	\$ -	\$ -
Travel	50,000	25,000	(25,000)	25,000	(25,000)
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 50,000</b>	<b>\$ 25,000</b>	<b>\$ (25,000)</b>	<b>\$ 25,000</b>	<b>\$ (25,000)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -
Office Rent	-	-	-	-	-
Office Costs	-	-	-	-	-
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Direct Expenses</b>	<b>\$ 71,613</b>	<b>\$ 46,613</b>	<b>\$ (25,000)</b>	<b>\$ 47,286</b>	<b>\$ (24,327)</b>
SPP Inc. Indirect Expenses	\$ 16,003	\$ 16,003	\$ -	\$ 13,951	\$ (2,052)
SPP RE Indirect Expenses	21,902	14,321	(7,580)	15,140	(6,762)
<b>Total Indirect Expenses</b>	<b>\$ 37,905</b>	<b>\$ 30,324</b>	<b>\$ (7,580)</b>	<b>\$ 29,091</b>	<b>\$ (8,814)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 109,518</b>	<b>\$ 76,937</b>	<b>\$ (32,580)</b>	<b>\$ 76,377</b>	<b>\$ (33,141)</b>
<b>Change in Assets</b>	<b>\$ -</b>	<b>\$ 32,580</b>	<b>\$ 32,580</b>	<b>\$ -</b>	<b>\$ 1</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	-	-	-	-	-
<b>Inc (Dec) in Fixed Assets (C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 109,518</b>	<b>\$ 76,937</b>	<b>\$ (32,580)</b>	<b>\$ 76,377</b>	<b>\$ (33,141)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ -</b>	<b>\$ 32,580</b>	<b>\$ 32,580</b>	<b>\$ -</b>	<b>\$ 1</b>
FTEs	0.15	0.15	0.00	0.13	-0.03

## Compliance Monitoring and Enforcement and Organization Registration and Certification Program

<b>Compliance Monitoring and Enforcement and Organization Registration and Certification Program</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	21.35	21.75	0.40
Direct Expenses	\$ 4,218,955	\$ 4,316,813	\$ 97,858
Indirect Expenses- SPP Inc.	\$ 2,277,787	\$ 2,427,437	\$ 149,650
Indirect Expenses- SPP RE	\$ 1,290,296	\$ 1,382,149	\$ 91,853
Inc(Dec) in Fixed Assets	\$ -	\$ -	\$ -
Total Funding Requirement	\$ 7,787,038	\$ 8,126,399	\$ 339,361

### Program Scope and Functional Description

The Compliance Monitoring and Enforcement and Organization Registration and Certification Program (CMEP) is required under the Regional Entity Delegation Agreement, as well as NERC Rules of Procedure, Section 400. There are approximately 115 registered entities located within the SPP RE's footprint. The SPP RE CMEP is administered by the SPP RE Staff. Only the SPP RE Trustees and certain SPP RE Staff members have the authority to make compliance and enforcement decisions.

To avoid the appearance of any conflicts of interest, SPP RE has engaged SERC Reliability Corporation to serve as the compliance enforcement authority for SPP's registered functions in the SPP RE region. In accordance with the terms of the agreement between SERC and SPP, SPP RE has included \$41,000 in its budget to compensate SERC for performing the 2017 CMEP activities and Risk Assessments for SPP's registered functions in the SPP RE region.

SPP RE CMEP activities are organized into three distinct groups: Compliance Monitoring; Critical Infrastructure Protection (CIP); and Enforcement. The SPP RE Director of Compliance and Events is responsible for the oversight of the Compliance Monitoring Group, the Director of Critical Infrastructure Protection (CIP) is responsible for the oversight of the CIP Group, and the SPP RE Manager of Enforcement is responsible for the oversight of the Enforcement Group.

### Compliance Groups

The FTEs assigned to the Compliance Groups (Compliance Monitoring and CIP) are responsible for registering owners, operators and users of the BPS and monitoring and assessing registered entities' compliance with NERC-approved reliability standards. The various activities performed by the staff members assigned to the Compliance groups include: 1) performing entity-specific inherent risk assessments and internal controls evaluations, 2) conducting compliance audits, spot checks, and self-certifications of entities registered in the SPP RE footprint, 3) reviewing CIP technical feasibility exception requests (TFEs), periodic data submittals and self-reports made by entities registered in the SPP RE footprint, 4) participating in SPP RE workshops and webinars,

and 5) participating in various SPP and NERC working groups. The Compliance Groups also make the initial determination of possible non-compliance with a reliability standard.

A total of 12.0 FTEs are assigned to the Compliance Groups, and include: the SPP RE Director of Compliance, allocated at 0.5 FTEs, five Operations & Planning (O&P or 693) auditor positions, Director of Critical Infrastructure Protection, five CIP audit positions, and one Outreach Coordinator, allocated at 0.5 FTEs.

In addition to the SPP RE Staff, SPP RE uses consultants to assist the SPP RE with operations and planning (693) and CIP audits. On average, two consultants participate on each SPP RE onsite 693 audit team and one consultant participates on SPP's offsite 693 audit team and onsite CIP audit teams. SPP RE has included \$477,610 in its budget for compliance consulting costs.

### **Enforcement Group**

The FTEs assigned to the Enforcement group are responsible for performing assigned Compliance Monitoring and Enforcement Program activities. These activities include but are not limited to: 1) the de novo review of all issues of noncompliance identified by the Compliance Monitoring Group; 2) conducting discovery; 3) documenting and filing all issues of noncompliance in accordance with the NERC Rules of Procedure; 4) preparing and issuing required Registered Entity notices, e.g., Find, Fix and Track (FFTs), Compliance Exceptions, Possible Violation, Alleged Violation and Proposed Penalty or Sanction, and Confirmed Violation; 5) reviewing, accepting, tracking and verifying completion of mitigation plans and mitigating activities; 6) engaging in settlement negotiations to resolve issues of noncompliance; 7) representing the SPP RE in hearings of contested violations; and 8) participating in various SPP and NERC working groups and SPP RE workshops.

A total of 9.75 FTEs are assigned to this group, and include: the Manager of Enforcement, four enforcement attorneys, two compliance enforcement specialists, one mitigation plan engineer, one paralegal and one legal clerk. To recognize that Enforcement staff (0.25 FTEs) participate in NERC's Reliability standard development activities and the Reliability and Performance Analysis (RAPA) data groups, 0.125 FTEs has been allocated to the Reliability Standards Program and 0.125 FTEs to the RAPA Program.

In addition to the SPP RE Staff, SPP RE uses consultants to assist SPP RE with reviewing, accepting, verifying completion of mitigation plans, and processing possible violations. SPP RE has included \$150,000 in its budget for enforcement consulting costs.

### **2017 Key Assumptions**

The assumptions for this program are consistent with those contained in the ERO BP&B Assumptions. NERC and the Regional Entities will continue to collaborate and define ongoing training needs, priorities, and implementation schedules for the auditors, enforcement, and investigation staff. As part of the training effort, at least two compliance enforcement authority (CEA) workshops are anticipated to occur. It is expected that this training and possible certification effort will have an impact on staffing needs and costs (e.g., travel and labor expenses) to participate and attend this training. SPP RE has provided time for staff to seek and maintain industry certifications, such as NERC System Operator Certification, physical and cyber security technical certifications, professional auditing certifications, Professional Engineering License, etc.

Given these key assumptions and based on actual 2016 resource requirements, SPP RE believes the resources assigned to this program area are adequate to achieve the goals and deliverables detailed below.

### **2017 Goals and Key Deliverables**

- Ensure that bulk power system owners, operators, and users are correctly registered, ensure the revised BES definition is correctly applied, and process Exception Requests in a timely manner;
- Implement the risk-based CMEP and conduct entity-specific Inherent Risk Assessments and Internal Controls Evaluations;
- Coordinated oversight of Multi-Region Registered Entities (MRREs);
- Perform 8 to 10 on-site FERC Order 693 compliance audits;
- Perform 12 to 15 off-site FERC Order 693 compliance audits;
- Perform 10 to 13 on-site CIP compliance audits of registered entities with High or Medium Impact BES Cyber Systems;
- SPP RE anticipates that audits of registered entities with only Low Impact BES Cyber Systems can be conducted off-site. The SPP RE will work with the affected registered entities to identify appropriate forms of evidence of compliance that can be evaluated without being on-site. The CIP audit team expects to go on-site only if an audit finding cannot be determined through other means;
- Perform spot check, self-certifications, and periodic data submittals of specified standards as dictated by NERC's 2017 Compliance Monitoring and Enforcement Program Annual Implementation Plan;
- Perform Compliance Investigations, as necessary;
- Perform secondary review of initial findings of possible violations;
- Create Notices of Alleged Violation and Proposed Penalties and Sanctions (NAVAPS) and Notices of Confirmed Violations (NOCV);
- Process Find, Fix and Track (FFT) and Compliance Exceptions;
- Negotiate and develop settlements of violations;
- Verify that findings of non-compliance are and/or have been appropriately mitigated;
- Serve as SPP RE liaisons to SPP working groups and attend approximately 30 SPP working group meetings in 2017; and

- Provide general CIP V5 outreach support for all Registered Entities in all impact categories (High, Medium and Low BES Cyber Systems).

## **Resource Requirements**

### **Personnel**

The Compliance program area reflects a net increase of 0.40 FTEs which reflects the return of 0.50 FTES from the Training & Education program specifically designated as CIP V5 outreach in the 2016 Business Plan & Budget and the enforcement staff's participation on the RAPA data groups.

### **Contracts and Consultants**

The use of consultants is expected to be reduced from 2016 due to a number of CIP audits being conducted on Multi-Region Registered Entities for which SPP RE is not the lead region.

**Statement of Activities and Capital Expenditures**  
**2016 Budget & Projection, and 2017 Budget**  
**Compliance and Organization Registration and Certification**

	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>SPP RE Funding</b>					
SPP RE Assessments	\$ 7,638,549	\$ 7,638,549	\$ -	\$ 7,846,675	\$ 208,126
Penalty Sanctions	148,488	148,488	-	279,724	131,236
<b>Total SPP RE Funding</b>	<b>\$ 7,787,038</b>	<b>\$ 7,787,038</b>	<b>\$ -</b>	<b>\$ 8,126,399</b>	<b>\$ 339,361</b>
Membership Dues	-	-	-	-	-
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 7,787,038</b>	<b>\$ 7,787,038</b>	<b>\$ -</b>	<b>\$ 8,126,399</b>	<b>\$ 339,361</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 2,373,788	\$ 2,373,788	\$ -	\$ 2,665,150	\$ 291,362
Payroll Taxes	181,595	181,595	-	203,884	22,289
Benefits	214,183	214,183	-	234,563	20,380
Retirement Costs	94,952	94,952	-	106,606	11,654
<b>Total Personnel Expenses</b>	<b>\$ 2,864,518</b>	<b>\$ 2,864,518</b>	<b>\$ -</b>	<b>\$ 3,210,203</b>	<b>\$ 345,685</b>
<b>Meeting Expenses</b>					
Meetings	\$ 15,000	\$ 15,000	\$ -	\$ 35,000	\$ 20,000
Travel	400,200	400,200	-	282,000	(118,200)
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 415,200</b>	<b>\$ 415,200</b>	<b>\$ -</b>	<b>\$ 317,000</b>	<b>\$ (98,200)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 883,042	\$ 883,042	\$ -	\$ 778,610	\$ (104,432)
Office Rent	-	-	-	-	-
Office Costs	-	-	-	-	-
Professional Services	4,750	4,750	-	11,000	6,250
Miscellaneous	51,445	51,445	-	-	(51,445)
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 939,237</b>	<b>\$ 939,237</b>	<b>\$ -</b>	<b>\$ 789,610</b>	<b>\$ (149,627)</b>
<b>Total Direct Expenses</b>	<b>\$ 4,218,955</b>	<b>\$ 4,218,955</b>	<b>\$ -</b>	<b>\$ 4,316,813</b>	<b>\$ 97,858</b>
SPP Inc. Indirect Expenses	\$ 2,277,787	\$ 2,277,787	\$ -	\$ 2,427,437	\$ 149,650
SPP RE Indirect Expenses	1,290,296	1,296,227	5,931	1,382,149	91,853
<b>Total Indirect Expenses</b>	<b>\$ 3,568,083</b>	<b>\$ 3,574,014</b>	<b>\$ 5,931</b>	<b>\$ 3,809,586</b>	<b>\$ 241,503</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 7,787,038</b>	<b>\$ 7,792,968</b>	<b>\$ 5,931</b>	<b>\$ 8,126,399</b>	<b>\$ 339,361</b>
<b>Change in Assets</b>	<b>\$ -</b>	<b>\$ (5,931)</b>	<b>\$ (5,931)</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	-	-	-	-	-
<b>Inc (Dec) in Fixed Assets (C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 7,787,038</b>	<b>\$ 7,792,968</b>	<b>\$ 5,931</b>	<b>\$ 8,126,399</b>	<b>\$ 339,361</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (0)</b>	<b>\$ (5,931)</b>	<b>\$ (5,931)</b>	<b>\$ -</b>	<b>\$ (1)</b>
FTEs	21.35	21.35	-	21.75	0.40

## Reliability Assessment and Performance Analysis Program

<b>Reliability Assessments and Performance Analysis</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	5.625	6.750	1.125
Direct Expenses	\$ 1,005,091	\$ 1,353,461	\$ 348,370
Indirect Expenses- SPP Inc.	\$ 600,119	\$ 753,343	\$ 153,224
Indirect Expenses- SPP RE	\$ 307,390	\$ 433,348	\$ 125,958
Inc(Dec) in Fixed Assets	\$ -	\$ -	\$ -
Total Funding Requirement	\$ 1,912,600	\$ 2,540,152	\$ 627,552

### Program Scope and Functional Description

The Reliability Assessment and Performance Analysis Program is required under the Regional Entity Delegation Agreement, as well as NERC Rules of Procedure, Section 800. SPP RE direct staff and Shared Staff members available as consultants to the Regional Entity support NERC's efforts in preparing a number of reliability assessments each year including a long-term reliability assessment (LTRA) report, seasonal assessment reports, and a probabilistic report. These reports analyze electricity demand and adequacy of supply throughout the North American bulk power system, as well as examine the adequacy of the transmission system.

SPP RE direct staff participates in numerous meetings each year with the Shared Staff during the development of the models and the performance of studies leading up to the issuance of the annual reliability assessment reports. Once each report has been prepared, SPP RE direct staff performs an independent assessment and the SPP RE, in the spirit of transparency, discusses the process, assumptions, and findings at a webinar and/or a public Trustees meeting. The assessments are subject to endorsement by the Trustees.

SPP Shared Staff also conduct inter-regional studies and other planning studies.

SPP RE is responsible for overseeing and conducting Event Analyses on reliability events within the SPP RE footprint. The analysis may be conducted by the entity involved in the event, an assigned SPP Working Group/Committee, a technical team comprised of industry experts or may be conducted by the RE, NERC or FERC staff. SPP RE is responsible for producing a final technical report on each reportable event and for cause coding. Any issues that surface which may lead to standards compliance questions will be handled through the CMEP portion of this Business Plan.

### 2017 Key Assumptions

SPP RE expects to continue to utilize SPP Shared Staff to assist SPP RE in fulfilling its non-CMEP activities in this program. Key assumptions shared by NERC and the Regional Entities affecting the SPP RE budget in this program area include:

- NERC and the Regional Entities will prioritize and budget for a long-term and two seasonal reliability assessments per year;

- SPP RE will support the development of short-term reliability assessments (6-18 month horizon) and special studies requested by NERC;
- SPP RE will continue to support the NERC’s Planning Committee and its standing committees including the Reliability Assessment Subcommittee;
- NERC and the Regional Entities will continue to define clear, uniform criteria/ranking for reporting and categorizing of system events and security incidents;
- NERC and the Regional Entities will continue to work together to develop joint processes and resourcing for triage, analysis, and reporting of system events to the regulators and will coordinate with regulators regarding these issues;
- NERC and the Regional Entities will provide timely publication of lessons learned and recommendations and track responses to recommendations;
- NERC and the Regional Entities will continue to process and encourage prompt and complete self-analysis of events and disturbances to promote continuous improvement and information sharing;
- Support cause coding of events for trend analysis purposes; and
- The number of events requiring review and analysis are expected to remain at approximately the same level as 2016.

### **2017 Goals and Key Deliverables**

- Maintain and host a library of solved power flow models, a system dynamics database, and dynamics simulation cases for use by planning coordinators, regional entities, and registered entities to assist with planning and evaluating future systems and current operating conditions;
- Provide regional technical input to NERC’s reliability assessments each year: a long-term reliability assessment report, seasonal assessment reports and shorter-term focused reports. Perform an annual Probabilistic Assessment in support of the LTRA;
- Participate in NERC meetings to discuss reliability assessment and analyses of the impact of these assessments;
- Conduct inter-regional and other planning studies, including participation in the Eastern Interconnection Reliability Assessment Group (ERAG);
- Participate in NERC’s model validation efforts;
- Investigate, assess, and report on the potential impacts of new and evolving electricity market practices, new or proposed regulatory procedures, and new or proposed legislation (e.g., environmental requirements) on the adequacy and operating reliability of the bulk power system;
- Maintain a working dialog on bulk power system reliability and adequacy issues with SPP members;



- Support development of an expanded ERO data collection and analysis system to improve performance analysis of the BPS; and
- Participate actively in the following NERC working groups/committees/task forces:
  - Event Analysis Subcommittee (EAS)
  - Reliability Assessment Subcommittee (RAS)
  - Performance Analysis Subcommittee (PAS)
    - Generator Availability Data System Working Group (GADSWG)
    - Transmission Availability Data System Working Group (TADSWG)
    - Demand Response Availability Data System Working Group (DADSWG)

## **Resource Requirements**

### **Personnel**

Even though SPP RE direct staff expects to remain consistent with 2016, a modest increase is included to recognize that responsibilities for participating on the Performance Analysis Subcommittee, including the data working groups, has shifted to other engineering staff within the RE. Shared Staff is expected to increase by 1.0 FTE due to the increasing number and scope of the annual reliability assessments and special engineering studies being requested by NERC.

### **Contracts and Consultants**

Development of the Engineering Model Data Validation project was halted in early 2016. A change in the project's scope and vendor will cause the project to carry over into 2017. \$150,000 has been budgeted for completion of the project.

## Statement of Activities and Capital Expenditures 2016 Budget & Projection, and 2017 Budget

### Reliability Assessment and Performance Analysis

	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>SPP RE Funding</b>					
SPP RE Assessments	\$ 1,873,479	\$ 1,873,479	\$ -	\$ 2,453,341	\$ 579,863
Penalty Sanctions	39,122	39,122	-	86,811	47,689
<b>Total SPP RE Funding</b>	<u>\$ 1,912,600</u>	<u>\$ 1,912,600</u>	<u>\$ -</u>	<u>\$ 2,540,152</u>	<u>\$ 627,552</u>
Membership Dues	-	-	-	-	-
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<u>\$ 1,912,600</u>	<u>\$ 1,912,600</u>	<u>\$ -</u>	<u>\$ 2,540,152</u>	<u>\$ 627,552</u>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 728,223	\$ 728,223	\$ -	\$ 895,372	\$ 167,149
Payroll Taxes	55,709	55,709	-	68,496	12,787
Benefits	56,430	56,430	-	62,778	6,348
Retirement Costs	29,129	29,129	-	35,815	6,686
<b>Total Personnel Expenses</b>	<u>\$ 869,491</u>	<u>\$ 869,491</u>	<u>\$ -</u>	<u>\$ 1,062,461</u>	<u>\$ 192,970</u>
<b>Meeting Expenses</b>					
Meetings	\$ -	\$ -	\$ -	\$ -	\$ -
Travel	105,000	105,000	-	110,000	5,000
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<u>\$ 105,000</u>	<u>\$ 105,000</u>	<u>\$ -</u>	<u>\$ 110,000</u>	<u>\$ 5,000</u>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 25,000	\$ 25,000	\$ -	\$ 181,000	\$ 156,000
Office Rent	-	-	-	-	-
Office Costs	-	-	-	-	-
Professional Services	2,600	2,600	-	-	(2,600)
Miscellaneous	3,000	3,000	-	-	(3,000)
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<u>\$ 30,600</u>	<u>\$ 30,600</u>	<u>\$ -</u>	<u>\$ 181,000</u>	<u>\$ 150,400</u>
<b>Total Direct Expenses</b>	<u>\$ 1,005,091</u>	<u>\$ 1,005,091</u>	<u>\$ -</u>	<u>\$ 1,353,461</u>	<u>\$ 348,370</u>
SPP Inc. Indirect Expenses	\$ 600,119	\$ 600,119	\$ -	\$ 753,343	\$ 153,224
SPP RE Indirect Expenses	307,390	308,803	1,413	433,348	125,958
<b>Total Indirect Expenses</b>	<u>\$ 907,509</u>	<u>\$ 908,922</u>	<u>\$ 1,413</u>	<u>\$ 1,186,691</u>	<u>\$ 279,182</u>
<b>Other Non-Operating Expenses</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Total Expenses (B)</b>	<u>\$ 1,912,600</u>	<u>\$ 1,914,013</u>	<u>\$ 1,413</u>	<u>\$ 2,540,152</u>	<u>\$ 627,552</u>
<b>Change in Assets</b>	<u>\$ -</u>	<u>\$ (1,413)</u>	<u>\$ (1,413)</u>	<u>\$ -</u>	<u>\$ 1</u>
<b>Fixed Assets</b>	\$ -	\$ -	\$ -	\$ -	\$ -
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	-	-	-	-	-
<b>Inc (Dec) in Fixed Assets (C)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>TOTAL BUDGET (=B + C)</b>	\$ 1,912,600	\$ 1,914,013	\$ 1,413	\$ 2,540,152	\$ 627,552
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<u>\$ -</u>	<u>\$ (1,413)</u>	<u>\$ (1,413)</u>	<u>\$ -</u>	<u>\$ -</u>
FTEs	5.63	5.63	-	6.75	1.13

## Training, Education, and Operator Certification Program

<b>Training, Education and Operator Certification</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>Increase (Decrease)</b>
Total FTEs	0.50	-	(0.50)
Direct Expenses*	\$ 147,100	\$ 60,000	\$ (87,100)
Indirect Expenses- SPP Inc.	\$ 53,344	\$ -	\$ (53,344)
Indirect Expenses- SPP RE	\$ 44,988	\$ 19,211	\$ (25,777)
Inc(Dec) in Fixed Assets	\$ -	\$ -	\$ -
Total Funding Requirement	\$ 245,432	\$ 79,211	\$ (166,222)
* To maintain confidentiality, Personnel Expenses are included in Compliance and General & Administrative.			

### Program Scope and Functional Description

The Training, Education, and Operator Certification Program is required under the Regional Entity Delegation Agreement, as well as NERC Rules of Procedure, Section 900. SPP RE Staff design, develop, and conduct training and education via workshops, newsletters, webinars, SPP RE Trustee meetings, and videos.

Operator Certification Training is provided by SPP RTO staff, and as such, the expenses for this training continue to be excluded from the SPP RE budget and are included in the SPP, Inc. budget.

### 2017 Key Assumptions

SPP RE will continue its outreach activities designed to increase regional BPS reliability, educate stakeholders about compliance matters, inform stakeholders of emerging issues and compliance program changes. NERC will continue to budget and incur the cost of a unified learning system for the regional CEA staff and work with the Registered Entities to consolidate training resources. This promotes better coordination, planning, delivery and management of training efforts across the enterprise without adversely impacting region-specific training requirements.

### 2017 Goals and Key Deliverables

- Host three compliance workshops, one focused on CIP;
- Publish a monthly newsletter;
- Present at least six compliance webinars or training videos; and
- Maintain an online training video library to share compliance information with stakeholders.

## Resource Requirements

### Personnel

The personnel expenses for the Training and Education program coordinator are accounted for within the General and Administrative program (50%) and the Compliance Program (50%). The net (0.5 FTE) decrease is due to the completion of the outreach being conducted prior to the implementation of CIP V5 by the CIP audit staff. Post-CIP V5 implementation outreach will continue to be performed by CIP auditors with the FTEs accounted for in the Compliance Program Area.

## Statement of Activities and Capital Expenditures 2016 Budget & Projection, and 2017 Budget

### Training and Education

	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>SPP RE Funding</b>					
SPP RE Assessments	\$ 241,955	\$ 241,955	\$ -	\$ 79,211	\$ (162,744)
Penalty Sanctions	3,477	3,477	-	-	(3,477)
<b>Total SPP RE Funding</b>	<u>\$ 245,432</u>	<u>\$ 245,432</u>	<u>\$ -</u>	<u>\$ 79,211</u>	<u>\$ (166,222)</u>
Membership Dues	-	-	-	-	-
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<u>\$ 245,432</u>	<u>\$ 245,432</u>	<u>\$ -</u>	<u>\$ 79,211</u>	<u>\$ (166,222)</u>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 64,563	\$ 64,563	\$ -	\$ -	\$ (64,563)
Payroll Taxes	4,939	4,939	-	-	(4,939)
Benefits	5,016	5,016	-	-	(5,016)
Retirement Costs	2,583	2,583	-	-	(2,583)
<b>Total Personnel Expenses</b>	<u>\$ 77,100</u>	<u>\$ 77,100</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (77,100)</u>
<b>Meeting Expenses</b>					
Meetings	\$ 50,000	\$ 50,000	\$ -	\$ 60,000	\$ 10,000
Travel	20,000	20,000	-	-	(20,000)
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<u>\$ 70,000</u>	<u>\$ 70,000</u>	<u>\$ -</u>	<u>\$ 60,000</u>	<u>\$ (10,000)</u>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -
Office Rent	-	-	-	-	-
Office Costs	-	-	-	-	-
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Total Direct Expenses</b>	<u>\$ 147,100</u>	<u>\$ 147,100</u>	<u>\$ -</u>	<u>\$ 60,000</u>	<u>\$ (87,100)</u>
SPP Inc. Indirect Expenses	\$ 53,344	\$ 53,344		\$ -	\$ (53,344)
SPP RE Indirect Expenses	44,988	45,195		19,211	(25,777)
<b>Total Indirect Expenses</b>	<u>\$ 98,332</u>	<u>\$ 98,539</u>	<u>\$ 207</u>	<u>\$ 19,211</u>	<u>\$ (79,121)</u>
<b>Other Non-Operating Expenses</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Total Expenses (B)</b>	<u>\$ 245,432</u>	<u>\$ 245,639</u>	<u>\$ 207</u>	<u>\$ 79,211</u>	<u>\$ (166,222)</u>
<b>Change in Assets</b>	<u>\$ -</u>	<u>\$ (207)</u>	<u>\$ (207)</u>	<u>\$ -</u>	<u>\$ (2)</u>
<b>Fixed Assets</b>	\$ -	\$ -	\$ -	\$ -	\$ -
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	-	-	-	-	-
<b>Inc (Dec) in Fixed Assets (C)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>TOTAL BUDGET (=B + C)</b>	\$ 245,432	\$ 245,639	\$ 207	\$ 79,211	\$ (166,222)
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<u>\$ -</u>	<u>\$ (207)</u>	<u>\$ (207)</u>	<u>\$ -</u>	<u>\$ -</u>
FTEs	0.50	0.50	-	-	(0.50)

### Situation Awareness and Infrastructure Security Program

Situation Awareness and Infrastructure Security (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	0.13	0.13	-
Direct Expenses	\$ 21,362	\$ 22,286	\$ 924
Indirect Expenses- SPP Inc.	\$ 13,336	\$ 13,951	\$ 615
Indirect Expenses- SPP RE	\$ 6,533	\$ 7,135	\$ 602
Inc(Dec) in Fixed Assets	\$ -	\$ -	\$ -
Total Funding Requirement	\$ 41,232	\$ 43,372	\$ 2,141

### Program Scope and Functional Description

The Situation Awareness and Infrastructure Security Program is required under the Regional Entity Delegation Agreement, as well as NERC Rules of Procedure, Section 1000.

NERC coordinates electric industry activities to promote critical infrastructure protection of the bulk power system in North America. NERC has a leadership role in the critical infrastructure protection of the electricity sector to reduce vulnerability and improve mitigation and protection of the electricity sector's critical infrastructure. NERC acts as the electricity sector's Sector Coordinator and operates its Information Sharing and Analysis Center to gather and communicate information about security-related threats within the sector, United States and Canadian governmental authorities, and other critical infrastructure sectors. NERC also performs security planning activities focused on the critical infrastructure protection of the electricity sector, including sharing sensitive or classified information with federal, state, and provincial governmental authorities.

SPP Reliability Coordinator actively participates in NERC critical infrastructure protection activities and serves as an information conduit between NERC and SPP members. These activities are non-statutory. SPP also sponsors a Critical Infrastructure Protection Working Group (CIPWG), which:

- Serves as an expert advisory panel to the SPP Board of Directors, committees, and members, provides a forum for discussion of physical and cyber security issues within the SPP Region;
- Provides general guidance to SPP members on CIP Standards and related compliance efforts; and
- Serves as the interface between the NERC Critical Information Protection Committee (CIPC) and the SPP membership, including:
  - Serving as a conduit for information flow between the CIPC and SPP members

- Developing guidance and recommendations to CIPC members representing the SPP

The CIPWG consists of SPP members who are subject to the NERC CIP Cyber Security Standards and is facilitated by an SPP staff member. The working group meets quarterly at a member location. Additional meetings and conference calls are scheduled as required.

SPP RE is represented on the CIPC by three SPP member company representatives who represent the physical, cyber, and operations disciplines. Per the SPP Bylaws, SPP RE reimburses the member representatives for travel expenses incurred while performing CIPC responsibilities.

CIP compliance monitoring and enforcement is included in Compliance Monitoring and Enforcement and Organization Registration and Certification Program.

### **2017 Key Assumptions**

In addition to the assumptions that are shared among NERC and the Regional Entities, SPP RE expects the continued support of the SPP CIPWG, and continued support for CIPC participation from designated SPP member representatives.

### **2017 Goals and Key Deliverables**

- Continue sponsoring the Critical Infrastructure Protection Working Group (CIPWG)
  - Continue quarterly meetings
  - Maintain and Increase CIPWG membership
  - Provide registered entities-only discussion periods regarding CIP compliance progress
  - Provide a discussion forum for NERC-requested comments and ballot issues
- Provide enhanced support to SPP registered entities about CIP Standards
  - Provide general recommendations and discussion/outreach forum for CIP Version 5 implementation issues
  - Provide general recommendations on appropriate security best practices
  - Provide opportunities for technical and compliance-related training
  - Maintain the CIPWG electronic mail lists for group discussion of CIP-related issues
- Continue supporting CIPC attendance by CIPWG representatives
  - Reimburse expenses for Physical, Cyber, and Operations representatives (or designated alternates)

## Resource Requirements

### Personnel

There is no change to the budgeted FTEs for this program area.



## Situation Awareness and Infrastructure Security Program

### Statement of Activities and Capital Expenditures 2016 Budget & Projection, and 2017 Budget

#### Situation Awareness and Infrastructure Security

	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>SPP RE Funding</b>					
SPP RE Assessments	\$ 40,362	\$ 40,362	\$ -	\$ 41,765	\$ 1,403
Penalty Sanctions	869	869	-	1,608	738
<b>Total SPP RE Funding</b>	<b>\$ 41,232</b>	<b>\$ 41,232</b>	<b>\$ -</b>	<b>\$ 43,372</b>	<b>\$ 2,141</b>
Membership Dues	-	-	-	-	-
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 41,232</b>	<b>\$ 41,232</b>	<b>\$ -</b>	<b>\$ 43,372</b>	<b>\$ 2,141</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 18,010	\$ 18,010	\$ -	\$ 18,969	\$ 959
Payroll Taxes	1,378	1,378	-	1,451	73
Benefits	1,254	1,254	-	1,107	(147)
Retirement Costs	720	720	-	759	38
<b>Total Personnel Expenses</b>	<b>\$ 21,362</b>	<b>\$ 21,362</b>	<b>\$ -</b>	<b>\$ 22,286</b>	<b>\$ 924</b>
<b>Meeting Expenses</b>					
Meetings	\$ -	\$ -	\$ -	\$ -	\$ -
Travel	-	-	-	-	-
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -
Office Rent	-	-	-	-	-
Office Costs	-	-	-	-	-
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Direct Expenses</b>	<b>\$ 21,362</b>	<b>\$ 21,362</b>	<b>\$ -</b>	<b>\$ 22,286</b>	<b>\$ 924</b>
SPP Inc. Indirect Expenses	\$ 13,336	\$ 13,336		\$ 13,951	\$ 615
SPP RE Indirect Expenses	6,533	6,563		7,135	602
<b>Total Indirect Expenses</b>	<b>\$ 19,869</b>	<b>\$ 19,899</b>	<b>\$ 30</b>	<b>\$ 21,086</b>	<b>\$ 1,217</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 41,232</b>	<b>\$ 41,262</b>	<b>\$ 30</b>	<b>\$ 43,372</b>	<b>\$ 2,142</b>
<b>Change in Assets</b>	<b>\$ -</b>	<b>\$ (30)</b>	<b>\$ (30)</b>	<b>\$ -</b>	<b>\$ (1)</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	-	-	-	-	-
<b>Inc (Dec) in Fixed Assets (C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 41,232</b>	<b>\$ 41,262</b>	<b>\$ 30</b>	<b>\$ 43,372</b>	<b>\$ 2,142</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ -</b>	<b>\$ (30)</b>	<b>\$ (30)</b>	<b>\$ -</b>	<b>\$ (1)</b>
FTEs	0.13	0.13	-	0.13	-

## Administrative Services

	Administrative Services					
	Direct Expense and Fixed Assets (in whole dollars)			FTEs		
	2016 Budget	2017 Budget	Inc(Dec)	2016 Budget	2017 Budget	Inc(Dec)
General and Administrative	\$ 1,671,109	\$ 1,856,983	185,874	4.50	4.50	-
Technical Committee and Members Forums	\$ -	\$ -	-	0.00	-	-
Legal and Regulatory	\$ -	\$ -	-	0.00	-	-
Information Technology	\$ -	\$ -	-	0.00	-	-
Human Resources	\$ -	\$ -	-	0.00	-	-
Finance and Accounting	\$ -	\$ -	-	0.00	-	-
Total Administrative Services	\$ 1,671,109	\$ 1,856,983	185,874	4.50	4.50	-

## General and Administrative

### Program Scope and Functional Description

The General and Administrative function consists of the RE General Manager, the RE Manager of Regulatory Interface and Process Improvement, RE Administrative Assistant, RE Outreach Coordinator, RE Business Analyst II, and three to four independent Regional Entity Trustees.

The RE Trustees, who are independent of the SPP Board of Directors, any SPP member, SPP registered entity, industry stakeholder, or organizational group, have autonomy over decisions in fund allocation and approval of the SPP RE budget, as well as decisions on regional standards, compliance enforcement actions, and penalties. The SPP Bylaws were amended in 2016 to allow up to four RE Trustees therefore an additional Trustee has been budgeted for 2017.

The RE General Manager provides executive level support through, among other means, participation in meetings and conference calls with other Regional Entities and Senior NERC staff. The RE General Manager reports directly to the three independent RE Trustees.

The RE Manager of Regulatory Interface and Process Improvement is responsible for coordinating and developing the SPP RE processes for SPP RE's Regulatory Interface and performing process improvement activities for the RE operational program functions, including internal auditing of SPP RE's processes. The RE Manager of Regulatory Interface and Process Improvement also coordinates and facilitates the development of compliance plans, policies, and procedures and implementation of appropriate systems/software for the SPP RE compliance monitoring and enforcement activities to enhance implementation of the NERC Compliance Monitoring and Enforcement Program (CMEP) and Rules of Procedure (RoP).

The RE Business Analyst II is responsible for managing the CMEP software (webCDMS) and provides support to all SPP RE programs and SPP RE direct staff members.

### 2017 Key Assumptions

- SPP RE continues to operate as an independent and functionally separate division of SPP;

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**2017 Goals and Key Deliverables**

- Ensure that SPP RE fulfills the responsibilities of the Regional Delegation Agreement between SPP and NERC;
- Ensure that SPP RE is adequately staffed and has the resources needed to fulfill the responsibilities of the Regional Entity Delegation Agreement between SPP and NERC; and
- Continue to explore opportunities to enhance the effectiveness and efficiency of SPP RE in promoting and improving the reliability of the bulk power system.

**Resource Requirements****Personnel**

The SPP Bylaws were changed to allow for one additional Trustee. There is no change to the budgeted FTEs for this program area.

**Technical Committees and Member Forums****Program Scope and Functional Description**

SPP RE provides forums for registered entities within its footprint to discuss and share reliability concerns. This includes SPP committees, subcommittees, working groups, and task forces that are grouped by technical areas. The expenses incurred by SPP RE for these forums are included in the direct expenses of the applicable program.

SPP RE also conducts a minimum of three public workshops per year where registered entities are able to interact with SPP RE Staff and NERC staff and discuss reliability issues. These expenses are included in the Training, Education, and Operator Certification Program.

**2017 Key Assumptions**

- SPP RE liaisons to SPP working groups are projected to attend approximately 30 SPP working group meetings in 2017.

**2017 Goals and Key Deliverables**

- Provide input on ERO and RE issues, including but not limited to the NERC Members Representative Committee and other NERC standing committees.

**Resource Requirements****Personnel**

N/A

**Legal and Regulatory****Program Scope and Functional Description**

SPP RE has a Manager of Enforcement and Legal who provides exclusive legal support to SPP RE. The expenses related to the Manager of Enforcement and Legal and Regulatory are included

in the Compliance Enforcement and Organization Registration Program area. If SPP RE is required to convene hearings under the Compliance Enforcement and Organization Registration program, independent hearing officers and outside legal counsel may be utilized.

### **2017 Key Assumptions**

N/A

### **2017 Goals and Key Deliverables**

N/A

### **Resource Requirements**

#### **Personnel**

N/A

#### **Contractors and Consultants**

N/A

### **Information Technology**

#### **Program Scope and Functional Description**

The SPP Information Technology department provides resources for SPP RE to fulfill the responsibilities of the RE Delegation Agreement.

#### **2017 Key Assumptions**

- The SPP Information Technology department continues to provide resources for SPP RE;
- NERC and the Regional Entities will collaboratively work to refine existing strategies, governance and procurement practices applicable to the development, operation and maintenance of enterprise architecture, software and data systems supporting both NERC and Regional Entity operations. NERC's business plan and budget will include ongoing funding support for the development, operation and maintenance of NERC and Regional Entity approved enterprise applications. Enterprise application funding in any given year will be subject to the budget and funding limits set forth in NERC's approved business plan and budget;
- SPP RE will include appropriate funding for applications and supporting systems designed to satisfy Regional business needs that are not within the mutually agreed upon scope of the ERO Enterprise applications which are funded by NERC; and
- The costs for IT services to support all RE programs are accounted for within the SPP, Inc. Indirect Expenses. The SPP, Inc. cost for IT services does not include funding for the development of NERC's ERO Enterprise IT applications.

#### **2017 Goals and Key Deliverables**

- To provide adequate information technology support for SPP RE to fulfill the responsibilities of the Regional Entity Delegation Agreement between SPP and NERC.

## Resource Requirements

### Personnel

N/A

## Human Resources

### Program Scope and Functional Description

The SPP Human Resource department provides resources for SPP RE to fulfill the responsibilities of the RE Delegation Agreement.

### 2017 Key Assumptions

- The SPP Human Resource department continues to provide resources for SPP RE.

### 2017 Goals and Key Deliverables

- To provide adequate human resource support for SPP RE to fulfill the responsibilities of the Regional Entity Delegation Agreement between SPP and NERC.

## Resource Requirements

### Personnel

N/A

## Finance and Accounting

### Program Scope and Functional Description

The SPP Accounting department provides resources for SPP RE to fulfill the responsibilities of the RE Delegation Agreement.

### 2017 Key Assumptions

- The SPP Accounting department continues to provide resources for SPP RE.

### 2017 Goals and Key Deliverables

- To provide adequate accounting and finance support for SPP RE to fulfill the responsibilities of the Regional Entity Delegation Agreement between SPP and NERC.

## Resource Requirements

### Personnel

N/A

### Methodology for Allocation of Administrative Services Expenses to Programs

The expenses for finance and accounting, information technology, and human resources administrative support services that are provided to SPP RE by SPP (SPP, Inc. Indirect Expenses),

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which are separate and distinct from the services provided by SPP RE direct staff and consultants and contractors, are assessed to SPP RE on an annual basis by allocating SPP's shared services support costs by an appropriate measure (headcount, square footage, number of devices, etc.). In addition, an allocation of overhead costs will be added to the directly assignable staff's hourly rate for those employees performing SPP's statutory activities in the RAPA program area. A table showing the derivation of the SPP, Inc. Indirect Expense is presented in Section E of this BP&B.

SPP RE Administrative Services Expenses, which are limited to expenses incurred for SPP RE General and Administrative, are allocated among the five operational programs based on each program's pro rata share of the total direct operational program expense.

## Administrative Services

### Statement of Activities and Capital Expenditures 2016 Budget & Projection, and 2017 Budget

#### ADMINISTRATIVE SERVICES

Funding	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>SPP RE Funding</b>					
SPP RE Assessments	\$ (1,276,068)	\$ (1,276,068)	\$ (0)	\$ (1,403,208)	\$ (127,140)
Penalty Sanctions	\$ -	\$ -	-	\$ -	-
<b>Total SPP RE Funding</b>	<b>\$ (1,276,068)</b>	<b>\$ (1,276,068)</b>	<b>\$ (0)</b>	<b>\$ (1,403,208)</b>	<b>\$ (127,140)</b>
Membership Dues	\$ -	-	-	\$ -	-
Federal Grants	\$ -	-	-	\$ -	-
Services & Software	\$ -	-	-	\$ -	-
Workshops	\$ -	-	-	\$ -	-
Interest	\$ -	-	-	\$ -	-
Miscellaneous	\$ -	-	-	\$ -	-
<b>Total Funding (A)</b>	<b>\$ (1,276,068)</b>	<b>\$ (1,276,068)</b>	<b>\$ (0)</b>	<b>\$ (1,403,208)</b>	<b>\$ (127,140)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 693,898	\$ 693,898	\$ -	\$ 787,145	\$ 93,247
Payroll Taxes	53,083	\$ 53,083	-	\$ 60,217	7,133
Benefits	55,176	\$ 55,176	-	\$ 58,708	3,532
Retirement Costs	27,756	\$ 27,756	-	\$ 31,486	3,730
<b>Total Personnel Expenses</b>	<b>\$ 829,913</b>	<b>\$ 829,913</b>	<b>\$ -</b>	<b>\$ 937,555</b>	<b>\$ 107,642</b>
<b>Meeting Expenses</b>					
Meetings	\$ 25,000	\$ 25,000	\$ -	\$ 25,000	\$ -
Travel	105,000	\$ 105,000	-	\$ 120,000	15,000
Conference Calls	-	\$ -	-	\$ -	-
<b>Total Meeting Expenses</b>	<b>\$ 130,000</b>	<b>\$ 130,000</b>	<b>\$ -</b>	<b>\$ 145,000</b>	<b>\$ 15,000</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 57,000	\$ 57,000	\$ -	\$ 61,100	\$ 4,100
Office Rent	-	\$ -	-	\$ -	-
Office Costs	8,000	\$ 8,000	-	\$ 10,000	2,000
Professional Services	146,100	\$ 146,100	-	\$ 201,100	55,000
Miscellaneous	20,000	\$ 20,000	-	\$ -	(20,000)
Depreciation	-	\$ -	-	\$ -	-
<b>Total Operating Expenses</b>	<b>\$ 231,100</b>	<b>\$ 231,100</b>	<b>\$ -</b>	<b>\$ 272,200</b>	<b>\$ 41,100</b>
<b>Total Direct Expenses</b>	<b>\$ 1,191,013</b>	<b>\$ 1,191,013</b>	<b>\$ -</b>	<b>\$ 1,354,755</b>	<b>\$ 163,742</b>
<b>SPP Inc. Indirect Expenses</b>	<b>\$ 480,096</b>	<b>\$ 480,096</b>	<b>\$ -</b>	<b>\$ 502,228</b>	<b>\$ 22,132</b>
<b>SPP RE Indirect Expenses</b>	<b>\$ (1,276,068)</b>	<b>\$ (1,671,109)</b>	<b>\$ -</b>	<b>\$ (1,856,983)</b>	<b>\$ (580,915)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Change in Assets</b>	<b>\$ (1,276,068)</b>	<b>\$ (1,276,068)</b>	<b>\$ (0)</b>	<b>\$ (1,403,208)</b>	<b>\$ (127,140)</b>
<b>Fixed Assets</b>					
Depreciation	\$ -	\$ -	\$ -	\$ -	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	-	-	-	-	-
<b>Inc (Dec) in Fixed Assets (C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (1,662,962)</b>	<b>\$ (1,276,068)</b>	<b>\$ (0)</b>	<b>\$ (1,403,208)</b>	<b>\$ (127,140)</b>
FTEs	4.50	4.50	-	4.50	-

Section B – Supplemental Financial Information  
2017 Business Plan and Budget





## Section B — Supplemental Financial Information

### Reserve Balance

**Table B-1**

**Working Capital Reserve Analysis 2016-2017**

**STATUTORY**

<b>Beginning Working Capital Reserve (Deficit), December 31, 2015</b>	\$	3,261,209
Less Penalties Received 7/1/2015- 12/31/2015		(63,750)
Less: 2015 Year-End True-Up		(184,564)
Reserve for Engineering Data Tool		(165,619)
Plus: 2016 SPP RE Funding (from LSEs or designees)		8,626,751
Less: 2016 Projected expenses & capital expenditures		(10,070,819)
<b>Projected Working Capital Reserve (Deficit), December 31, 2016</b>		<b>1,403,208</b>
<b>Desired Working Capital Reserve, December 31, 2015</b>	<sup>2</sup> \$	-
Less: Projected Working Capital Reserve, December 31, 2016		(1,403,208)
<b>Increase(decrease) in assessments to achieve desired Working Capital Reserve</b>		<b>(1,403,208)</b>
2016 Expenses and Capital Expenditures		10,865,511
Less: Penalty sanctions to be used as offset to 2017 assessments	<sup>1</sup>	(369,750)
Less: Other Funding Sources		0
Adjustment to achieve desired Working Capital Reserve		(1,403,208)
<b>2017 SPP RE Assessment</b>		<b>9,092,553</b>

<sup>1</sup> Represents collections on or prior to June 30, 2016. See Table B-2 for full disclosure.

<sup>2</sup> The SPP RE does not require a working capital reserve in that on a cash basis SPP, Inc. is able to fund shortfalls in its statutory (Regional Entity) funding through its operating cash balances, and also has access to liquidity through a bank credit facility.

### Explanation of Changes in Reserve Policy from Prior Years

There have not been any changes in the SPP RE Reserve Policy. SPP RE does not maintain a working capital reserve. The expenses incurred by SPP RE are paid by SPP, Inc. from its operating cash balances and then reimbursed from SPP RE statutory funding on a monthly basis. If at any time SPP RE does not have sufficient statutory funds to finance its expenses, the statutory funding will be increased by the amount of the deficiency in the following year. When the funding is received from NERC, the SPP RE General Manager will authorize a reimbursement to SPP, Inc. for the amount of the shortfall. If needed, a line of credit is also available to SPP, Inc. to fund any shortfalls. SPP, Inc. would not charge any interest or penalties to SPP RE in the case of a shortfall.

## **Breakdown by Statement of Activity Sections**

The following detailed schedules are in support of Statement of Activities and Capital Expenditures on page 9 of the 2016 RE Business Plan and Budget.

### **Penalty Sanctions**

Penalty monies received from July 1, 2015 through June 30, 2016 will be used to offset assessments in the 2017 Budget, as documented in the NERC Policy – ACCOUNTING, FINANCIAL STATEMENT AND BUDGETARY TREATMENT OF PENALTIES IMPOSED AND RECEIVED FOR VIOLATIONS OF RELIABILITY STANDARD.

All penalties received prior to June 30, 2016 are detailed on the following page, including the amount and date received.

Allocation Method: Penalty sanctions received have been allocated to the following statutory programs to reduce assessments: Reliability Standards; Compliance Monitoring & Enforcement and Organization Registration & Certification; Reliability Assessments and Performance Analysis; Training, Education and Operator Certification; and Situation Awareness and Infrastructure Security. Penalty sanctions are allocated based upon the number of FTEs in the Program divided by the aggregate total FTEs in the Programs receiving the allocation.

Table B-2

Name of Entity	Date Received	Amount Received
Entity 1	12/8/15	\$ 63,750.00
Entity 2	2/19/16	\$ 44,000.00
Entity 3	3/9/16	\$ 27,000.00
Entity 4	3/24/16	\$ 235,000.00
<b>Total Penalties Received</b>		<u>\$ 369,750</u>

## Supplemental Funding

Table B-3

Outside Funding Breakdown By Program (excluding SPP RE Assessments & Penalty Sanctions)	Budget 2015	Projection 2015	Budget 2016	Variance 2016 Budget v 2015 Budget
Reliability Standards	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -
Compliance Monitoring, Enforcement & Org. Registration	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -
Reliability Assessment and Performance Analysis	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -
Training and Education	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -
Situation Awareness and Infrastructure Security	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -
Technical Committees and Member Forums	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -
General and Administrative	\$ -	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -	\$ -
<b>Total Outside Funding</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

SPP RE has not projected any interest income for 2017 because at the current market interest rate any interest income would be minimal.

**Personnel Expenses****Table B-4**

<b>Personnel Expenses</b>	<b>Budget 2016</b>	<b>Projection 2016</b>	<b>Budget 2017</b>	<b>Variance 2017 Budget v 2016 Budget</b>	<b>Variance %</b>
<b>Salaries</b>					
Salaries	\$ 3,896,492	3,896,492	\$ 4,385,605	\$ 489,113	12.6%
Employment Agency Fees	-	-	-	-	
Temporary Office Services	-	-	-	-	
<b>Total Salaries</b>	<b>\$ 3,896,492</b>	<b>\$ 3,896,492</b>	<b>\$ 4,385,605</b>	<b>\$ 489,113</b>	<b>12.6%</b>
<b>Total Payroll Taxes</b>	<b>\$ 298,082</b>	<b>\$ 298,082</b>	<b>\$ 335,499</b>	<b>\$ 37,417</b>	<b>12.6%</b>
<b>Benefits</b>					
Workers Compensation	\$ -	\$ -	\$ -	\$ -	
Medical Insurance	276,858	276,858	297,358	20,500	7.4%
Life-LTD-LTC Insurance	20,014	20,014	21,496	1,482	7.4%
Education	36,692	36,692	39,409	2,717	7.4%
Relocation	-	-	-	-	
<b>Total Benefits</b>	<b>\$ 333,564</b>	<b>\$ 333,564</b>	<b>\$ 358,263</b>	<b>\$ 24,699</b>	<b>7.4%</b>
<b>Retirement</b>					
Discretionary 401k Contribution	\$ 155,860	\$ 155,860	\$ 175,424	\$ 19,565	12.6%
Savings Plan	-	-	-	-	
<b>Total Retirement</b>	<b>\$ 155,860</b>	<b>\$ 155,860</b>	<b>\$ 175,424</b>	<b>\$ 19,565</b>	<b>12.6%</b>
<b>Total Personnel Costs</b>	<b>\$ 4,683,997</b>	<b>\$ 4,683,997</b>	<b>\$ 5,254,791</b>	<b>\$ 570,793</b>	<b>12.2%</b>
<b>FTEs</b>	<b>32.25</b>	<b>32.25</b>	<b>33.25</b>	<b>1.00</b>	<b>3.1%</b>
<b>Cost per FTE</b>					
Salaries	\$ 120,821	\$ 120,821	\$ 131,898	11,076	9.2%
Payroll Taxes	9,243	9,243	10,090	847	9.2%
Benefits	10,343	10,343	10,775	432	4.2%
Retirement	4,833	4,833	5,276	443	9.2%
<b>Total Cost per FTE</b>	<b>\$ 145,240</b>	<b>\$ 145,240</b>	<b>\$ 158,039</b>	<b>\$ 12,799</b>	<b>8.8%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

The increase in salaries is principally due to the budgeted merit increase combined with the increase in Shared Staff FTEs. The increase in Benefits is primarily due to the increase in Shared Staff FTEs.

**Meetings, Travel and Conference Calls****Table B-5**

<b>Meetings, Travel and Conference Calls</b>	<b>Budget 2016</b>	<b>Projection 2016</b>	<b>Budget 2017</b>	<b>Variance 2017 Budget v 2016 Budget</b>	<b>Variance %</b>
Meetings	\$ 90,000	\$ 90,000	\$ 120,000	\$ 30,000	33%
Travel	680,200	\$ 655,200	\$ 537,000	(143,200)	-21%
Conference Calls	-	\$ -	\$ -	-	
<b>Total Meetings, Travel &amp; Conf Calls</b>	<b>\$ 770,200</b>	<b>\$ 745,200</b>	<b>\$ 657,000</b>	<b>\$ (113,200)</b>	<b>-15%</b>

The decrease in travel expense is primarily due to the number of CIP audits for MRREs and the completion of CIP V5 outreach by the CIP audit team as well as a reduction in funds allocated for reimbursing travel expenses to participate in Standard Drafting Teams.

## Consultants and Contracts

Table B-6

Consultants	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
<b>Consultants</b>					
Reliability Standards	\$ -	\$ -	\$ -	\$ -	
Compliance and Organization Registration and Certification	670,042	670,042	627,610	(42,432)	-6%
Reliability Readiness Evaluation and Improvement	-	-	-	-	
Reliability Assessment and Performance Analysis	25,000	25,000	181,000	156,000	624%
Training and Education	-	-	-	-	
Situation Awareness and Infrastructure Security	-	-	-	-	
Committee and Member Forums	-	-	-	-	
General and Administrative	57,000	57,000	60,000	3,000	5%
Legal and Regulatory	-	-	-	-	
Information Technology	-	-	-	-	
Human Resources	-	-	-	-	
Accounting and Finance	-	-	-	-	
<b>Consultants Total</b>	<b>\$ 752,042</b>	<b>\$ 752,042</b>	<b>\$ 868,610</b>	<b>\$ 116,568</b>	<b>16%</b>
<b>Contracts</b>					
Reliability Standards	\$ -	\$ -	\$ -	\$ -	
Compliance and Organization Registration and Certification	213,000	213,000	151,000	(62,000)	-29%
Reliability Readiness Evaluation and Improvement	-	-	-	-	
Reliability Assessment and Performance Analysis	-	-	-	-	
Training and Education	-	-	-	-	
Situation Awareness and Infrastructure Security	-	-	-	-	
Committee and Member Forums	-	-	-	-	
General and Administrative	-	-	1,100	1,100	
Legal and Regulatory	-	-	-	-	
Information Technology	-	-	-	-	
Human Resources	-	-	-	-	
Accounting and Finance	-	-	-	-	
<b>Contracts Total</b>	<b>\$ 213,000</b>	<b>\$ 213,000</b>	<b>\$ 152,100</b>	<b>\$ (60,900)</b>	<b>-29%</b>
<b>Total Consulting and Contracts</b>	<b>\$ 965,042</b>	<b>\$ 965,042</b>	<b>\$ 1,020,710</b>	<b>\$ 55,668</b>	<b>6%</b>

### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

The \$116,568 increase in consultant costs is primarily due to the carry-over of the Engineering Data Validation software tool development into 2017 in the RAPA program. This expense is offset by the reduction in the use of consultants in Compliance due to a number of CIP audits being conducted on Multi-Region Registered Entities for which SPP RE is not the lead region.

Table B-7

Office Rent	Budget 2015	Projection 2015	Budget 2016	Variance 2016 Budget v 2015 Budget	Variance %
Office Rent	\$ -	\$ -	\$ -	\$ -	-
Utilities	-	-	-	-	-
Maintenance	-	-	-	-	-
Security	-	-	-	-	-
<b>Total Office Rent</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

This cost is included in the SPP, Inc. Indirect Expense.

Table B-8

Office Costs	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Telephone	\$ -	\$ -	\$ -	\$ -	-
Internet	-	-	-	-	-
Office Supplies	8,000	8,000	10,000	2,000	
Computer Supplies and Maintenance	-	-	-	-	-
Publications & Subscriptions	-	-	-	-	-
Dues	-	-	-	-	-
Postage	-	-	-	-	-
Express Shipping	-	-	-	-	-
Copying	-	-	-	-	-
Reports	-	-	-	-	-
Equipment Repair/Service Contracts	-	-	-	-	-
Bank Charges	-	-	-	-	-
Taxes	-	-	-	-	-
Merchant Card Fees	-	-	-	-	-
Presentation & Publicity	-	-	-	-	-
<b>Total Office Costs</b>	<b>\$ 8,000</b>	<b>\$ 8,000</b>	<b>\$ 10,000</b>	<b>\$ 2,000</b>	

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

Office Costs are included in the SPP, Inc. Indirect Expense. The \$2,000 increase in Office Supplies is a general inflationary cost increase for supplies needed for RE workshops and RE Trustee meetings.



Table B-9

Professional Services	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Independent Trustee Fees	\$ 146,100	\$ 146,100	\$ 201,100	\$ 55,000	37.65%
Outside Legal	-	-	-	-	
Accounting & Auditing Fees	-	-	-	-	
Insurance Commercial	-	-	-	-	
Other	7,350	7,350	11,000	3,650	
<b>Total Services</b>	<b>\$ 153,450</b>	<b>\$ 153,450</b>	<b>\$ 212,100</b>	<b>\$ 58,650</b>	<b>38.22%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

The \$55,000 increase in Independent Trustee Fees is principally due to the addition of one Trustee. The \$3,650 increase in Other professional services is due to full-year licensing of an IT software tool used by the CIP Auditors.

Table B-10

Miscellaneous Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Miscellaneous Expense	\$ 74,445	\$ 74,445	\$ -	\$ (74,445)	-100.00%
Employee Rewards and Recognition	\$ -	\$ -	\$ -	\$ -	
Community Resp & Employee Engagement	\$ -	\$ -	\$ -	\$ -	
Year-end Employee Recognition Event	\$ -	\$ -	\$ -	\$ -	
<b>Total Miscellaneous Expenses</b>	<b>\$ 74,445</b>	<b>\$ 74,445</b>	<b>\$ -</b>	<b>\$ (74,445)</b>	<b>-100.00%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

The \$74,445 decrease in Miscellaneous Expense is due to the re-classification of employee training expenses to Benefits.

Table B-11

Other Non-Operating Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	\$ -	
<b>Total Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

N/A

Table B-12

Fixed Assets	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
	\$ -	\$ -		\$ -	-
	\$ -	\$ -		\$ -	-
	\$ -	\$ -		\$ -	-
<b>Total Fixed Assets</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>

### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

N/A

## 2017, 2018 and 2019 Projections

### Table B-13

Statement of Activities and Capital Expenditures 2017 Budget & Projected 2018, 2019 and 2020 Budgets										
	2017 Budget	2018 Projection	\$ Change 18 v 17	% Change 18 v 17	2019 Projection	\$ Change 19 v 18	% Change 19 v 18	2020 Projection	\$ Change 20 v 19	% Change 20 v 19
<b>Funding</b>										
<b>ERO Funding</b>										
ERO Assessments	\$ 9,092,553	\$ 11,191,476	\$ 2,098,923	23.08%	\$ 11,527,221	\$ 335,744	2.9%	\$ 11,873,037	\$ 345,817	2.9%
Penalty Sanctions	369,750	-	(369,750)	-100.00%	-	-	-	-	-	-
<b>Total ERO Funding</b>	<b>\$ 9,462,303</b>	<b>\$ 11,191,476</b>	<b>\$ 1,729,173</b>	<b>18.3%</b>	<b>\$ 11,527,221</b>	<b>\$ 335,744</b>	<b>2.9%</b>	<b>\$ 11,873,037</b>	<b>\$ 345,817</b>	<b>2.9%</b>
Membership Dues	-	-	-	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-	-	-	-
Workshops	-	-	-	-	-	-	-	-	-	-
Interest	-	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-	-
<b>Total Funding</b>	<b>\$ 9,462,303</b>	<b>\$ 11,191,476</b>	<b>\$ 1,729,173</b>	<b>18.3%</b>	<b>\$ 11,527,221</b>	<b>\$ 335,744</b>	<b>3.0%</b>	<b>\$ 11,873,037</b>	<b>\$ 345,817</b>	<b>3.0%</b>
<b>Expenses</b>										
<b>Personnel Expenses</b>										
Salaries	\$ 4,385,605	\$ 4,517,173	\$ 131,568	3.0%	\$ 4,652,688	\$ 135,515	3.0%	\$ 4,792,269	\$ 139,581	3.0%
Payroll Taxes	335,499	345,564	10,065	3.0%	355,931	10,367	3.0%	366,609	10,678	3.0%
Benefits	358,263	369,011	10,748	3.0%	380,081	11,070	3.0%	391,484	11,402	3.0%
Retirement Costs	175,424	180,687	5,263	3.0%	186,108	5,421	3.0%	191,691	5,583	3.0%
<b>Total Personnel Expenses</b>	<b>\$ 5,254,791</b>	<b>\$ 5,412,435</b>	<b>\$ 157,644</b>	<b>3.0%</b>	<b>\$ 5,574,808</b>	<b>\$ 162,373</b>	<b>3.0%</b>	<b>\$ 5,742,052</b>	<b>\$ 167,244</b>	<b>3.0%</b>
<b>Meeting Expenses</b>										
Meetings	\$ 120,000	\$ 123,600	\$ 3,600	3.0%	\$ 127,308	3,708	3.0%	\$ 131,127	3,819	3.0%
Travel	537,000	553,110	16,110	3.0%	569,703	16,593	3.0%	586,794	17,091	3.0%
Conference Calls	-	-	-	-	-	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ 657,000</b>	<b>\$ 676,710</b>	<b>\$ 19,710</b>	<b>3.0%</b>	<b>\$ 697,011</b>	<b>\$ 20,301</b>	<b>3.0%</b>	<b>\$ 717,922</b>	<b>\$ 20,910</b>	<b>3.0%</b>
<b>Operating Expenses</b>										
Consultants & Contracts	\$ 1,020,710	\$ 1,051,331	30,621	3.0%	\$ 1,082,871	31,540	3.0%	\$ 1,115,357	32,486	3.0%
Office Rent	-	-	-	-	-	-	-	-	-	-
Office Costs	10,000	10,300	300	3.0%	10,609	309	3.0%	10,927	318	3.0%
Professional Services	212,100	218,463	6,363	3.0%	225,017	6,554	3.0%	231,767	6,751	3.0%
Miscellaneous	-	-	-	-	-	-	-	-	-	-
Depreciation	-	-	-	-	-	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 1,242,810</b>	<b>\$ 1,280,094</b>	<b>\$ 37,284</b>	<b>3.0%</b>	<b>\$ 1,318,497</b>	<b>\$ 38,403</b>	<b>3.0%</b>	<b>\$ 1,358,052</b>	<b>\$ 39,555</b>	<b>3.0%</b>
<b>Total Direct Expenses</b>	<b>\$ 7,154,601</b>	<b>\$ 7,369,239</b>	<b>\$ 214,638</b>	<b>3.0%</b>	<b>\$ 7,590,316</b>	<b>\$ 221,077</b>	<b>3.0%</b>	<b>\$ 7,818,026</b>	<b>\$ 227,709</b>	<b>3.0%</b>
<b>Indirect Expenses</b>	<b>\$ 3,710,910</b>	<b>\$ 3,822,237</b>	<b>\$ 111,327</b>	<b>3.0%</b>	<b>\$ 3,936,904</b>	<b>\$ 114,667</b>	<b>3.0%</b>	<b>\$ 4,055,012</b>	<b>\$ 118,107</b>	<b>3.0%</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>
<b>Total Expenses</b>	<b>\$ 10,865,511</b>	<b>\$ 11,191,476</b>	<b>\$ 325,965</b>	<b>3.0%</b>	<b>\$ 11,527,221</b>	<b>\$ 335,744</b>	<b>3.0%</b>	<b>\$ 11,873,037</b>	<b>\$ 345,817</b>	<b>3.0%</b>
<b>Change in Assets</b>	<b>\$ (1,403,208)</b>	<b>\$ -</b>	<b>\$ 1,403,208</b>	<b>-100.0%</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>
<b>Fixed Assets</b>										
Depreciation	\$ -	\$ -	\$ -	-	\$ -	\$ -	-	\$ -	\$ -	-
Computer & Software CapEx	-	-	-	-	-	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-	-	-	-	-	-
<b>(Incr)Dec in Fixed Assets</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>
<b>TOTAL CHANGE IN NET ASSETS</b>	<b>\$ (1,403,208)</b>	<b>\$ -</b>	<b>\$ 1,403,208</b>	<b>-100.0%</b>	<b>\$ -</b>	<b>\$ -</b>	<b>0.0%</b>	<b>\$ -</b>	<b>\$ -</b>	<b>0.0%</b>
<b>FTEs</b>	33.25	33.25	0.00	0.0%	33.25	0.00	0.0%	33.25	0.00	0.0%

### Explanation of 2018, 2019 and 2020 Projections

At this time, SPP RE does not anticipate material changes in its personnel or business operations for the next three years.

- No projected change in FTEs
- No projected change in operating costs other than inflationary adjustments
- Budgeted merit pay increases
- Assessment stabilization will be managed year by year

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# Section C – Non-Statutory Activities

## 2017 Business Plan and Budget

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## Section C — 2016 Non-Statutory Business Plan and Budget

### **Non-Statutory Functional Scope**

As discussed in the Introduction, SPP is one of nine FERC-approved Independent System Operators/Regional Transmission Organizations (ISOs/RTOs). As an RTO, SPP helps ensure reliable supplies of power, adequate transmission infrastructure, and competitive wholesale prices of electricity. These activities are budgeted for separately from SPP RE and constitute the non-statutory activities further described below.

### **Membership and Governance (for non-statutory activities)**

SPP is a relationship-based organization with member-driven processes offering independence through diversity in Organizational Group membership and recognition that reliability and economic/equity issues are inseparable. SPP strives to continuously improve and implement new concepts in a deliberate evolutionary manner.

SPP membership is voluntary and open to any electric utility, federal power marketing agency, transmission service provider, any entity engaged in the business of producing, selling and/or purchasing electric energy for resale, and any entity willing to meet the membership requirements, including execution of the Membership Agreement. Membership is also open to entities eligible to take service under the SPP Open Access Transmission Tariff (OATT). SPP offers its Members greater efficiency and service reliability through better coordination.

SPP members serve customers across 14 states (Arkansas, Iowa, Kansas, Louisiana, Minnesota, Missouri, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas and Wyoming)

SPP is governed in accordance with its Bylaws by an independent Board of Directors consisting of seven directors independent of any SPP Member. The Board of Directors works to ensure equity to all Members and acts in the best interest of SPP through its management, control and direction of the general business of SPP.

### **Non-Statutory Functional Scope**

SPP is mandated by the Federal Energy Regulatory Commission (Commission) to ensure reliable supplies of power, adequate transmission infrastructure, and competitive wholesale prices of electricity.

SPP provides the following primary services to our members and customers:

Tariff Administration: SPP provides independent administration of the Open Access Transmission Tariff that offers one-stop shopping for regional transmission service with consistent rates and terms.

Reliability Coordination: SPP monitors power flow throughout our footprint. We anticipate problems and take preemptive action to mitigate operating limit violations. SPP coordinates regional response in emergency situations or blackouts.

Regional Scheduling: SPP ensures that the amount of power sent is coordinated and matched with power received. SPP's regional scheduling service reduces the number of entities with which SPP members and customers have to coordinate.

Market Operations: SPP began developing new energy markets in 2009 to bring additional regional benefit to our members. The Integrated Marketplace launched in 2014 and includes a Day-Ahead Market with Transmission Congestion Rights, a Reliability Unit Commitment process, a Real-Time Balancing Market, replacing the Energy Imbalance Marketplace, and the incorporation of price-based Operating Reserve Procurement. The Integrated Marketplace also consolidated SPP footprint's 16 legacy Balancing Authorities into an SPP Balancing Authority.

Expansion Planning: SPP's planning process seeks to identify system limitations and develop transmission upgrades for increased capacity.

Contract Services: SPP provides reliability, tariff administration, and scheduling for non-members on a contract basis.

Finally, as a Public Utility under the Federal Power Act, SPP is required to submit its budget to the Commission. The Commission already has approved SPP's activities and has ordered that SPP's budgets be filed with the Commission.<sup>6</sup>

### **Schedule for Preparation and Approval of SPP Inc.'s Overall Annual Budget**

SPP's overall annual budget is prepared on a budget cycle to be approved by its independent Board of Directors annually at its October meeting. Because of this timing difference with the NERC budget process SPP is unable to provide an accurate 2017 SPP budget for non-statutory activities at this time. The process begins during the second quarter when the SPP staff develops preliminary non-statutory budgets. During the third quarter the Finance Committee of SPP initially reviews and evaluates the budget prepared by SPP staff. Once the budget is approved by the Finance Committee, it is presented to the Board of Directors for their review and approval at its quarterly meeting held in October. The SPP overall annual budget is then submitted to FERC for approval. Because the 2017 SPP budget is not yet available, SPP is providing its Commission-approved 2016 budget and its 2015 actual results on the following table:

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<sup>6</sup> See Sw. Power Pool, Inc., 109 FERC ¶ 61,010, at P 98 (2004) (requiring SPP to file its operating budget on an annual basis). See also Sw. Power Pool, Inc., 109 FERC ¶ 61,009, at PP 3-5 (2004), order on reh'g, 110 FERC ¶ 61,137 (2005) (describing history of SPP RTO application, including approval and revision of SPP Bylaws); see also, generally, Sw. Power Pool, Inc., 108 FERC ¶ 61,003 (2004), order on reh'g, 110 FERC ¶ 61,138 (2005); Sw. Power Pool, Inc., 106 FERC ¶ 61,110 (2004).

Southwest Power Pool  
Income Statement



(in \$000)	<u>2016 Budget</u>	<u>2015 Actual</u>
<b>Income</b>		
Tariff Administrative Service	150,660	143,826
Fees & Assessments	27,520	27,891
Contract Services Revenue	498	975
Miscellaneous Income	3,400	6,040
<b>Total Income</b>	<u>182,079</u>	<u>178,733</u>
<b>Expense</b>		
Salary & Benefits	85,153	84,043
Employee Travel	2,449	1,903
Administrative	5,198	4,928
Assessments & Fees	17,000	13,939
Meetings	983	825
Communications	4,091	3,758
Leases	-	123
Maintenance	16,847	13,553
Services	14,803	12,329
Regional State Committee	263	200
Depreciation & Amortization	59,736	59,285
Other Expense (Income)	10,569	26,317
<b>Total Expense</b>	<u>217,092</u>	<u>221,203</u>
<b>Net Income (Loss)</b>	<u><u>(\$35,013)</u></u>	<u><u>(\$42,470)</u></u>
<b>Debt Repayment</b>	<b>\$24,194</b>	<b>\$24,887</b>
<b>Billing Determinant (MWh)</b>	<b>407,200</b>	<b>373,649</b>
<b>Net Revenue Requirement</b>	<b>\$150,495</b>	<b>\$142,587</b>
<b>Calculated Admin Fee / MWh</b>	<b>\$ 0.370</b>	<b>\$ 0.382</b>
<b>Recommended Admin Fee / MWh</b>	<b>\$ 0.370</b>	<b>\$ 0.390</b>
<b>Capital Expense</b>	<b>\$22,279</b>	<b>\$19,143</b>
<b>Headcount</b>	<b>599</b>	<b>596</b>

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Section D – Additional Consolidated Financial  
Statements  
2017 Business Plan and Budget

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Section D — Consolidated Statement of Activities by Program, Statutory and Non-Statutory

Section D 2017 Consolidated Statement of Activities by Program, Statutory and Non-Statutory

Statement of Activities and Capital Expenditures by Program 2017 Budget	Functions in Delegation Agreement														Non-Statutory Functions		
	Total	Statutory Total	Non-Statutory Total	Statutory Total	Reliability Standards (Section 306)	Compliance and Organization Registration and Certification (Section 400 & 500)	Reliability Assessment and Performance Analysis (Section 800)	Training and Education (Section 900)	Situation Awareness and Infrastructure Security (Section 1000)	Committee and Member Forums	General and Administrative	Legal and Regulatory	Information Technology	Human Resources		Accounting and Finance	Non-Statutory Total
<b>Funding</b>																	
<b>SPP RE Funding</b>																	
SPP RE Assessments	9,092,553	9,092,553	-	9,092,553	74,769	7,846,675	2,453,341	79,211	41,765	-	(1,403,208)	-	-	-	-	-	-
Penalty Sanctions	369,750	369,750	-	369,750	1,608	279,724	86,811	-	1,608	-	-	-	-	-	-	-	-
<b>Total SPP RE Funding</b>	<b>9,462,303</b>	<b>9,462,303</b>	<b>-</b>	<b>9,462,303</b>	<b>76,377</b>	<b>8,126,399</b>	<b>2,540,152</b>	<b>79,211</b>	<b>43,372</b>	<b>-</b>	<b>(1,403,208)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Non-statutory Funding	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Federal Grants	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Workshops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Funding</b>	<b>9,462,303</b>	<b>9,462,303</b>	<b>-</b>	<b>9,462,303</b>	<b>76,377</b>	<b>8,126,399</b>	<b>2,540,152</b>	<b>79,211</b>	<b>43,372</b>	<b>-</b>	<b>(1,403,208)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Expenses</b>																	
<b>Personnel Expenses</b>																	
Salaries	4,385,605	4,385,605	-	4,385,605	18,969	2,665,150	895,372	-	18,969	-	787,145	-	-	-	-	-	-
Payroll Taxes	335,499	335,499	-	335,499	1,451	203,884	68,496	-	1,451	-	60,217	-	-	-	-	-	-
Benefits	358,263	358,263	-	358,263	1,107	234,563	62,778	-	1,107	-	58,708	-	-	-	-	-	-
Retirement Costs	175,424	175,424	-	175,424	759	106,606	35,815	-	759	-	31,486	-	-	-	-	-	-
<b>Total Personnel Expenses</b>	<b>5,254,791</b>	<b>5,254,791</b>	<b>-</b>	<b>5,254,791</b>	<b>22,286</b>	<b>3,210,203</b>	<b>1,062,461</b>	<b>-</b>	<b>22,286</b>	<b>-</b>	<b>937,555</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Meeting Expenses</b>																	
Meetings	120,000	120,000	-	120,000	-	35,000	-	60,000	-	-	25,000	-	-	-	-	-	-
Travel	537,000	537,000	-	537,000	25,000	282,000	110,000	-	-	-	120,000	-	-	-	-	-	-
Conference Calls	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>657,000</b>	<b>657,000</b>	<b>-</b>	<b>657,000</b>	<b>25,000</b>	<b>317,000</b>	<b>110,000</b>	<b>60,000</b>	<b>-</b>	<b>-</b>	<b>145,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Operating Expenses</b>																	
Consultants & Contracts	1,020,710	1,020,710	-	1,020,710	-	778,610	181,000	-	-	-	61,100	-	-	-	-	-	-
Office Rent	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Office Costs	10,000	10,000	-	10,000	-	-	-	-	-	-	10,000	-	-	-	-	-	-
Professional Services	212,100	212,100	-	212,100	-	11,000	-	-	-	-	201,100	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>1,242,810</b>	<b>1,242,810</b>	<b>-</b>	<b>1,242,810</b>	<b>-</b>	<b>789,610</b>	<b>181,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>272,200</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Direct Expenses</b>	<b>7,154,601</b>	<b>7,154,601</b>	<b>-</b>	<b>7,154,601</b>	<b>47,286</b>	<b>4,316,813</b>	<b>1,353,461</b>	<b>60,000</b>	<b>22,286</b>	<b>-</b>	<b>1,354,755</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>SPP Inc. Indirect Expenses</b>	<b>3,710,910</b>	<b>3,710,910</b>	<b>-</b>	<b>3,710,910</b>	<b>13,951</b>	<b>2,427,437</b>	<b>753,343</b>	<b>-</b>	<b>13,951</b>	<b>-</b>	<b>502,228</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
SPP RE Indirect Expenses	(0)	(0)	-	(0)	15,140	1,382,149	433,348	19,211	7,135	-	(1,856,983)	-	-	-	-	-	-
<b>Total Indirect Expenses</b>	<b>3,710,910</b>	<b>3,710,910</b>	<b>-</b>	<b>3,710,910</b>	<b>29,091</b>	<b>3,809,586</b>	<b>1,186,691</b>	<b>19,211</b>	<b>21,086</b>	<b>-</b>	<b>(1,354,755)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Other Non-Operating Expenses</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total Expenses</b>	<b>10,865,511</b>	<b>10,865,511</b>	<b>-</b>	<b>10,865,511</b>	<b>76,377</b>	<b>8,126,399</b>	<b>2,540,152</b>	<b>79,211</b>	<b>43,372</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Change in Assets</b>	<b>(1,403,208)</b>	<b>(1,403,208)</b>	<b>-</b>	<b>(1,403,208)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(1,403,208)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Fixed Assets</b>																	
Depreciation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Equipment CapEx	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>(Inc)/Dec in Fixed Assets</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Allocation of Fixed Assets	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Change in Fixed Assets</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL CHANGE IN NET ASSETS</b>	<b>(1,403,208)</b>	<b>(1,403,208)</b>	<b>-</b>	<b>(1,403,208)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(1,403,208)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>FTEs</b>	<b>33.25</b>	<b>33.3</b>	<b>-</b>	<b>33.25</b>	<b>0.13</b>	<b>21.75</b>	<b>6.75</b>	<b>-</b>	<b>0.13</b>	<b>-</b>	<b>4.50</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Percentage of FTEs					100%	65.4%	20.3%	0.0%	0.4%	0.0%	13.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Percentage of Functional Program FTEs					100%	75.7%	23.5%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Percentage of Functional Program Direct Expenses					100%	0.8%	74.4%	23.3%	1.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Indirect Cost Allocation</b>																	
SPP Inc. Indirect Costs	3,710,910	3,710,910	-	3,710,910	13,951	2,427,437	753,343	-	13,951	-	502,228	-	-	-	-	-	-
SPP RE Indirect Costs	1,856,983	1,856,983	-	1,856,983	15,140	1,382,149	433,348	19,211	7,135	-	-	-	-	-	-	-	-
<b>Total Indirect Costs</b>	<b>5,567,893</b>	<b>5,567,893</b>	<b>-</b>	<b>5,567,893</b>	<b>29,091</b>	<b>3,809,586</b>	<b>1,186,691</b>	<b>19,211</b>	<b>21,086</b>	<b>-</b>	<b>502,228</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Fixed Assets Allocation</b>																	
Penalty Sanctions Allocation	369,750	369,750	-	369,750	1,608	279,724	86,811	-	1,608	-	-	-	-	-	-	-	-

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## Section E – Calculation of SPP, Inc. Indirect Expense 2017 Business Plan and Budget

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**Section E****CALCULATION OF THE SPP INC. INDIRECT EXPENSE CHARGE<sup>1</sup>**

<u>Expense Category<sup>2</sup></u>	<u>Overhead Costs Allocation (\$000)</u>
Facilities	\$ 446
Information Technology	595
Human Resources/Benefits/Payroll	310
Corporate Services	1,169
2015 Total Costs	<u>2,520</u>
<b>Escalated by 3%</b>	<b>\$ 2,596</b>

**Shared Staff Overhead Allocation**

2015 Overhead Allocation Escalated by 3%	850 A
Ending 2015 FTEs	4 B
2017 Budgeted FTEs	<u>5.25 C</u>
<b>Total Cost</b>	<b>1,115 D</b>

$$D = (A / B) \times C$$

<b>Budgeted SPP Inc. Indirect Costs</b>	<b>\$ 3,710,910</b>
-----------------------------------------	---------------------

<sup>1</sup>Due to the timing of the budget process/schedule, the fixed estimated indirect expense charge for 2017 is based on 2015 costs, escalated by 3%. Any variance between the estimated overhead expenses and the actual 2017 overhead expenses will be included in the annual 2017 Business Plan and Budget true-up filing.

<sup>2</sup> SPP RE cost allocation is based on an appropriate measure per expense category (square footage, number of devices, headcount, etc.)

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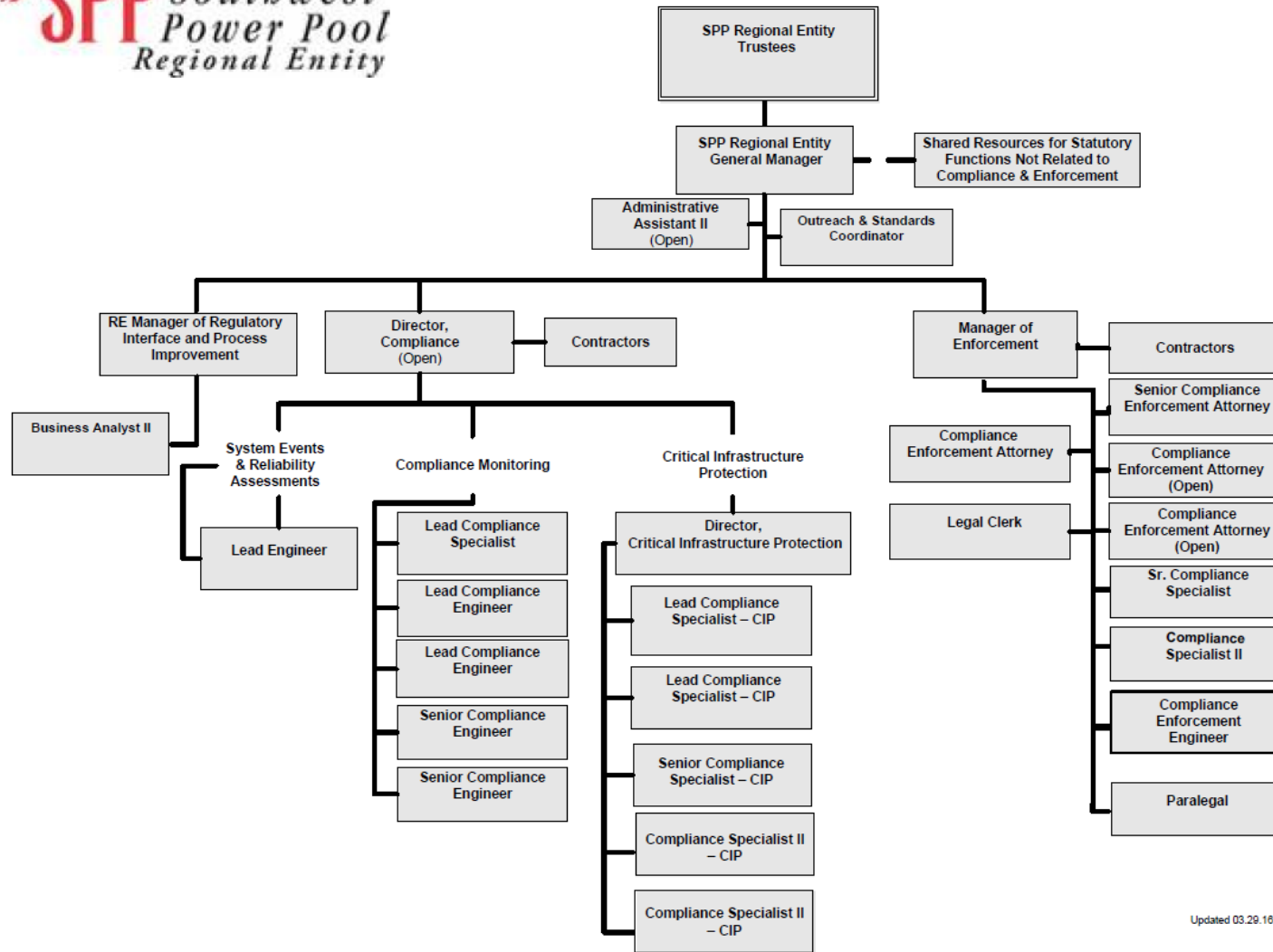
## Section F– Organizational Chart 2017 Business Plan and Budget

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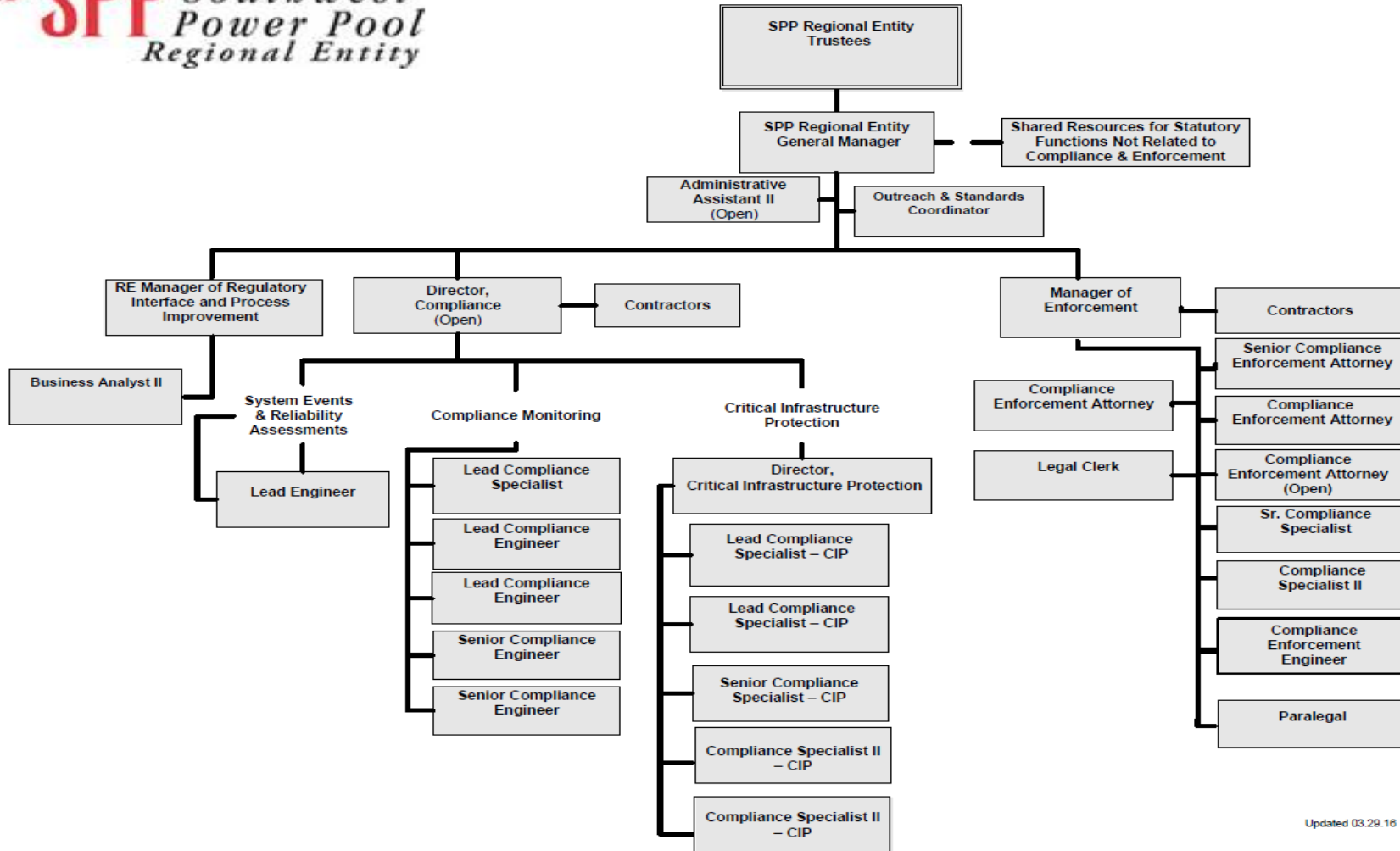
Organizational Chart - 2016



Updated 03.29.16



### Organizational Chart - 2017 Proposed



Updated 03.29.16

**DOCKET NO. RR16-\_\_-000**

**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**2017 BUSINESS PLAN AND BUDGET FILING**

**ATTACHMENT 9**

**TEXAS RELIABILITY ENTITY**

**PROPOSED 2017 BUSINESS PLAN AND BUDGET**



## **2017 Business Plan and Budget**

**Texas Reliability Entity, Inc.**

**Approved by Texas RE Board of Directors**

**Date: May 24, 2016**



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## Introduction

	TOTAL RESOURCES (in whole dollars)			
	2017 Budget	U.S.	Canada	Mexico
Statutory FTEs	60.00			
Non-statutory FTEs	5.0			
<b>Total FTEs</b>	65.00			
Statutory Expenses	\$ 12,394,535			
Non-Statutory Expenses	\$ 1,059,945			
<b>Total Expenses</b>	\$ 13,454,480			
Statutory Inc(Dec) in Fixed Assets	\$ (227,279)			
Non-Statutory Inc(Dec) in Fixed Assets	\$ -			
<b>Total Inc(Dec) in Fixed Assets</b>	\$ (227,279)			
Statutory Working Capital Requirement	\$ (2,520,000)			
Non-Statutory Working Capital Requirement				
<b>Total Working Capital Requirement</b>	\$ (2,520,000)			
Total Statutory Funding Requirement	\$ 9,647,256			
Total Non-Statutory Funding Requirement	\$ 1,059,945			
<b>Total Funding Requirement</b>	\$ 10,707,201			
<b>Statutory Funding Assessments</b>	\$ 9,595,256			
<b>Non-Statutory Fees</b>	\$ 1,059,945			
NEL	348,274,793	348,274,793		
NEL%	100.00%	100.00%		

\*Refer to Table B-1 Reserve Analysis on page 36 in Section B.

## Organizational Overview

Texas Reliability Entity, Inc. (Texas RE) is a Texas non-profit corporation that is the Regional Entity for the Electric Reliability Council of Texas, Inc. (ERCOT) region, pursuant to its Amended and Restated Delegation Agreement (Delegation Agreement) with North American Electric Reliability Corporation (NERC) effective January 1, 2016. Texas RE ensures the reliability of the ERCOT region bulk-power system (BPS).

Texas RE also performs non-statutory activities as the Reliability Monitor for the ERCOT region, on behalf of the Public Utility Commission of Texas (PUCT). As the Reliability Monitor, Texas RE monitors and reports to the PUCT regarding market participants' compliance with reliability-related ERCOT Protocols, Operating Guides, and Texas rules (ERCOT Regional Rules).

The ERCOT region is the geographic area located within the state of Texas that operates under the jurisdiction of the PUCT and is not synchronously interconnected with any electric utilities operating outside of Texas. The ERCOT region includes approximately 90% of Texas load and 75% of the Texas land area.

## **Membership and Governance**

### **Members**

Texas RE has the following six membership sectors under its Bylaws:

- System Coordination and Planning
- Transmission and Distribution
- Cooperative Utility
- Municipal Utility
- Generation
- Load-Serving and Marketing

Membership in Texas RE is voluntary and open to any entity that is a user, owner, or operator in the ERCOT region BPS, who registers with Texas RE as a member and complies with the Texas RE Bylaws requirements. There is no charge for membership with Texas RE. Any person or entity that has a direct and material interest in the BPS has a right to participate in the Texas RE Standards Development Process, even if not a Texas RE member.

Texas RE has two stakeholder committees, the Member Representatives Committee (MRC) and the Reliability Standards Committee (RSC). The MRC includes representatives from members in each of the six membership sectors and provides advice and recommendations to the Board on administrative, financial, reliability-related, or any other matters, except for standards development issues, through its elected Chair and Vice Chair, who serve as directors. The RSC includes representatives from the six sectors described above, whether or not members of Texas RE, which may include any entity with a direct and material interest in the ERCOT region BPS. The RSC facilitates the Regional Standards Development Process, and coordinates the development of regional standards and variances with the development of national standards. A subcommittee of the RSC, the NERC Standards Review Subcommittee (NSRS), monitors, reviews, and discusses NERC (continent-wide) standards under development and standards interpretation requests.

### **Board of Directors**

Texas RE is governed by a hybrid board of directors (Board), comprised of the following nine individuals:

- The Texas RE President and Chief Executive Officer
- Four Independent Directors (elected by membership)
- Two Affiliated Directors (the Chair and Vice-Chair of the Member Representatives Committee)

- Chairman of the PUCT or another PUCT Commissioner designated by the Chairman, as an ex officio non-voting member
- Texas Public Counsel, from the Texas Office of Public Utility Counsel, as an ex officio non-voting member

The Board's primary role is to oversee the management of Texas RE, including assuring that Texas RE meets its requirements under the Bylaws and Delegation Agreement, and appointing a chief executive officer to manage and be responsible for the day-to-day on-going activities of Texas RE.

### **Statutory Functional Scope**

In accordance with its Delegation Agreement with NERC and in compliance with the NERC Rules of Procedure (NERC ROP), Texas RE performs the following statutory (or delegated) functions:

- Participation in the development of NERC Reliability Standards (Standards), or modifications thereof, and facilitation of developing needed regional standards or variances through Texas RE's Standards Development Process.
- Identification and registration of responsible entities with NERC and, as needed, certification of such entities within the ERCOT region.
- Monitoring and enforcement of compliance with approved Standards and regional standards, in accordance with the NERC ROP, in the ERCOT region.
- Analysis and assessment of system events and disturbances.
- Assessment of the present and future reliability, adequacy, and security of the BPS.
- Promotion of effective training and education of personnel, and assistance in the certification of operating personnel.
- Promotion of situation awareness and the protection of critical infrastructure.

### **Financial Policies**

Texas RE has policies and procedures in place that address its overall financial management, including procurement, business expense reimbursement, and line of credit. Additionally, Texas RE has a working capital and operating reserve policy to ensure the stability of the ongoing operations of the organization. This policy is intended to provide funds for situations such as a sudden unanticipated increase in expenses, one-time unbudgeted expenses, unanticipated loss in funding, or uninsured losses.

## 2017 Overview of Cost Impacts

In developing the Texas RE 2017 Business Plan and Budget, Texas RE, NERC, and the other Regional Entities collaborated and agreed upon common foundational and program assumptions which are contained in the [Shared Business Plan and Budget Assumptions for the 2016-2019 Planning Period \(2017 Budget Cycle\)](#) which is provided as Exhibit A to the NERC 2017 Business Plan and Budget. Texas RE used these shared assumptions as well as the Electric Reliability Organization Enterprise Strategic Goals in developing this 2017 Business Plan and Budget. Prior to obtaining final approval from its Board of Directors, Texas RE seeks NERC input and review of its annual Regional Entity Business Plan and Budget, including coordination of program requirements and any related key initiative for the Electric Reliability Organization (ERO) Enterprise.

Overall, the Texas RE 2017 statutory expenses (\$12,394,535) increased by 4.2% from the 2016 statutory expenses (\$11,897,248).

The 2017 statutory assessment (\$9,595,256) represents an increase of 0.4% from the 2016 assessment (\$9,560,448).

Significant statutory expense changes (including capital expenditures) include:

- Total Personnel expenses are increasing by 0.9%. Salaries are decreasing 0.01%. The 2016 budget allowed for 4% salary increases; the 2017 budget has been reduced to 3% for potential salary increases. Payroll taxes are decreasing 11.7% to better align with actual experience. Benefits expense is increasing 19.3%, which partially offsets the decrease in payroll taxes. Health-plan expense is projected to increase 20% in 2017. Employee benefits also include education reimbursement, relocation, training and professional development costs. This is consistent with the NERC budget guidelines. Retirement costs are decreasing 5.7% due to aligning actual employee participation and the reduction for salary increases.
- Total Meeting and Travel expenses are increasing by \$10,410 primarily due to a \$13,750 increase in conference-call expenses. These expenses are increasing due to more meetings being hosted in the conference center. Meeting Expense is decreasing 2.5% and Travel expense is decreasing 0.6% due to more on-site meetings and cost savings efforts.

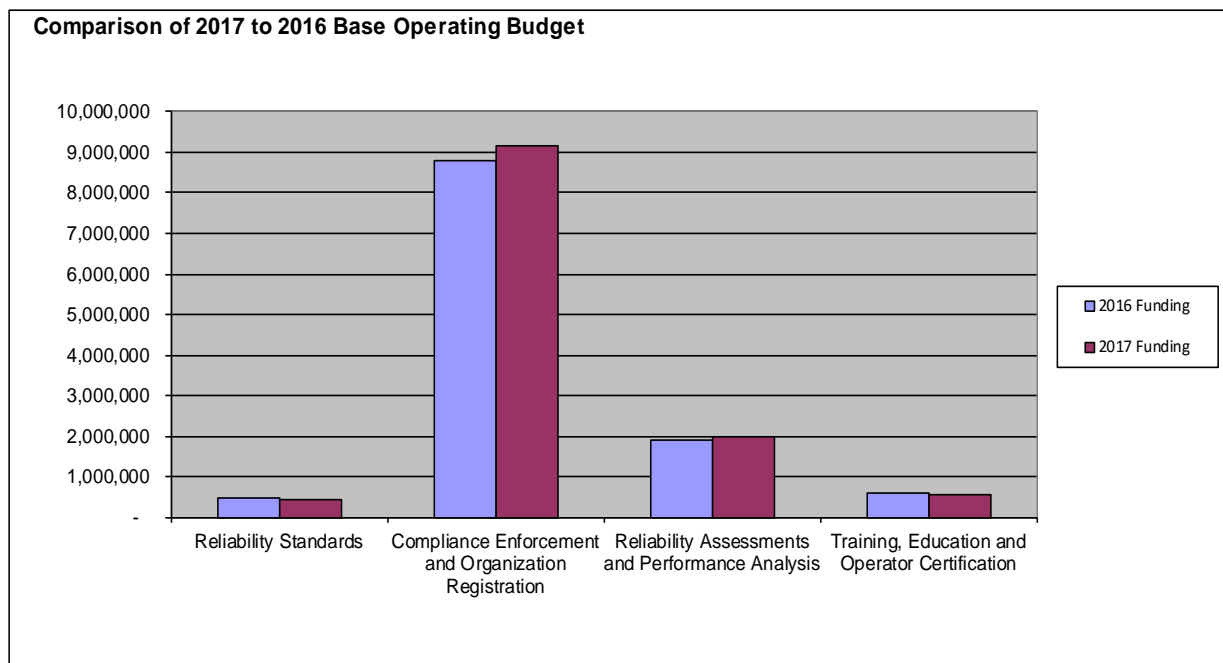
Total Operating Expenses are increasing by 18.5%. The Consultants and Contracts category is increasing 26.6% due to a compensation study, a custom Regional Entity salary survey, and an executive coaching program. Rent cost is increasing 26.1% and office supply cost is increasing 10.7%. Both increases are due to the additional costs associated with the conference center. Professional Services costs are increasing 0.8% primarily due to a potential change in Board of Director fees. Depreciation expense is increasing 68.1% due to Leasehold Improvements, Furniture and Fixtures and Equipment purchased for the conference center.

All statutory activity in the 2017 Business Plan and Budget aligns with the NERC Enterprise Strategic Plan.

## Summary by Program

The following table summarizes the Texas RE budget by program area.

Base Operating Budget	Budget	Projection	Budget	Variance	
	2016	2016	2017	2017 Budget v 2016 Budget	Variance %
Reliability Standards	\$ 469,003	\$ 469,003	\$ 446,168	\$ (22,835)	-4.9%
Compliance Enforcement and Organization Registration	8,809,903	8,809,903	9,171,887	361,984	4.1%
Reliability Assessments and Performance Analysis	1,911,637	1,911,637	1,984,476	72,839	3.8%
Training, Education and Operator Certification	591,672	591,672	564,725	(26,947)	-4.6%
<b>Total by Program</b>	<b>\$ 11,782,215</b>	<b>\$11,782,215</b>	<b>\$12,167,256</b>	<b>\$ 385,042</b>	<b>3.3%</b>



**Section A — 2017 Business Plan – Statutory Programs**

FTEs by Program Area

**Personnel Analysis**

The following table displays total FTEs by program area.

Total FTEs by Program Area	Budget	Projection	Direct FTEs	Shared	Total FTEs	Change
	2016	2016	2017	FTEs 2017	2017	from 2016
	Budget	Budget	Budget	Budget	Budget	Budget
<b>STATUTORY</b>						
<b>Operational Programs</b>						
Reliability Standards	1.75	1.75	1.50	-	1.50	(0.25)
Compliance and Organization Registration and Certificat	35.75	35.75	36.25	-	36.25	0.50
Training and Education	2.25	2.25	2.25	-	2.25	-
Reliability Assessment and Performance Analysis	6.50	6.50	6.25	-	6.25	(0.25)
<b>Total FTEs Operational Programs</b>	<b>46.25</b>	<b>46.25</b>	<b>46.25</b>	<b>-</b>	<b>46.25</b>	<b>-</b>
<b>Administrative Programs</b>						
General & Administrative	3.00	3.00	3.00	-	3.00	-
Legal and Regulatory	2.75	2.75	2.75	-	2.75	-
Information Technology	5.00	5.00	5.00	-	5.00	-
Human Resources	-	-	-	-	-	-
Finance and Accounting	3.00	3.00	3.00	-	3.00	-
<b>Total FTEs Administrative Programs</b>	<b>13.75</b>	<b>13.75</b>	<b>13.75</b>	<b>-</b>	<b>13.75</b>	<b>-</b>
<b>Total FTEs</b>	<b>60.00</b>	<b>60.00</b>	<b>60.00</b>	<b>-</b>	<b>60.00</b>	<b>-</b>

A shared FTE is defined as an employee who performs both Statutory and Non-Statutory functions.

For an explanation of the variances, refer to the Resource Requirements section in each program area in Section A.

## 2016 Budget and Projection and 2017 Budget Comparisons

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
STATUTORY					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2016 Budget v 2017 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 9,560,448	\$ 9,560,448	\$ -	\$ 9,595,256	\$ 34,808
Penalty Sanctions	337,000	337,000	-	50,000	(287,000)
<b>Total NERC Funding</b>	<b>\$ 9,897,448</b>	<b>\$ 9,897,448</b>	<b>\$ -</b>	<b>\$ 9,645,256</b>	<b>\$ (252,192)</b>
Interest	1,000	1,000	-	2,000	1,000
<b>Total Funding (A)</b>	<b>\$ 9,898,448</b>	<b>\$ 9,898,448</b>	<b>\$ -</b>	<b>\$ 9,647,256</b>	<b>\$ (251,192)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 6,749,489	\$ 6,749,489	\$ -	\$ 6,739,715	\$ (9,774)
Payroll Taxes	496,723	496,723	-	438,778	(57,945)
Benefits	1,075,949	1,075,949	-	1,283,357	207,408
Retirement Costs	968,077	968,077	-	912,670	(55,407)
<b>Total Personnel Expenses</b>	<b>\$ 9,290,238</b>	<b>\$ 9,290,238</b>	<b>\$ -</b>	<b>\$ 9,374,519</b>	<b>\$ 84,282</b>
<b>Meeting &amp; Travel Expenses</b>					
Meetings	\$ 50,350	\$ 50,350	\$ -	\$ 49,080	\$ (1,270)
Travel	368,115	368,115	-	366,045	(2,070)
Conference Calls	10,000	10,000	-	23,750	13,750
<b>Total Meeting &amp; Travel Expenses</b>	<b>\$ 428,465</b>	<b>\$ 428,465</b>	<b>\$ -</b>	<b>\$ 438,875</b>	<b>\$ 10,410</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 342,148	\$ 342,148	\$ -	\$ 433,200	\$ 91,052
Office Rent	489,557	489,557	-	617,212	127,655
Office Costs	672,307	672,307	-	744,000	71,693
Professional Services	515,500	515,500	-	519,450	3,950
Depreciation	159,033	159,033	-	267,279	108,246
<b>Total Operating Expenses</b>	<b>\$ 2,178,545</b>	<b>\$ 2,178,545</b>	<b>\$ -</b>	<b>\$ 2,581,141</b>	<b>\$ 402,596</b>
<b>Total Direct Expenses</b>	<b>\$ 11,897,248</b>	<b>\$ 11,897,248</b>	<b>\$ -</b>	<b>\$ 12,394,535</b>	<b>\$ 497,288</b>
Indirect Expenses	\$ -	\$ -	\$ -	\$ -	\$ -
Other Non-Operating Expenses	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Expenses (B)</b>	<b>\$ 11,897,248</b>	<b>\$ 11,897,248</b>	<b>\$ -</b>	<b>\$ 12,394,535</b>	<b>\$ 497,288</b>
<b>Change in Assets</b>	<b>\$ (1,998,800)</b>	<b>\$ (1,998,800)</b>	<b>\$ -</b>	<b>\$ (2,747,279)</b>	<b>\$ (748,479)</b>
<b>Fixed Assets</b>					
Depreciation	\$ (159,033)	\$ (159,033)	\$ -	\$ (267,279)	\$ (108,246)
Computer & Software CapEx	44,000	44,000	-	40,000	(4,000)
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>(115,033)</b>	<b>(115,033)</b>	<b>-</b>	<b>(227,279)</b>	<b>(112,246)</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>11,782,215</b>	<b>\$ 11,782,215</b>	<b>\$ -</b>	<b>\$ 12,167,256</b>	<b>\$ 385,042</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (1,883,767)</b>	<b>\$ (1,883,767)</b>	<b>\$ -</b>	<b>\$ (2,520,000)</b>	<b>\$ (636,233)</b>



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## Section A – Statutory Programs 2017 Business Plan and Budget

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## Section A — 2017 Business Plan – Statutory Programs

### Reliability Standards Program

Reliability Standards Program (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	1.75	1.50	(0.25)
Direct Expenses	\$ 309,161	\$ 294,520	\$ (14,641)
Indirect Expenses	\$ 164,195	\$ 159,019	\$ (5,176)
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ (4,353)	\$ (7,371)	\$ (3,019)
Total Funding Requirement	\$ 469,003	\$ 446,168	\$ (22,835)

### Program Scope and Functional Description

Texas RE's Reliability Standards Program supports the NERC Reliability Standards program and facilitates the development of regional standards and variances, in accordance with the Texas RE Standards Development Process. Texas RE Standards staff coordinates and publicly posts information regarding the activities of the Texas RE Reliability Standards Committee (RSC), NERC Standards Review Subcommittee (NSRS) and all regional standard drafting teams (SDTs).

The Texas RE Standards Development Process is open to all individuals and organizations that are directly and materially affected by the ERCOT region BPS, with no undue financial barriers and regardless of Texas RE membership status. Texas RE's Standards Development Process provides for fair and due process by providing sufficient public notice of the intent to develop a regional standard. The Standards Development Process includes an appeals process and an interpretation process.

Texas RE Standards staff supports and participates in the NERC Standards Committee and other NERC activities relating to standards development. Texas RE regularly comments and votes on proposed NERC standards and revisions from its perspective as the Compliance Enforcement Authority, based on recommendations and input from subject matter experts employed by Texas RE.

In addition, Texas RE reviews proposed reliability standards from NERC and other regions, and staff from NERC and other Regional Entities have the opportunity to review proposed Texas RE regional standards. This Program area supports and facilitates meetings of the Texas RE RSC and the NSRS. The RSC is a stakeholder committee that oversees the execution of the Texas RE Standard Development Process. The NSRS provides a regional stakeholder forum for education and discussion of NERC standards activities, both regional and continent-wide.

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Texas RE Standards staff provides education and advice to other Texas RE departments regarding issues relating to standards, including applicability and interpretation of requirements in accordance with NERC processes.

When developing regional Reliability Standards, Texas RE is responsible for adhering to the approved Regional Reliability Standards development processes, and for assisting NERC as needed with obtaining Board approval and subsequent filing(s) with FERC and other regulatory authorities, as appropriate, including developing the record necessary to support approval.

### **2017 Key Assumptions**

- It is expected that the number of continent-wide standards development projects will remain relatively stable, except as required to address any new FERC directives to create or modify Reliability Standards, or industry submittals of standard authorization requests.
- Continent-wide standards projects will consist primarily of conducting enhanced periodic reviews on existing standards to improve the content and, respond to identified risks to reliability (including those that may be identified through the implementation of risk-based Compliance Monitoring and Enforcement), and addressing FERC directives that may arise. This activity will require the allocation of technical resources from several internal NERC departments (e.g., Reliability Assessment and Performance Analysis (RAPA), Reliability Risk Management (RRM), Compliance Analysis and Certification (CAC), and Compliance Assurance) and support from across the ERO Enterprise.
- During the enhanced periodic review of ERO standards, any associated regional standards will be reviewed for potential incorporation as variances or as improvements to the continent-wide requirements. Regional and NERC standards development processes may require modification to accomplish efficiently this task. Each Regional Entity will work with NERC and possibly other Regional Entities on projects where there is a regional standard/variance. Regional standards development activity will be driven by requests the Regional Entity may receive or reliability issues the Regional Entity may identify. Regional standards development activity is expected to remain low.
- In coordination with SDTs and consistent with current approaches, Regional Entities may support outreach during standard development. Additionally, following FERC approval, Regions will assist the transition of standards to compliance monitoring and enforcement supporting industry and auditor training, or providing information regarding the intent of the standard.
- The number of interpretations are expected to remain low. However, guidance requests associated with the implementation of Standards may increase.

### **2017 Goals and Key Deliverables**

- Encourage stakeholder awareness and participation in the NERC standards development process through educational outreach efforts and participation in

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Standard Drafting Teams, the NERC Standards Committee and related subcommittees.

- Participate in and provide outreach to regional stakeholders regarding nation-wide Standard development to help ensure that ERCOT region perspective is represented in continent-wide Standards.
- Facilitate Texas RE participation in NERC standards development activities, including preparation of recommendations for voting and comments on NERC ballots, and provide standards-related expertise to other Program areas.
- Work closely with other Texas RE departments to ensure that staff is appropriately educated and informed regarding proper application and interpretation of standards and requirements while performing functions under the Compliance Monitoring and Enforcement Program (CMEP) and receive feedback for future standards development.
- Continue to enhance communication to and education of the registered entities in the ERCOT region to increase awareness of regional standards development activities and to ensure adequate representation on the Registered Ballot Body.

### **Resource Requirements**

#### **Personnel Expenses**

FTEs are decreasing by .25 due to an FTE reallocation to the CMEP department. Personnel expenses for this Program are 4.9% less than 2016.

#### **Consultants and Contracts**

No consulting support and contracts are budgeted for 2017, which is consistent with the 2016 budget.

## Reliability Standards Program

The following table shows the funding sources and related expenses for the Reliability Standards Program for 2017. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>RELIABILITY STANDARDS</b>					
	<b>2016 Budget</b>	<b>2016 Projection</b>	<b>Variance 2016 Projection v 2016 Budget Over(Under)</b>	<b>2017 Budget</b>	<b>Variance 2016 Budget v 2017 Budget Over(Under)</b>
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 361,747	\$ 361,747	\$ -	\$ 311,198	\$ (50,549)
Penalty Sanctions	12,751	12,751	-	1,622	(11,130)
<b>Total NERC Funding</b>	<b>\$ 374,498</b>	<b>\$ 374,498</b>	<b>\$ -</b>	<b>\$ 312,819</b>	<b>\$ (61,679)</b>
Interest	38	38	-	65	27
<b>Total Funding</b>	<b>\$ 374,536</b>	<b>\$ 374,536</b>	<b>\$ -</b>	<b>\$ 312,884</b>	<b>\$ (61,652)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 208,137	\$ 208,137	\$ -	\$ 198,994	\$ (9,144)
Payroll Taxes	16,001	16,001	-	12,372	(3,630)
Benefits	37,853	37,853	-	39,470	1,617
Retirement Costs	31,192	31,192	-	27,935	(3,257)
<b>Total Personnel Expenses</b>	<b>\$ 293,183</b>	<b>\$ 293,183</b>	<b>\$ -</b>	<b>\$ 278,770</b>	<b>\$ (14,413)</b>
<b>Meeting &amp; Travel Expenses</b>					
Meetings	\$ -	\$ -	\$ -	\$ -	\$ -
Travel	14,333	14,333	-	13,950	(383)
Conference Calls	-	-	-	1,700	1,700
<b>Total Meeting &amp; Travel Expenses</b>	<b>\$ 14,333</b>	<b>\$ 14,333</b>	<b>\$ -</b>	<b>\$ 15,650</b>	<b>\$ 1,317</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -
Office Rent	-	-	-	-	-
Office Costs	1,645	1,645	-	100	(1,545)
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 1,645</b>	<b>\$ 1,645</b>	<b>\$ -</b>	<b>\$ 100</b>	<b>\$ (1,545)</b>
<b>Total Direct Expenses</b>	<b>\$ 309,161</b>	<b>\$ 309,161</b>	<b>\$ -</b>	<b>\$ 294,520</b>	<b>\$ (14,641)</b>
<b>Indirect Expenses</b>	<b>\$ 164,195</b>	<b>\$ 164,195</b>	<b>\$ -</b>	<b>\$ 159,019</b>	<b>\$ (5,176)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses</b>	<b>\$ 473,356</b>	<b>\$ 473,356</b>	<b>\$ -</b>	<b>\$ 453,539</b>	<b>\$ (19,817)</b>
<b>Change in Assets</b>	<b>\$ (98,820)</b>	<b>\$ (98,820)</b>	<b>\$ -</b>	<b>\$ (140,655)</b>	<b>\$ (41,835)</b>
<b>Fixed Assets</b>					
Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -
Computer & Software CapEx	-	-	-	-	-
Allocation of Fixed Assets	(4,353)	(4,353)	-	(7,371)	(3,019)
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ (4,353)</b>	<b>\$ (4,353)</b>	<b>\$ -</b>	<b>\$ (7,371)</b>	<b>\$ (3,019)</b>
<b>TOTAL BUDGET</b>	<b>\$ 469,003</b>	<b>\$ 469,003</b>	<b>\$ -</b>	<b>\$ 446,168</b>	<b>\$ (22,835)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL</b>	<b>\$ (94,467)</b>	<b>\$ (94,467)</b>	<b>\$ -</b>	<b>\$ (133,284)</b>	<b>\$ (38,817)</b>

Approved by the Texas RE Board of Directors May 24, 2016

## Compliance Monitoring and Enforcement and Organization Registration and Certification Program

Compliance Monitoring and Enforcement and Organization Registration and Certification Program (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	35.75	36.25	0.5
Direct Expenses	\$ 5,544,552	\$ 5,507,068	\$ (37,484)
Indirect Expenses	\$ 3,354,269	\$ 3,842,957	\$ 488,689
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ (88,917)	\$ (178,138)	\$ (89,220)
Total Funding Requirement	\$ 8,809,903	\$ 9,171,887	\$ 361,984

### Program Scope and Functional Description

Texas RE's Compliance Monitoring and Enforcement and Organization Registration and Certification Program (CMEP) includes the key activities of registering (and where required, certifying) responsible entities, monitoring and assessing compliance with the NERC Reliability Standards and regional standards, and enforcing and ensuring mitigation of violations of Standards in accordance with the NERC ROP. The primary monitoring and assessment methods include audits, self-reports, self-certifications, complaints, spot checks, compliance investigations, exception reporting, and data submittals.

There are several major ERO-wide activities that are expected to benefit NERC, the Regional Entities, and registered entities. The risk-based Compliance and Enforcement Program (risk-based CMEP) formerly known as the Reliability Assurance Initiative (RAI), is a multi-year effort to identify and implement changes to enhance the effectiveness of the ERO's compliance and enforcement functions. Risk-based CMEP is designed to improve BES reliability by refocusing efforts on serious and substantial reliability risks and on the internal controls that mitigate those risks. Similarly, Risk-Based Registration (RBR) is designed to ensure that the right entities are subject to the right set of applicable Reliability Standards, using a consistent and common approach to risk assessment and registration across the ERO Enterprise. In addition, NERC, the Regional Entities, and registered entities will transition to apply Critical Infrastructure Protection (CIP) Version 5, which adopts new cybersecurity controls and extends the scope of the systems that the CIP standards protect.

Two elements of risk-based CMEP—RBR and the CIP Version 5 transition—are expected to be major activities for Texas RE in 2017. Risk-based CMEP, for example, will require Texas RE to allocate resources to re-validate the design and to enhance the processes necessary to implement risk-based CMEP for both compliance and enforcement. Additionally, increased resources may be required to meet the training requirements for the compliance and enforcement staff associated with the implementation of risk-based CMEP 2017 Key Assumptions. Because resource demands are not fully known, consideration will be given to reallocating existing staff or

using available reserves to provide the resource support, if Texas RE determines this to be necessary to support the successful implementation (or transition) of these major activities.

### **2017 Key Assumptions**

- The implementation of the risk-based CMEP will continue to require the allocation of dedicated resources from both NERC and the Regional Entities for both compliance and enforcement. Regional Entities created a plan in 2016 to complete Inherent Risk Assessments (IRAs) for all their Reliability Coordinators, Balancing Authorities, and Transmission Operators and will require resources to complete the remaining IRAs. In addition, Regional Entities will require resources to update previously done IRAs based on identified triggers, and focus on creating compliance oversight plans that include compliance monitoring tools, the frequency of compliance monitoring, and the standards that are to be monitored as well as the depth of testing of those standards.
- An assessment project was completed in 2014 to evaluate software systems used for compliance, registration, analysis and tracking, which may result in changing or replacing existing systems in the future. Until a decision is made by the ERO-EMG to change or replace existing systems, NERC and the Regional Entities should continue to maintain contractor and consultant services to support existing systems.
- CIP compliance personnel will need to support the continued transition from the cyber-security Reliability Standards version 3 (V3) to V5 and provide support to “low impact” entities undergoing a CIP audit:
- NERC will lead the CIP V5 training development, coordination, and facilitation for the CMEP staff and industry outreach. Texas RE will support these activities in collaboration with NERC, as needed, to ensure appropriate knowledge and guidance are developed, understood, and administered.
- NERC and the Regional Entities are planning to support the training and education requirements and guidelines necessary to meet the criteria set forth by the ERO Enterprise Compliance Monitoring and Enforcement Manual and the Competency Guide.
- Potential increase in resources may be necessary to support compliance and enforcement activities related to CIP V5 Standards in 2017 and 2018.
- Additional resource considerations should be given to managing the increased amount of registered entities applicable to the CIP Standards due to the addition of “low impact” requirements that will come into effect in 2017 and 2018.
- Additional resources may be necessary for increased Physical Security activities as the CIP-014 Reliability Standard matures in terms of implementation across the ERCOT region. Similar to the Cyber Security Reliability Standards activities, industry and CMEP staff training will be enhanced, along with increased guidance as needed.

- As the depth of focused analysis of reliability performance and events across NERC improves, any identification of possible gaps in standards and compliance monitoring could potentially influence this program area.
- The certification and registration programs will be assessed in 2016, which may result in modifications to the program in 2017.
- The activities associated with the implementation of the BES definition have decreased, therefore no additional resource demands are expected in the registration area.
- Planned oversight activities for 2017 will be aligned with the ERO Enterprise Operating Model and may affect 2017 resource allocation, but they should have little effect on overall NERC resource requirements. NERC understands that each Regional Entity will need to evaluate its individual resource needs and allocations.
- The NERC-led panel establishes subset lists of applicable Reliability Standards for registered entity functions (e.g., Under-Frequency Load Shedding-only Distribution Providers) and has been incorporated into the rules. The implementation of the NERC-led panel may place additional resource demands in the registration area. These demands cannot be fully assessed at this time. However, if a high number NERC-led panel reviews are requested, the potential for resource constraints is possible.

## **2017 Goals and Key Deliverables**

### COMPLIANCE MONITORING

- Perform formal, in depth, risk-based compliance engagements for the functions posing risk to the BES. The frequency of engagements will vary as a result of the risk-based CMEP process. The number of anticipated engagements provided below are similar to the current cyclic approach, but may increase or decrease.
- Perform approximately 40 engagements, including all aspects of 693 and CIP risks identified through risk-based CMEP processes.
- Perform spot checks where warranted due to identified risks, system events, complaints, or other reliability concerns.
- Continue to work with NERC and other Regional Entities to improve consistency of engagements of registered entities.
- Conduct self-certifications of registered entities as needed.
- Increase coordination with Enforcement regarding all compliance monitoring engagements.
- Enhance feedback loops to the standard development process.



- Enhance registered entities' understanding of standard requirements by capturing lessons learned from compliance monitoring engagements and distributing to registered entities via training programs, newsletters, and announcements.
- Review and re-validate risk-based CMEP processes and tools.
- Participation in the RSAW development process.
- Training related to enhancements to the risk-based monitoring approach.

#### ENFORCEMENT

- Review, validate, and process or dismiss all possible violations in a timely fashion, to enhance visibility of violations and penalties.
- Manage all settlements and contested cases to completion, as efficiently as possible.
- Coordinate appropriate engineering, other subject matter experts, and legal resources for the processing of alleged violations, including all settlements, appeals, and contested cases.
- Use targeted, aggressive enforcement for the violations posing the most risk to BPS reliability.
- Support streamlined mechanisms implemented to expedite possible violations which pose a lesser reliability risk to the BPS.
- Improve the consistency and timeliness of all compliance and enforcement data tracking to enable review and reporting for compliance and enforcement staff, management, the Texas RE Board, NERC, and stakeholders.
- Promote timeliness and transparency of compliance results, including those efforts associated with meeting the caseload index, average violation aging, and mitigation aging metrics.
- Assure timely mitigation of all violations, assessing all mitigating activities and mitigation plans for effectiveness and reasonableness of implementation, tracking completion of accepted plans to closure, and verifying completion of mitigation plans.
- Enhanced feedback loops to the standard development process.

#### REGISTRATION AND CERTIFICATION

- Continue to monitor activity in the region and to register and certify entities in accordance with Texas RE procedures and the NERC ROP, including revisions to registrations and annual maintenance to reflect new and revised NERC standards. The level of activity is expected to be consistent with 2016.

- Continue to work with NERC and other Regional Entities to improve efficiency and consistency in performing registration and certification functions. Register new entities associated with generation and transmission facilities that may be planned and constructed during the applicable period, and conduct any required certifications.
- Continue to implement the revised Bulk Electric System definition, including execution of the exception process, handling exclusion notices, tracking the status of exclusions and exceptions, and dealing with related issues.
- Participate on the NERC-led panel as required.

### **Resource Requirements**

#### Personnel Expenses

FTEs are increasing from 35.75 FTEs in 2016 to 36.25 FTEs in 2017 due to an FTE reallocation from the Reliability Standards and the RAPA programs. Salaries expense includes 3% salary increases for 2017. There is a 24.7% increase in benefits expense due to more employees participating in the plans and increased cost for the benefits.

Travel Expense is increasing by \$18,653 (12.7%) for an auditor workshop that approximately twelve employees will attend in 2017.

#### Consultants and Contracts

There is an increase of \$45,948 (28.9%) in contracts and consulting services for this department. The increase is based on projected operating costs for webCDMS.

## Compliance Monitoring, Enforcement and Organization Registration and Certification Program

The following table shows the funding sources and related expenses for the Compliance Enforcement and Organization Registration and Certification Program for 2017. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>COMPLIANCE MONITORING, ENFORCEMENT and ORGANIZATION REGISTRATION and CERTIFICATION</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2016 Budget v 2017 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 7,389,968	\$ 7,389,968	\$ -	\$ 7,520,606	\$ 130,639
Penalty Sanctions	260,492	260,492	-	39,189	(221,303)
<b>Total NERC Funding</b>	<b>\$ 7,650,459</b>	<b>\$ 7,650,459</b>	<b>\$ -</b>	<b>\$ 7,559,795</b>	<b>\$ (90,664)</b>
Interest	773	773	-	1,568	795
<b>Total Funding</b>	<b>\$ 7,651,232</b>	<b>\$ 7,651,232</b>	<b>\$ -</b>	<b>\$ 7,561,363</b>	<b>\$ (89,869)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 3,825,208	\$ 3,825,208	\$ -	\$ 3,653,924	\$ (171,284)
Payroll Taxes	279,713	279,713	-	257,246	(22,467)
Benefits	557,967	557,967	-	693,090	135,123
Retirement Costs	556,678	556,678	-	513,071	(43,607)
<b>Total Personnel Expenses</b>	<b>\$ 5,219,566</b>	<b>\$ 5,219,566</b>	<b>\$ -</b>	<b>\$ 5,117,331</b>	<b>\$ (102,235)</b>
<b>Meeting &amp; Travel Expenses</b>					
Meetings	\$ 2,900	\$ 2,900	\$ -	\$ 2,080	\$ (820)
Travel	146,934	146,934	-	165,587	18,653
Conference Calls	-	-	-	300	300
<b>Total Meeting &amp; Travel Expenses</b>	<b>\$ 149,834</b>	<b>\$ 149,834</b>	<b>\$ -</b>	<b>\$ 167,967</b>	<b>\$ 18,133</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 159,052	\$ 159,052	\$ -	\$ 205,000	\$ 45,948
Office Rent	-	-	-	-	-
Office Costs	15,100	15,100	-	16,770	1,670
Professional Services	1,000	1,000	-	-	(1,000)
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 175,152</b>	<b>\$ 175,152</b>	<b>\$ -</b>	<b>\$ 221,770</b>	<b>\$ 46,618</b>
<b>Total Direct Expenses</b>	<b>\$ 5,544,552</b>	<b>\$ 5,544,552</b>	<b>\$ -</b>	<b>\$ 5,507,068</b>	<b>\$ (37,484)</b>
<b>Indirect Expenses</b>	<b>\$ 3,354,269</b>	<b>\$ 3,354,269</b>	<b>\$ -</b>	<b>\$ 3,842,957</b>	<b>\$ 488,689</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses</b>	<b>\$ 8,898,821</b>	<b>\$ 8,898,821</b>	<b>\$ -</b>	<b>\$ 9,350,025</b>	<b>\$ 451,204</b>
<b>Change in Assets</b>	<b>\$ (1,247,588)</b>	<b>\$ (1,247,588)</b>	<b>\$ -</b>	<b>\$ (1,788,662)</b>	<b>\$ (541,074)</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Allocation of Fixed Assets	(88,917)	(88,917)	-	(178,138)	(89,220)
<b>Inc(Dec) in Fixed Assets</b>	<b>\$ (88,917)</b>	<b>\$ (88,917)</b>	<b>\$ -</b>	<b>\$ (178,138)</b>	<b>\$ (89,220)</b>
<b>TOTAL BUDGET</b>	<b>\$ 8,809,903</b>	<b>\$ 8,809,903</b>	<b>\$ -</b>	<b>\$ 9,171,887</b>	<b>\$ 361,984</b>
<b>TOTAL CHANGE IN WORKING CAPITAL</b>	<b>\$ (1,158,671)</b>	<b>\$ (1,158,671)</b>	<b>\$ -</b>	<b>\$ (1,610,524)</b>	<b>\$ (451,854)</b>

## Reliability Assessment and Performance Analysis Program

Reliability Assessments and Performance Analysis (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	6.50	6.25	(0.25)
Direct Expenses	\$ 1,317,936	\$ 1,352,611	\$ 34,674
Indirect Expenses	\$ 609,867	\$ 662,579	\$ 52,712
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ (16,167)	\$ (30,713)	\$ (14,547)
Total Funding Requirement	\$ 1,911,637	\$ 1,984,476	\$ 72,839

### Program Scope and Functional Description

Texas RE's Reliability Assessment and Performance Analysis (RAPA) Program provides input to assessments of the adequacy of resources and operating reliability of the BPS in the ERCOT region, both existing and planned, as well as review of system events and disturbances that impact the ERCOT region BPS. In addition to support for these assessments and analyses, Texas RE will continue to participate with NERC in ongoing work to evaluate system performance, measure progress in improving current reliability and track leading indicators of future reliability. This program requires validation and analysis of data collected from registered entities, which is used in measurement of ongoing reliability performance of generation, transmission, and demand response. RAPA also identifies risks and analyzes key issues that may affect reliability, such as market practices, legislation, regulation, technology developments, high-impact low frequency (HILF) events, industry trends, or proposed public policy measures. Event analyses will determine causative factors for system disturbances as well as best practices used in preparing or recovering from them. Texas RE will disseminate these insights to industry and seek broader collaboration among stakeholders to identify and reduce threats to reliability.

RAPA also includes Situation Awareness and Infrastructure Security. Situation Awareness covers the assessment of the current condition of and threats to the BPS and development and application of situation awareness tools for monitoring the BPS. Infrastructure Security resources participate in the on-going development of CIP standards, improving regional coordination and cooperation for the CIP program, and aid the NERC-led efforts to develop industry alerts and guidance in support of the Electricity – Information Sharing and Analysis Center (E-ISAC). Most of the Texas RE CIP resources functionally reside in the Compliance, Monitoring, Enforcement and Organizational Registration and Certification Program, and much of situation awareness involves initial event review, which is primarily performed as part of the Event Analysis Process, in the RAPA Program.

### 2017 Key Assumptions

- Current staffing levels are expected to meet known and predicted program needs; however, as many RAPA tasks are presently in preliminary stages of definition or are under re-evaluation in the area of reliability assessments, potential additional program staffing demands are not known. Additionally, there is some uncertainty regarding the amount of resources that will be required to support joint Enterprise-wide modeling and data collection systems.
- Continued ERCOT stakeholder support is expected in Regional planning activities that meet ERO schedules for the various proposed reliability assessments and Interconnection study case model building activities.

### 2017 Goals and Key Deliverables

- Provide independent reviews of reliability assessments for the ERCOT region and assist NERC in its overall development of the long-term reliability assessments, along with continuing support for any remaining winter and summer seasonal assessments, along with post-seasonal reviews.
- Contribute to two anticipated NERC special reliability assessments in 2017, involving topics such as the impact of physical security, new technologies and environmental regulations, changes in resource mix, or delays in transmission development.
- Support NERC-wide modelling improvement efforts as the Interconnection model designee associated with MOD-032 and MOD-033 standards, working with stakeholders to integrate fidelity and quality tests into Regional study case development processes.
- Contribute to and review two short-term reliability assessments in 2017, involving topics such as the impact of gas dependency and changes in resource mix.
- Oversee collection of reliability data for the ERCOT region, provide analysis and validation, and support stakeholders as enhancements for databases and portals are added or as new systems are developed. Systems include:
  - Transmission Availability Data System (TADS)
  - Generation Availability Data System (GADS)
  - Demand Response Availability Data System (DADS)
  - Spare Equipment Database (SED)
  - Protection System Mis-operations (MIDAS)
- Participate in ERO development of an outcome-based approach to achieve measurable improvements in reliability, utilizing the data above and NERC's adequate level of reliability (ALR) metrics. Collect data and perform analysis as needed to evaluate the ALR metrics and produce annual performance summary reports with NERC and within the Region. The number of metrics and level of analysis is expected to remain consistent in 2017.

- Provide regional data collection and analysis to meet NERC or FERC initiatives, orders or directives, in particular for short-term reliability assessments on specific reliability risk concerns in a six to eighteen month horizon. These may include continuing review of risks associated with geomagnetic disturbances, physical security, protection system mis-operations, system frequency response, fuel dependency, human performance, drought, environmental regulations, single point of failure in protection systems, characterization of contingent load loss and new technology integration. NERC aims for up to four such short term assessments in 2017; FERC may have additional requests.
- Review NERC Standards and process developments. Evaluate against existing and proposed Regional criteria and processes for reliability concerns.
- Continue to implement the NERC event analysis and cause-coding process within the ERCOT region, expecting a similar volume of events as 2016, estimated at 12 Category 1 (minor), three Category 2 or 3 (moderate impact) and 1 Category 4 or 5 event (significant impact). Conduct follow-up on recommendations from past major events within ERCOT and other Regions and event trends associated with events across the ERO.
- Review approximately 100 lesser system events, such as remedial action scheme mis-operations, communications issues, and frequency disturbances, which do not meet the threshold for NERC events analysis, in order to monitor trends and system impacts in these areas.
- Support the BES Definition exception process as needed by providing technical review of exception requests and coordination internally and with other Regions and NERC for consistent application. At this time, the number of such requests is uncertain but is expected to be limited to one or two issues handled by existing staff.
- Engage ERCOT stakeholders to identify system issues that lead to reliability concerns, including those identified and prioritized by the NERC Reliability Issues Steering Committee.
- Provide workshops, webinars, and other outreach to support industry participation in RAPA programs and to disseminate lessons learned, best practices, trends and observations.
- Texas RE staff will continue ongoing monitoring for Situation Awareness, including system data, weather, technological developments, industry news, and media to understand trends that affect reliability both in the near and long term horizon.
- Provide regional coordination to maintain the Situation Awareness for FERC, NERC and the Regional Entities (SAFNR) tool, along with internal real-time visualization tools. Texas RE will use these tools to provide regular reporting to NERC along with current information on on-going events in the ERCOT region.

- Texas RE will continue to monitor and follow up on NERC alerts and anticipates that the volume of alerts will be similar to 2016, or approximately four, with one alert expected to require responses and analysis.
- Texas RE staff will continue to support initiatives in the Situation Awareness area that concern infrastructure security, working closely with NERC cyber-security staff. An example is participation in the NERC Grid-X Security exercise in 2017.

### **Resource Requirements**

#### Personnel Expenses

FTEs are decreasing by .25 due to an FTE reallocation to the CMEP department. Personnel expenses for this Program are 2.6% greater than 2016 due to promotions and market adjustments for salaries. Payroll taxes and Retirement costs are decreasing to more accurately reflect actual costs based on experience.

#### Consultants and Contracts

No consulting support and contracts are budgeted for 2017, which is consistent with the 2016 budget.

## Reliability Assessment and Performance Analysis Program

The following table shows the funding sources and related expenses for the Reliability Assessment and Performance Analysis Program for 2017. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital 2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>RELIABILITY ASSESSMENTS and PERFORMANCE ANALYSIS</b>					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2016 Budget v 2017 Budget Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 1,343,630	\$ 1,343,630	\$ -	\$ 1,296,656	\$ (46,974)
Penalty Sanctions	47,362	47,362	-	6,757	(40,605)
<b>Total NERC Funding</b>	<u>\$ 1,390,993</u>	<u>\$ 1,390,993</u>	<u>\$ -</u>	<u>\$ 1,303,413</u>	<u>\$ (87,580)</u>
Interest	141	141	-	270	130
<b>Total Funding</b>	<u>\$ 1,391,132</u>	<u>\$ 1,391,132</u>	<u>\$ -</u>	<u>\$ 1,303,683</u>	<u>\$ (87,450)</u>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 871,652	\$ 871,652	\$ -	\$ 888,746	\$ 17,094
Payroll Taxes	66,974	66,974	-	56,290	(10,684)
Benefits	135,225	135,225	-	162,569	27,345
Retirement Costs	127,401	127,401	-	124,787	(2,614)
<b>Total Personnel Expenses</b>	<u>\$ 1,201,251</u>	<u>\$ 1,201,251</u>	<u>\$ -</u>	<u>\$ 1,232,393</u>	<u>\$ 31,141</u>
<b>Meeting &amp; Travel Expenses</b>					
Meetings	\$ -	\$ -	\$ -	\$ -	\$ -
Travel	75,825	75,825	-	78,858	3,033
Conference Calls	-	-	-	-	-
<b>Total Meeting &amp; Travel Expenses</b>	<u>\$ 75,825</u>	<u>\$ 75,825</u>	<u>\$ -</u>	<u>\$ 78,858</u>	<u>\$ 3,033</u>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -
Office Rent	-	-	-	-	-
Office Costs	40,860	40,860	-	41,360	500
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<u>\$ 40,860</u>	<u>\$ 40,860</u>	<u>\$ -</u>	<u>\$ 41,360</u>	<u>\$ 500</u>
<b>Total Direct Expenses</b>	<u>\$ 1,317,936</u>	<u>\$ 1,317,936</u>	<u>\$ -</u>	<u>\$ 1,352,611</u>	<u>\$ 34,674</u>
<b>Indirect Expenses</b>	<u>\$ 609,867</u>	<u>\$ 609,867</u>	<u>\$ -</u>	<u>\$ 662,579</u>	<u>\$ 52,712</u>
<b>Other Non-Operating Expenses</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Total Expenses</b>	<u>\$ 1,927,803</u>	<u>\$ 1,927,803</u>	<u>\$ -</u>	<u>\$ 2,015,189</u>	<u>\$ 87,386</u>
<b>Change in Assets</b>	<u>\$ (536,671)</u>	<u>\$ (536,671)</u>	<u>\$ -</u>	<u>\$ (711,506)</u>	<u>\$ (174,836)</u>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Allocation of Fixed Assets	(16,167)	(16,167)	-	(30,713)	(14,547)
<b>Inc(Dec) in Fixed Assets</b>	<u>\$ (16,167)</u>	<u>\$ (16,167)</u>	<u>\$ -</u>	<u>\$ (30,713)</u>	<u>\$ (14,547)</u>
<b>TOTAL BUDGET</b>	<u>\$ 1,911,637</u>	<u>\$ 1,911,637</u>	<u>\$ -</u>	<u>\$ 1,984,476</u>	<u>\$ 72,839</u>
<b>TOTAL CHANGE IN WORKING CAPITAL</b>	<u>\$ (520,504)</u>	<u>\$ (520,504)</u>	<u>\$ -</u>	<u>\$ (680,793)</u>	<u>\$ (160,289)</u>



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## Training, Education, and Operator Certification Program

Training, Education and Operator Certification (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	2.25	2.25	-
Direct Expenses	\$ 386,160	\$ 337,253	\$ (48,907)
Indirect Expenses	\$ 211,108	\$ 238,528	\$ 27,421
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ (5,596)	\$ (11,057)	\$ (5,461)
Total Funding Requirement	\$ 591,672	\$ 564,725	\$ (26,947)

### Program Scope and Functional Description

Texas RE's Training, Education, and Operator Certification Program provides education and training primarily focused on implementation of the CMEP (including processes and expectations), application of Standards, lessons learned from event analysis, and other related information pertinent to system reliability and compliance. Texas RE subject matter experts from other Programs provide expertise for educational materials, meetings, and workshops. In addition, Texas RE provides assistance for the annual ERCOT Operator Training Seminar.

Texas RE will continue to coordinate Standards and Compliance workshops and other education and sharing meetings and webinars, including *Talk with Texas RE*, in 2017. The purpose of these workshops, meetings, and webinars is to provide standards, compliance, and procedural information and expectations, share lessons learned and best practices, obtain feedback from stakeholders, and provide sharing opportunities for registered entities and other stakeholders. Texas RE will use cost effective additional education mechanisms such as webinars, newsletters, and conference calls, and will coordinate presentations by Texas RE subject matter experts at other industry meetings.

### 2017 Key Assumptions

- Additional resources may be required to support certain training activities of the risk-based CMEP and the CIP Version 5 transition.
- The Operating Personnel Certification program is expected to remain at a steady state with no additional resources required from Texas RE.

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## 2017 Goals and Key Deliverables

- Communicate and maintain effective relationships with industry, regulators, and stakeholders.
- Promote stakeholder engagement in Texas RE and the ERO Enterprise, including attending training opportunities.
- Develop technical materials for and present Standards and Compliance workshops for registered entities.
- Present additional workshops, webinars, meetings, and other industry outreach, including *Talk with Texas RE* meetings to support CMEP implementation and any new or modified NERC standards, procedures, or programs.
- Create and publish newsletters that disseminate lessons learned for registered entities and include useful updates regarding standard revisions and interpretations, other reliability or compliance-related information, and Texas RE and NERC activities.
- Develop an Annual Report summarizing the prior year's accomplishments.
- Coordinate with and provide Texas RE subject matter experts as a resource for ERCOT regional stakeholder training and NERC compliance working groups.
- Provide a mechanism for workshop, webinar, and meeting participants and other stakeholders to provide feedback and suggestions to be used to enhance future workshops, webinars, and meetings.

## Resource Requirements

### Personnel Expenses

The number of FTEs assigned to this Program are remaining constant in 2017. The decrease in personnel expenses is to more accurately reflect actual salary costs based on experience

### Consultants and Contracts

Consulting support and contracts are increasing by \$3,000 due to increased costs for List Serve, the service contracted to manage communication with external parties.

## Training, Education, and Operator Certification Program

The following table shows the funding sources and related expenses for the Training, Education, and Operator Certification Program for 2017. Explanations of variances by expense category are included with the Supplemental Tables found in Section B.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>TRAINING, EDUCATION and OPERATOR CERTIFICATION</b>					
	2016	2016	Variance		Variance
	Budget	Projection	2016 Projection	2017	2016 Budget
			v 2016 Budget	Budget	v 2017 Budget
			Over(Under)		Over(Under)
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ 465,103	\$ 465,103	\$ -	\$ 466,796	\$ 1,693
Penalty Sanctions	16,395	16,395	-	2,432	(13,962)
<b>Total NERC Funding</b>	<b>\$ 481,497</b>	<b>\$ 481,497</b>	<b>\$ -</b>	<b>\$ 469,229</b>	<b>\$ (12,269)</b>
Interest	49	49	-	97	49
<b>Total Funding</b>	<b>\$ 481,545</b>	<b>\$ 481,545</b>	<b>\$ -</b>	<b>\$ 469,326</b>	<b>\$ (12,220)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 232,644	\$ 232,644	\$ -	\$ 188,474	\$ (44,170)
Payroll Taxes	17,822	17,822	-	12,788	(5,034)
Benefits	51,265	51,265	-	43,494	(7,771)
Retirement Costs	33,588	33,588	-	26,467	(7,121)
<b>Total Personnel Expenses</b>	<b>\$ 335,320</b>	<b>\$ 335,320</b>	<b>\$ -</b>	<b>\$ 271,223</b>	<b>\$ (64,097)</b>
<b>Meeting &amp; Travel Expenses</b>					
Meetings	\$ 30,000	\$ 30,000	\$ -	\$ 30,000	\$ -
Travel	6,700	6,700	-	3,270	(3,430)
Conference Calls	10,000	10,000	-	20,000	10,000
<b>Total Meeting &amp; Travel Expenses</b>	<b>\$ 46,700</b>	<b>\$ 46,700</b>	<b>\$ -</b>	<b>\$ 53,270</b>	<b>\$ 6,570</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 2,000	\$ 2,000	\$ -	\$ 5,000	\$ 3,000
Office Rent	-	-	-	-	-
Office Costs	2,140	2,140	-	6,760	4,620
Professional Services	-	-	-	1,000	1,000
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 4,140</b>	<b>\$ 4,140</b>	<b>\$ -</b>	<b>\$ 12,760</b>	<b>\$ 8,620</b>
<b>Total Direct Expenses</b>	<b>\$ 386,160</b>	<b>\$ 386,160</b>	<b>\$ -</b>	<b>\$ 337,253</b>	<b>\$ (48,907)</b>
<b>Indirect Expenses</b>	<b>\$ 211,108</b>	<b>\$ 211,108</b>	<b>\$ -</b>	<b>\$ 238,528</b>	<b>\$ 27,421</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses</b>	<b>\$ 597,268</b>	<b>\$ 597,268</b>	<b>\$ -</b>	<b>\$ 575,782</b>	<b>\$ (21,486)</b>
<b>Change in Assets</b>	<b>\$ (115,723)</b>	<b>\$ (115,723)</b>	<b>\$ -</b>	<b>\$ (106,456)</b>	<b>\$ 9,266</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Allocation of Fixed Assets	(5,596)	(5,596)	-	(11,057)	(5,461)
<b>Inc(Dec) in Fixed Assets</b>	<b>\$ (5,596)</b>	<b>\$ (5,596)</b>	<b>\$ -</b>	<b>\$ (11,057)</b>	<b>\$ (5,461)</b>
<b>TOTAL BUDGET</b>	<b>\$ 591,672</b>	<b>\$ 591,672</b>	<b>\$ -</b>	<b>\$ 564,725</b>	<b>\$ (26,947)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL</b>	<b>\$ (110,126)</b>	<b>\$ (110,126)</b>	<b>\$ -</b>	<b>\$ (95,399)</b>	<b>\$ 14,727</b>

Approved by the Texas RE Board of Directors May 24, 2016

## Administrative Services

	Administrative Services					
	Direct Expenses & Fixed Assets			FTEs		
	2016 Budget	2017 Budget	Inc (Dec)	2016 Budget	2017 Budget	Inc (Dec)
General and Administrative	1,799,268	2,134,504	335,236	3.00	3.00	-
Legal and Regulatory	476,792	501,860	25,069	2.75	2.75	-
Information Technology	1,301,812	1,427,635	125,823	5.00	5.00	-
Human Resources	98,370	108,345	9,975	-	-	-
Finance and Accounting	548,164	503,460	(44,704)	3.00	3.00	-
Total Administrative Services	4,224,405	4,675,805	451,399	13.75	13.75	-

### Program Scope and Functional Description

The Administrative Services Program is comprised of the following programs: General and Administrative, Legal and Regulatory, Information Technology, Human Resources, and Finance and Accounting. The resource requirements and comparative budget information for each of these functions is described below.

Texas RE allocates its general and administrative expenses to the functional/direct areas proportionately based on FTE count. Each direct activity receives a pro-rata allocation of expense based on its FTEs compared to total FTEs.

Fixed asset additions that benefit the entire corporation that are not specific to any one activity/function will be allocated based on FTEs to all of the direct activities.

### General and Administrative

This Program includes the President and CEO and the personnel costs for the HR Department. The President and CEO carries out the general affairs of Texas RE, including administrative and corporate facilities support, and includes the time and expenses of the Texas RE Board. The President and CEO reports to the Board and is responsible for leading, overseeing and managing the activities of Texas RE, managing relationships with NERC, FERC, registered entities, and other stakeholders, and for making final decisions with respect to non-contested enforcement actions. The CEO's time is expended for and charged to other operational Program activities.

Personnel expenses for Human Resources (HR) are included in General and Administrative (G&A). The benefits expenses in G&A include tuition reimbursement, training and classes, and relocation costs.

Consulting fees and contracts are increasing by \$33,104 (46.7%) due to a compensation study for the Board of Directors.

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## **Legal and Regulatory**

The Legal and Regulatory area provides legal advice, counsel, and governmental and external relations support to Texas RE management, Board, and employees, on all legal and regulatory matters affecting the organization. The Legal and Regulatory group also oversees (1) corporate membership enrollment, meetings and voting; (2) Board meetings, minutes, support, training and other activities; (3) corporate documents and transactions; (4) governmental, regulatory relations and communications; (5) the work of any outside legal counsel; and (6) the prosecution of any contested enforcement matters.

### **2017 Key Assumptions**

- Texas RE will maintain the scope of its current operations.
- Activities of the Legal and Regulatory program will be consistent with current levels.

### **2017 Key Deliverables and Goals**

- Provide timely, useful legal advice to the CEO, the Board, and all Program areas, and provide annual employee and Board ethics and antitrust compliance training.
- Effectively communicate information to the Board, Texas RE members, and registered entities.
- Oversee membership registration, membership voting and meetings, and maintain an accurate roster of members.
- Maintain effective relationships and communications with NERC, FERC, PUCT, and other state and federal representatives, and timely file all documents required by NERC or FERC.
- Review contracts and corporate documents.
- Update and maintain corporate policies and procedures.
- Assist with the prosecution and any appeal of contested enforcement or disputed registration matters.

The budgeted number of FTEs for Legal and Regulatory is remaining constant in 2016.

Consulting support and contracts are consistent with the 2016 budget.

## **Information Technology**

Texas RE's Information Technology (IT) program provides information technology and security support to Texas RE, including the following: hardware, systems, software, and applications; physical security, electronic security, data center operations, IT and security-related vendor management, strategy, planning, development, and deployment of enterprise systems,

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application, and training, research, and planning for improvement and efficiency of business process and operations.

Texas RE's approach is to keep its in-house IT staff small and efficiently outsource maintenance, services, and major development to ensure that applications and hardware are well maintained, service levels remain high, costs are controlled, and systems are consistent with business, federal, and regional requirements.

Texas RE supports the ERO efforts to implement, operate and maintain software tools supporting common enterprise-wide operations which have been approved by the ERO Executive Management Group (ERO-EMG), which is comprised of the senior leadership of NERC and each of the Regional Entities. Texas RE's budget assumes the availability of enterprise software tools as described in NERC's Business Plan and Budget. If implementation of these software applications are delayed or otherwise not available as planned, Texas RE could incur additional costs to conduct operations pending the availability of these applications.

NERC and the Regional Entities are committed to working collaboratively to minimize duplication of effort and investments, and improve operational efficiency. This collaboration continues to refine existing strategies, governance and procurement practices applicable to the development, operation and maintenance of enterprise architecture, software and data systems supporting combined NERC and Regional Entity operations.

The NERC information technology budget does not supplant Texas RE's need for IT expenditures for specific regional projects and internal region specific IT support needs. Texas RE's 2017 Business Plan and Budget assumes agreed-upon ERO Enterprise applications will be available and includes Texas RE costs for internal region specific supports needs.

### **2017 Key Assumptions**

- Focus on better leverage of current technology to support business functions and workflow.
- Increase knowledge of industry best practices for security, data management, and system administration.

### **2017 Goals and Key Deliverables**

- Provide IT and security support to all Texas RE's operations, including: IT and security budget; infrastructure; service support; service design and delivery; service transition; and hardware and network security in a secure and efficient manner, with the following strategy:
  - Continue to develop knowledge of systems through training and experience to reduce the reliance on external vendors.
  - Continue to utilize third-party security services to evaluate and test Texas RE's security posture, while fostering maturity in Texas RE's Internal Controls Program and security posture.
  - Continue to maintain the appropriate number of employees to oversee the strategy, policies and procedures, service and performance, budget, and vendor management. Cross-train employees to serve as backups and mentors to each other.

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- Continue to outsource IT and security services that are not within the core competencies or IT's cost-containment plan, and augment employees with temporary contractors as needed to meet business requirements while developing knowledge of systems through training and experience to reduce the reliance on external vendors.
  - Develop internal applications to increase consistency, efficiency, and assist users in business processes.
  - Assist business staff with development of webCDMS enhancement requests and other IT-related project requirements, and prioritize and oversee all IT or security-related projects.
  - Coordinate and share best practices with other Regional Entities and NERC.
  - Participate in the design, planning and implementation of ERO Centralized Applications.
  - Continue the Security Awareness Program that addresses, through education and training, social media vulnerabilities that pose threats to Texas RE systems.
  - Train and support Texas RE staff on software and applications.
  - Continue to develop and test failover and disaster recovery methods for all Texas RE systems.

FTEs are remaining consistent with 2016.

Consulting support and contracts are consistent with the 2016 budget.

### **Human Resources**

The Texas RE Human Resources (HR) program area is responsible for the delivery of all HR functions including: recruitment, staffing, compensation, benefits, health and safety, employee relations, performance management, and employee training and development. HR maintains Human Resources related databases and ensures compliance with all federal and state requirements.

#### **2017 Key Assumptions**

- Provide competitive compensation and benefits.
- Ensure that Texas RE maintains a skilled, qualified workforce.
- Maintain appropriate salaries and benefits based on industry data.

#### **2017 Goals and Key Deliverables**

- Recruit highly skilled employees.
- Review and update employee handbook and policies and procedures, as needed.

- 
- Review and manage employee benefit plans.
  - Review Texas RE compensation strategy in concert with executive management team to ensure Texas RE remains a competitive employer in its industry.

Personnel expenses are reported under G&A.

Consulting services and contracts are increasing by \$9,000 (11.4%) in 2017 due to an all-staff compensation study, an executive compensation study, and a potential custom Regional Entity salary survey.

### **Finance and Accounting**

The Finance and Accounting function provides all accounting services and financial analysis for Texas RE. Texas RE Finance and Accounting personnel are responsible for general accounting and reporting, budget preparation and reporting, cash management, and tax filing.

#### **2017 Key Assumptions**

- Current accounting systems and controls are adequate.
- Identify and implement efficiencies in financial processes.
- Provide improved reporting and financial analysis to Directors, Finance and Audit Committee and the Board of Directors.

#### **2017 Goals and Key Deliverables**

- Work with all Regional Entities to provide consistency in budget submittals to NERC and FERC.
- Provide improved reporting and financial analysis to the Texas RE CEO, managers, and the Texas RE Board.
- Ensure strong internal controls designed to protect the assets of Texas RE and ensure accurate financial reporting.
- Identify and implement efficiencies in the financial processes.
- Ensure that Texas RE receives an unqualified opinion on the audit of its financial statements.

FTEs are remaining consistent with 2016.

No consulting support and contracts are budgeted for 2017, which is consistent with the 2016 budget.



## Administrative Services

The following table shows funding sources and related expenses for the Administrative Services section of the 2017 Business Plan and Budget. Explanations of variances by expense category are included with the Department Section and with the Supplemental Tables found in Section B.

<b>Statement of Activities, Fixed Assets Expenditures and Change in Working Capital</b>					
<b>2016 Budget &amp; Projection, and 2017 Budget</b>					
<b>ADMINISTRATIVE SERVICES</b>					
	<b>2016 Budget</b>	<b>2016 Projection</b>	<b>Variance 2016 Projection v 2016 Budget Over(Under)</b>	<b>2017 Budget</b>	<b>Variance 2016 Budget v 2017 Budget Over(Under)</b>
<b>Funding</b>					
<b>ERO Funding</b>					
NERC Assessments	\$ -	\$ -	\$ -	\$ -	\$ -
Penalty Sanctions	-	-	-	-	-
<b>Total NERC Funding</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Total Funding (A)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 1,611,847	\$ 1,611,847	\$ -	\$ 1,809,577	\$ 197,730
Payroll Taxes	116,213	116,213	-	100,082	(16,131)
Benefits	293,639	293,639	-	344,734	51,094
Retirement Costs	219,218	219,218	-	220,410	1,192
<b>Total Personnel Expenses</b>	<u>\$ 2,240,917</u>	<u>\$ 2,240,917</u>	<u>\$ -</u>	<u>\$ 2,474,803</u>	<u>\$ 233,885</u>
<b>Meeting and Travel Expenses</b>					
Meetings	\$ 17,450	\$ 17,450	\$ -	\$ 17,000	\$ (450)
Travel	124,323	124,323	-	104,380	(19,943)
Conference Calls	-	-	-	1,750	1,750
<b>Total Meeting &amp; Travel Expenses</b>	<u>\$ 141,773</u>	<u>\$ 141,773</u>	<u>\$ -</u>	<u>\$ 123,130</u>	<u>\$ (18,643)</u>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 181,096	\$ 181,096	\$ -	\$ 223,200	\$ 42,104
Office Rent	489,557	489,557	-	617,212	127,655
Office Costs	612,562	612,562	-	679,010	66,448
Professional Services	514,500	514,500	-	518,450	3,950
Depreciation	159,033	159,033	-	267,279	108,246
<b>Total Operating Expenses</b>	<u>\$ 1,956,748</u>	<u>\$ 1,956,748</u>	<u>\$ -</u>	<u>\$ 2,305,151</u>	<u>\$ 348,403</u>
<b>Total Direct Expenses</b>	<u>\$ 4,339,438</u>	<u>\$ 4,339,438</u>	<u>\$ -</u>	<u>\$ 4,903,084</u>	<u>\$ 563,645</u>
<b>Indirect Expenses</b>	<u>\$ (4,339,438)</u>	<u>\$ (4,339,438)</u>	<u>\$ -</u>	<u>\$ (4,903,084)</u>	<u>\$ (563,645)</u>
<b>Other Non-Operating Expenses</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Total Expenses (B)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 0</u>
<b>Change in Assets</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (0)</u>
<b>Fixed Assets</b>					
Depreciation	(159,033)	(159,033)	-	(267,279)	(108,246)
Computer & Software CapEx	44,000	44,000	-	40,000	(4,000)
Allocation of Fixed Assets	115,033	115,033	-	227,279	112,246
<b>Inc(Dec) in Fixed Assets ( C )</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>TOTAL BUDGET (=B + C)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 0</u>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ (0)</u>

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## Section B – Supplemental Financial Information

### 2017 Business Plan and Budget

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## Section B — Supplemental Financial Information

### Reserve Balance

Table B-1

<b>Working Capital Reserve Analysis 2016-2017</b>	
<b>STATUTORY</b>	
<b>Beginning Working Capital Reserve (Deficit), December 31, 2015</b>	6,586,523
Plus: 2016 Funding (from LSEs or designees)	9,897,448
Plus: 2016 Other funding sources	1,000
Less: 2016 Projected expenses & capital expenditures	(11,782,215)
<b>Projected Working Capital Reserve (Deficit), December 31, 2016</b>	<b>4,702,756</b>
<b>Desired Working Capital Reserve, December 31, 2017</b>	2,182,756
Minus: Projected Working Capital Reserve, December 31, 2016	(4,702,756)
Minus: adjustment to Cash Reserve, December 31, 2016	-
<b>Increase(decrease) in funding requirement to achieve Working Capital Reserve</b>	<b>(2,520,000)</b>
2017 Expenses and Capital Expenditures	12,167,256
Less: Penalty Sanctions <sup>1</sup>	(50,000)
Less: Other Funding Sources	(2,000)
Adjustment to achieve desired Working Capital Reserve	(2,520,000)
<b>2017 NERC Assessment</b>	<b>9,595,256</b>

<sup>1</sup> Represents collections on or prior to June 30, 2016.

### Explanation of Changes in Reserve Policy from Prior Years

Consistent with Board approved Working Capital and Operating Reserve Policy, Texas RE is retaining its \$2,000,000 cash reserve requirement plus an additional \$183,000.

### **Breakdown by Statement of Activity Sections**

The following detailed schedules are in support of the statement of activities on page 9 of the 2017 Texas RE Business Plan and Budget. All significant variances have been disclosed by program area in the preceding pages.

Texas RE anticipates no variance between budgeted and actual/forecasted results for 2016. The 2017 budget was based on this information.

### **Penalty Sanctions**

Penalty monies received by June 30, 2016 are to be used to offset assessments in the 2017 Budget, as documented in the NERC Policy – *ACCOUNTING, FINANCIAL STATEMENT AND BUDGETARY TREATMENT OF PENALTIES IMPOSED AND RECEIVED FOR VIOLATIONS OF RELIABILITY STANDARD*. Penalty monies received from July 1, 2016 through June 30, 2017 will be used to offset assessments in the 2018 Budget.

All penalties received by June 30, 2016 are detailed in exhibit B-2.

Allocation Method: Penalty sanctions received have been allocated to the following statutory programs to reduce assessments: Reliability Standards; Compliance Monitoring & Enforcement and Organization Registration & Certification; Reliability Assessments and Performance Analysis; and Training, Education and Operator Certification. Penalty sanctions are allocated based upon the number of FTEs in the program divided by the aggregate total FTEs in the programs receiving the allocation.

Table B-2 – Penalty Sanctions

Penalty Sanctions Received On or Prior to June 30, 2016	Date Received	Amount Received
	8/21/2014	50,000
<b>Total Penalties Received</b>		<u>\$ 50,000</u>

Table B-3 – Supplemental Funding

Outside Funding Breakdown By Program (Excluding Penalty Sanction)	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget
<b>Reliability Standards</b>				
Total	\$ -	\$ -	\$ -	\$ -
<b>Compliance Monitoring, Enforcement &amp; Org. Registration</b>				
Total	\$ -	\$ -	\$ -	\$ -
<b>Reliability Assessment and Performance Analysis</b>				
Total	\$ -	\$ -	\$ -	\$ -
<b>Training and Education</b>				
Total	\$ -	\$ -	\$ -	\$ -
<b>Situation Awareness and Infrastructure Security</b>				
Total	\$ -	\$ -	\$ -	\$ -
<b>General and Administrative</b>				
Interest Income	\$ 1,000	\$ 1,000	\$ 2,000	\$ 1,000
Total	\$ 1,000	\$ 1,000	\$ 2,000	\$ 1,000
Total Outside Funding	\$ 1,000	\$ 1,000	\$ 2,000	\$ 1,000

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- Texas RE anticipates its investments will earn interest of approximately \$2,000 in 2017. This amount reflects historical interest income.

Table B-4 – Personnel Expenses

Personnel Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Total Salaries	\$ 6,749,489	\$ 6,749,489	\$ 6,739,715	\$ (9,774)	-0.1%
Total Payroll Taxes	496,723	496,723	438,778	(57,945)	-11.7%
Total Benefits	1,075,949	1,075,949	1,283,357	207,408	19.3%
Total Retirement	968,077	968,077	912,670	(55,407)	-5.7%
<b>Total Personnel Costs</b>	<b>\$ 9,290,238</b>	<b>\$ 9,290,238</b>	<b>\$ 9,374,519</b>	<b>\$ 84,282</b>	<b>0.9%</b>
FTEs	60.00	60.00	60.00	-	0.0%
Cost per FTE					
Salaries	\$ 112,491	\$ 112,491	\$ 112,329	(163)	-0.1%
Payroll Taxes	8,279	8,279	7,313	(966)	-11.7%
Benefits	17,932	17,932	21,389	3,457	19.3%
Retirement	16,135	16,135	15,211	(923)	-5.7%
<b>Total Cost per FTE</b>	<b>\$ 154,837</b>	<b>\$ 154,837</b>	<b>\$ 156,242</b>	<b>\$ 1,405</b>	<b>0.9%</b>

#### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

- Total costs for Texas RE personnel expenses are increasing by 0.9%. The 11.7% decrease in payroll taxes is to more accurately reflect actual tax costs based on experience. The decrease in taxes is offset by employee benefits, which are increasing 19.3% primarily due to a projected 20% increase in health benefits costs. Retirement costs reflect the decrease in salaries and actual employee participation in the retirement plans.
- Total benefits include employee training, relocation, and employee education reimbursement.
- A vacancy rate of 2% is assumed for the 2017 budget.

**Table B-5 – Meeting & Travel Expenses**

Meeting and Travel Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Meetings	\$ 50,350	\$ 50,350	\$ 49,080	\$ (1,270)	-2.5%
Travel	368,115	368,115	366,045	(2,070)	-0.6%
Conference Calls	10,000	10,000	23,750	13,750	137.5%
	<b>\$ 428,465</b>	<b>\$ 428,465</b>	<b>\$ 438,875</b>	<b>\$ 10,410</b>	<b>2.4%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- Total Meeting Expense is increasing due to the anticipated costs of on-site meetings in the new conference center.
- The ability to hold meetings on-site is reducing Travel Expense.

Conference Call Expense is increasing primarily due to additional on-site meetings and webinars being held in the new conference center.



**Table B-6 – Consultants and Contracts**

Consultants and Contracts	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Reliability Standards	\$ -	\$ -	\$ -	\$ -	
Compliance and Organization Registration and Certificatio	159,052	159,052	205,000	45,948	28.9%
Reliability Assessment and Performance Analysis	-	-	-	-	
Training and Education	2,000	2,000	5,000	3,000	150.0%
General and Administrative	70,896	70,896	104,000	33,104	46.7%
Legal and Regulatory	3,200	3,200	3,200	-	0.0%
Information Technology	28,000	28,000	28,000	-	0.0%
Human Resources	79,000	79,000	88,000	9,000	11.4%
Accounting and Finance	-	-	-	-	
<b>Consultants Total</b>	<b>\$ 342,148</b>	<b>\$ 342,148</b>	<b>\$ 433,200</b>	<b>\$ 91,052</b>	<b>26.6%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

For an explanation of the variances, refer to the Resource Requirements section in each program area in Section A.

**Table B-7 – Office Rent**

<b>Rent</b>	<b>Budget 2016</b>	<b>Projection 2016</b>	<b>Budget 2017</b>	<b>Variance 2017 Budget v 2016 Budget</b>	<b>Variance %</b>
Office Rent	\$ 489,557	\$ 489,557	\$ 617,212	\$ 127,655	26.1%
Utilities			-	-	
Maintenance			-	-	
<b>Total Office Rent</b>	<b>\$ 489,557</b>	<b>\$ 489,557</b>	<b>\$ 617,212</b>	<b>\$ 127,655</b>	<b>26.1%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- Rent Expense includes utilities and maintenance and is increasing by 26.1%. The increase is due to utilities and maintenance costs for the additional conference center space..

Table B-8 – Office Costs

Office Costs	Budget 2016	Projection 2016	Budget 2017	Variance	
				2017 Budget v 2016 Budget	Variance %
Telephone/Cell Phone	\$ 24,760	\$ 24,760	\$ 26,840	\$ 2,080	8.4%
Internet Expense	125,000	125,000	130,000	5,000	4.0%
Office Supplies	49,590	49,590	55,700	6,110	12.3%
Computer Supplies & Maintenance	28,100	28,100	45,100	17,000	60.5%
Software & Software Maintenance	161,020	161,020	207,400	46,380	28.8%
Subscriptions & Publications	34,450	34,450	23,450	(11,000)	-31.9%
Dues	12,350	12,350	10,935	(1,415)	-11.5%
Postage	495	495	650	155	31.3%
Express Shipping	575	575	425	(150)	-26.1%
Stationary & Office Forms	2,200	2,200	2,600	400	18.2%
Equipment Repair/Srv. Contracts	5,000	5,000	4,000	(1,000)	-20.0%
Bank Charges	2,313	2,313	2,300	(13)	-0.6%
Property Taxes	15,000	15,000	13,000	(2,000)	-13.3%
Merchant Credit Card Fee	1,454	1,454	1,400	(54)	-3.7%
IT-Leased Equipment	200,000	200,000	200,000	-	0.0%
Maintenance	10,000	10,000	12,000	2,000	20.0%
Office Furniture & Equipment Exp	-	-	5,000	5,000	100.0%
IT Maintenance	-	-	2,000	2,000	100.0%
Employment Related Fees	-	-	1,200	1,200	100.0%
<b>Total Office Costs</b>	<b>\$ 672,307</b>	<b>\$ 672,307</b>	<b>\$ 744,000</b>	<b>\$ 71,693</b>	<b>10.66%</b>

#### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

- All categories in the Office Costs have been adjusted in the 2017 budget to more accurately reflect actual experience.
- Telephone/Cell Phone Costs are increasing due to more employees being reimbursed for using personal cell phones for Texas RE business.
- Office Supplies are increasing to cover supplies for the added conference center.
- Computer Supplies and Maintenance are increasing for additional requirements in the conference center.
- Software and Software Maintenance increased to cover the cost of licenses and maintenance agreements for ongoing and new software programs.
- Subscriptions and Publications decreased to reflect historical costs for Board of Director meeting package publication software.
- Dues decrease reflects historical costs for employees maintaining professional licenses.
- Property Taxes decreased primarily due to moving the data center location from the Dallas area to San Antonio.

- Maintenance expense are increasing for additional requirements in the conference center.
- Office Furniture & Equipment Expense and IT Maintenance expense has been added for purchases that do not meet the capitalization requirement.
- Employment Related Fees have been added to the Human Resources department for drug testing, background checks and other items required for hiring new employees.

Table B-9 – Professional Services

Professional Services	Budget 2016	Projection 2016	Budget 2017	Variance	
				2017 Budget v 2016 Budget	Variance %
Board of Director Fees	\$ 275,000	\$ 275,000	\$ 283,000	\$ 8,000	2.9%
Accounting & Auditing Fees	42,500	42,500	42,500	-	0.0%
Legal Fees	31,000	31,000	30,000	(1,000)	-3.2%
Insurance - Commercial	75,000	75,000	69,750	(5,250)	-7.0%
Professional Services-Other	92,000	92,000	94,200	2,200	2.4%
<b>Total Professional Services</b>	<b>\$ 515,500</b>	<b>\$ 515,500</b>	<b>\$ 519,450</b>	<b>\$ 3,950</b>	<b>0.8%</b>

#### Explanation of Significant Variances – 2017 Budget versus 2016 Budget

- Expense for fees paid to Independent Board of Directors have been increased to reflect an anticipated increase in Director fees.
- Accounting and Auditing Fees are remaining consistent with 2016.
- Legal Fees has been reduced to reflect actual cost based on experience.
- Commercial Insurance is projected to decrease slightly based on an estimate from the broker. Texas RE now has history with an experience rating that allows for better rates.
- Professional Services – Other is increasing slightly to cover professional employee photographs.

**Table B-10 – Miscellaneous Expense**

Miscellaneous	Budget 2016	Projection 2016	Budget 2017	Variance	
				2017 Budget v 2016 Budget	Variance %
Miscellaneous Expense	\$ -	\$ -	\$ -	\$ -	-
<b>Total Miscellaneous Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- N/A

**Table B-11 – Other Non-Operating Expenses**

Other Non-Operating Expenses	Budget 2016	Projection 2016	Budget 2017	Variance	
				2017 Budget v 2016 Budget	Variance %
Interest Expense	\$ -	\$ -	\$ -	\$ -	-
Line of Credit Payment		-			-
Office Relocation	-	-	-		-
<b>Total Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- N/A

**Table B-12 – Fixed Assets**

Fixed Assets	Budget 2016	Projection 2016	Budget 2017	Variance	
				2017 Budget v 2016 Budget	Variance %
Depreciation	\$ (159,033)	\$ (159,033)	\$ (267,279)	\$ (108,246)	68.1%
Computer & Software CapEx	44,000	44,000	40,000	(4,000)	-9.1%
Furniture & Fixtures CapEx	-	-	-	-	
Equipment CapEx	-	-	-	-	
Leasehold Improvements	-	-	-	-	
<b>Total Fix Assets</b>	<b>\$ (115,033)</b>	<b>\$ (115,033)</b>	<b>\$ (227,279)</b>	<b>\$ (112,246)</b>	<b>97.6%</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

- Depreciation is increasing 68.1% due to Leasehold Improvements, Furniture and Fixtures, and Equipment purchased in 2015 for the additional conference center space.
- Computer and Software CapEx is 9.1% less than 2016 budget.



Table B-13 – 2018 and 2019 Projection

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital 2017 Budget & Projected 2018 and 2019 Budgets							
	2017 Budget	2018 Projection	\$ Change 18 v 17	% Change 18 v 17	2019 Projection	\$ Change 19 v 18	% Change 19 v 18
<b>Funding</b>							
<b>ERO Funding</b>							
NERC Assessments	\$ 9,595,256	\$ 9,979,067	\$ 383,810	4.00%	\$ 10,378,229	\$ 399,163	3.8%
Penalty Sanctions	50,000	-	(50,000)	-100.00%	-	-	
<b>Total NERC Funding</b>	<b>\$ 9,645,256</b>	<b>\$ 9,979,067</b>	<b>\$ 333,810</b>	<b>3.5%</b>	<b>\$ 10,378,229</b>	<b>\$ 399,163</b>	<b>3.8%</b>
Membership Dues	-	\$ -	-		-	-	
Interest	2,000	2,080	80	4.00%	2,163	83	4.0%
<b>Total Funding (A)</b>	<b>\$ 9,647,256</b>	<b>\$ 9,981,147</b>	<b>\$ 333,890</b>	<b>3.5%</b>	<b>\$ 10,380,392</b>	<b>\$ 399,246</b>	<b>4.0%</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 6,739,715	\$ 7,009,303	\$ 269,589	4.0%	\$ 7,289,675	\$ 280,372	4.0%
Payroll Taxes	438,778	456,329	17,551	4.0%	474,582	18,253	4.0%
Benefits	1,283,357	1,334,691	51,334	4.0%	1,388,079	53,388	4.0%
Retirement Costs	912,670	949,177	36,507	4.0%	987,144	37,967	4.0%
<b>Total Personnel Expenses</b>	<b>\$ 9,374,519</b>	<b>\$ 9,749,500</b>	<b>\$ 374,981</b>	<b>4.0%</b>	<b>\$ 10,139,480</b>	<b>\$ 389,980</b>	<b>4.0%</b>
<b>Meeting &amp; Travel Expenses</b>							
Meetings	\$ 49,080	\$ 51,043	\$ 1,963	4.0%	\$ 53,084.93	2,042	4.0%
Travel	366,045	380,687	14,642	4.0%	395,914	15,227	4.0%
Conference Calls	22,350	23,244	894	4.0%	24,174	930	4.0%
<b>Total Meeting &amp; Travel Expenses</b>	<b>\$ 437,475</b>	<b>\$ 454,974</b>	<b>\$ 17,499</b>	<b>4.0%</b>	<b>\$ 473,173</b>	<b>\$ 18,199</b>	<b>4.0%</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 434,600	\$ 451,984	17,384	4.0%	\$ 470,063	18,079	4.0%
Office Rent	617,212	641,900	24,688	4.0%	667,577	25,676	4.0%
Office Costs	744,000	773,760	29,760	4.0%	804,710	30,950	4.0%
Professional Services	519,450	540,228	20,778	4.0%	561,837	21,609	4.0%
Depreciation	267,279	277,970	10,691	4.0%	289,089	11,119	4.0%
<b>Total Operating Expenses</b>	<b>\$ 2,582,541</b>	<b>\$ 2,685,843</b>	<b>\$ 103,302</b>	<b>4.0%</b>	<b>\$ 2,793,276</b>	<b>\$ 107,434</b>	<b>4.0%</b>
<b>Total Direct Expenses</b>	<b>\$ 12,394,535</b>	<b>\$ 12,890,317</b>	<b>\$ 495,781</b>	<b>4.0%</b>	<b>\$ 13,405,929</b>	<b>\$ 515,613</b>	<b>4.0%</b>
<b>Indirect Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>0.0%</b>	<b>\$ -</b>	<b>\$ -</b>	<b>0.0%</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>		<b>\$ -</b>	<b>\$ -</b>	
<b>Total Expenses (B)</b>	<b>\$ 12,394,535</b>	<b>\$ 12,890,317</b>	<b>\$ 495,781</b>	<b>4.0%</b>	<b>\$ 13,405,929</b>	<b>\$ 515,613</b>	<b>4.0%</b>
<b>Change in Assets</b>	<b>\$ (2,747,279)</b>	<b>\$ (2,909,170)</b>	<b>\$ (161,891)</b>	<b>5.9%</b>	<b>\$ (3,025,537)</b>	<b>\$ (116,367)</b>	<b>4.0%</b>
<b>Fixed Assets</b>							
Depreciation	\$ (267,279)	\$ (277,970)	\$ (10,691)	4.0%	\$ (289,089)	\$ (11,119)	4.0%
Computer & Software CapEx	40,000	41,600	1,600	4.0%	43,264	1,664	4.0%
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>\$ (227,279)</b>	<b>\$ (236,370)</b>	<b>\$ (9,091)</b>	<b>4.0%</b>	<b>\$ (245,825)</b>	<b>\$ (116,367)</b>	<b>0.0%</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 12,167,256</b>	<b>\$ 12,653,947</b>	<b>\$ 486,690</b>	<b>4.0%</b>	<b>\$ 13,160,104</b>	<b>\$ 515,613</b>	<b>4.1%</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (2,520,000)</b>	<b>\$ (2,672,800)</b>	<b>\$ (152,800)</b>	<b>6.1%</b>	<b>\$ (2,779,712)</b>	<b>(106,912)</b>	<b>4.0%</b>
<b>FTEs</b>	<b>60</b>	<b>60</b>	<b>-</b>	<b>0.0%</b>	<b>60</b>	<b>-</b>	<b>0.0%</b>

### 2018 and 2019 Projection Analysis

- Assumes overall workload will remain consistent; reflects no additional FTEs and an overall expense increase of approximately 4% per year.

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## Section C – 2017 State (Non-Statutory) Activities 2017 Business Plan and Budget

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## Section C — 2017 State (Non-Statutory) Business Plan and Budget

<b>State (Non-Statutory) Activities</b> (in whole dollars)			
	<b>2016 Budget</b>	<b>2017 Budget</b>	<b>increase (Decrease)</b>
Total FTEs	5.0	5.0	
Direct Expenses	1,029,072	1,059,945	30,873
Indirect Expenses	-	-	-
Inc(Dec) in Fixed Assets	-	-	
Total Funding Requirement	1,029,072	1,059,945	30,873

### State (Non-Statutory) Functional Scope

Texas RE is authorized by Public Utility Commission of Texas (PUCT), and is permitted by NERC, to serve as PUCT's Reliability Monitor for the ERCOT region. Under the direction of PUCT, Texas RE performs audits, investigations, monthly metrics review, and other monitoring and reporting of market entities' compliance with the reliability-related ERCOT Protocols, Operating Guides, and PUCT rules (Regional Rules). Texas RE also monitors the ERCOT Regional Rules creation and modification process and provides technical support to the PUCT regarding proposed reliability-related changes. Texas RE does not perform any enforcement activities related to Regional Rules, but, when needed, provides testimony and technical support to PUCT for its enforcement cases.

### Major 2017 Assumptions and Cost Impacts

- Texas RE will continue to be the Reliability Monitor and perform ERCOT Regional Rules compliance monitoring and reporting for PUCT in 2017.

### 2017 State (Non-Statutory) Goals and Objectives

- Appropriately monitor, investigate, and report to PUCT regarding stakeholder compliance with the Regional Rules.
- Review and assess system disturbances for potential violations of ERCOT Regional Rules and report all findings to PUCT.
- Provide technical expertise to PUCT for the review and modification of ERCOT Regional Rules that impact reliability.
- Provide technical or testimony support as needed to the PUCT for its enforcement of ERCOT Regional Rules violations.

### Funding Sources

- State (Non-Statutory) activities are funded through the ERCOT ISO system administration fee and payment to Texas RE is authorized by the PUCT. Texas RE's total 2017 non-statutory budget and funding is \$1,059,945.
- Total expenses for 2017 are increasing 3% over 2016.

### **Personnel Expenses**

- State (Non-statutory) personnel are remaining constant at 5 FTEs. Personnel expenses are consistent with 2016. One FTE will continue to represent the composite of time spent on non-statutory activities by employees who report to statutory and G&A program areas.

### **Meeting and Travel Expenses**

- Meeting and travel is increasing 12%. The increase is primarily due to mileage for travel to meetings.

### **Operating Expenses**

- Operating expenses are increasing 32.4 % due to rent and office costs associated with the new conference center.

### **Indirect Expenses**

- Costs are being charged directly to the expense line item in 2017, therefore, no indirect expenses are charged.

Section C — 2017 Business Plan – 2017 State (Non-Statutory) Activities

2017 Budget and Projection and 2016 Budget Comparisons

Statement of Activities, Fixed Assets Expenditures and Change in Working Capital					
2016 Budget & Projection, and 2017 Budget					
STATE (NON-STATUTORY)					
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget Over(Under)	2017 Budget	Variance 2016 Budget v 2017 Budget Over(Under)
<b>Funding</b>					
ERO Funding					
NERC Assessments	\$ -	\$ -		\$ -	\$ -
Penalty Sanctions	-	-		-	-
<b>Total NERC Funding</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
PUCT	\$ 1,029,073	\$ 1,029,073		\$ 1,059,945	\$ 30,872
<b>Total Funding (A)</b>	<b>\$ 1,029,073</b>	<b>\$ 1,029,073</b>	<b>\$ -</b>	<b>\$ 1,059,945</b>	<b>\$ 30,872</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 672,103	\$ 672,103		\$ 654,007	\$ (18,096)
Payroll Taxes	51,667	51,667		34,534	(17,133)
Benefits	106,573	106,573		146,306	39,733
Retirement Costs	97,455	97,455		91,568	(5,887)
<b>Total Personnel Expenses</b>	<b>\$ 927,798</b>	<b>\$ 927,798</b>	<b>\$ -</b>	<b>\$ 926,415</b>	<b>\$ (1,383)</b>
<b>Meeting Expenses</b>					
Meetings	\$ -	\$ -		\$ -	-
Travel	1,500	1,500		1,800	\$ 300
Conference Calls	1,000	1,000		1,000	-
<b>Total Meeting Expenses</b>	<b>\$ 2,500</b>	<b>\$ 2,500</b>	<b>\$ -</b>	<b>\$ 2,800</b>	<b>\$ 300</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 22,861	\$ 22,861		\$ 37,852	14,991
Office Rent	50,000	50,000		56,037	6,037
Office Costs	7,220	7,220		9,060	1,840
Professional Services	7,140	7,140		7,650	510
Miscellaneous	-	-		-	-
Depreciation	11,553	11,553		20,131	8,578
<b>Total Operating Expenses</b>	<b>\$ 98,774</b>	<b>\$ 98,774</b>	<b>\$ -</b>	<b>\$ 130,730</b>	<b>\$ 31,956</b>
<b>Total Direct Expenses</b>	<b>\$ 1,029,072</b>	<b>\$ 1,029,072</b>	<b>\$ -</b>	<b>\$ 1,059,945</b>	<b>\$ 30,873</b>
<b>Indirect Expenses</b>	<b>\$ -</b>	<b>\$ -</b>			<b>\$ -</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>		<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 1,029,072</b>	<b>\$ 1,029,072</b>	<b>\$ -</b>	<b>\$ 1,059,945</b>	<b>\$ 30,873</b>
<b>Change in Assets</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ -</b>	<b>\$ 0</b>	<b>\$ 0</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx					
Allocation of Fixed Assets	\$ -	-	\$ -	\$ -	\$ -
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>\$ 1,029,072</b>	<b>\$ 1,029,072</b>	<b>\$ -</b>	<b>\$ 1,059,945</b>	<b>30,873</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ -</b>	<b>\$ 0</b>	<b>\$ 0</b>

Approved by the Texas RE Board of Directors May 24, 2016

## Personnel Analysis

Total FTE's by Program Area	Budget 2016	Projection 2016	Direct FTEs 2017 Budget	Shared FTEs 2017 Budget	Total FTEs 2017 Budget	Change from 2016 Budget
<b>STATE (NON-STATUTORY)</b>						
<b>Operational Programs</b>						
State (Non-Statutory)	4.00	4.00	4.00	0.00	4.00	0.00
<b>Total FTEs Operational Programs</b>	<b>4.00</b>	<b>4.00</b>	<b>4.00</b>	<b>0.00</b>	<b>4.00</b>	<b>0.00</b>
<b>Administrative Programs</b>						
G&A	1.00	1.00	0.00	1.00	1.00	0.00
<b>Total FTEs Administrative Programs</b>	<b>1.00</b>	<b>1.00</b>	<b>0.00</b>	<b>1.00</b>	<b>1.00</b>	<b>0.00</b>
<b>Total FTEs</b>	<b>5.00</b>	<b>5.00</b>	<b>4.00</b>	<b>1.00</b>	<b>5.00</b>	<b>0.00</b>

A shared FTE is defined as an employee who performs both Statutory and Non-Statutory functions.

### **Reserve Analysis — 2016–2017**

Texas RE does not have reserves for State (Non-Statutory) activities due to contractual provisions ensuring minimal risk for this funding.

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## Section D – Supplemental Information

### 2017 Business Plan and Budget

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## Section D – Supplemental Information

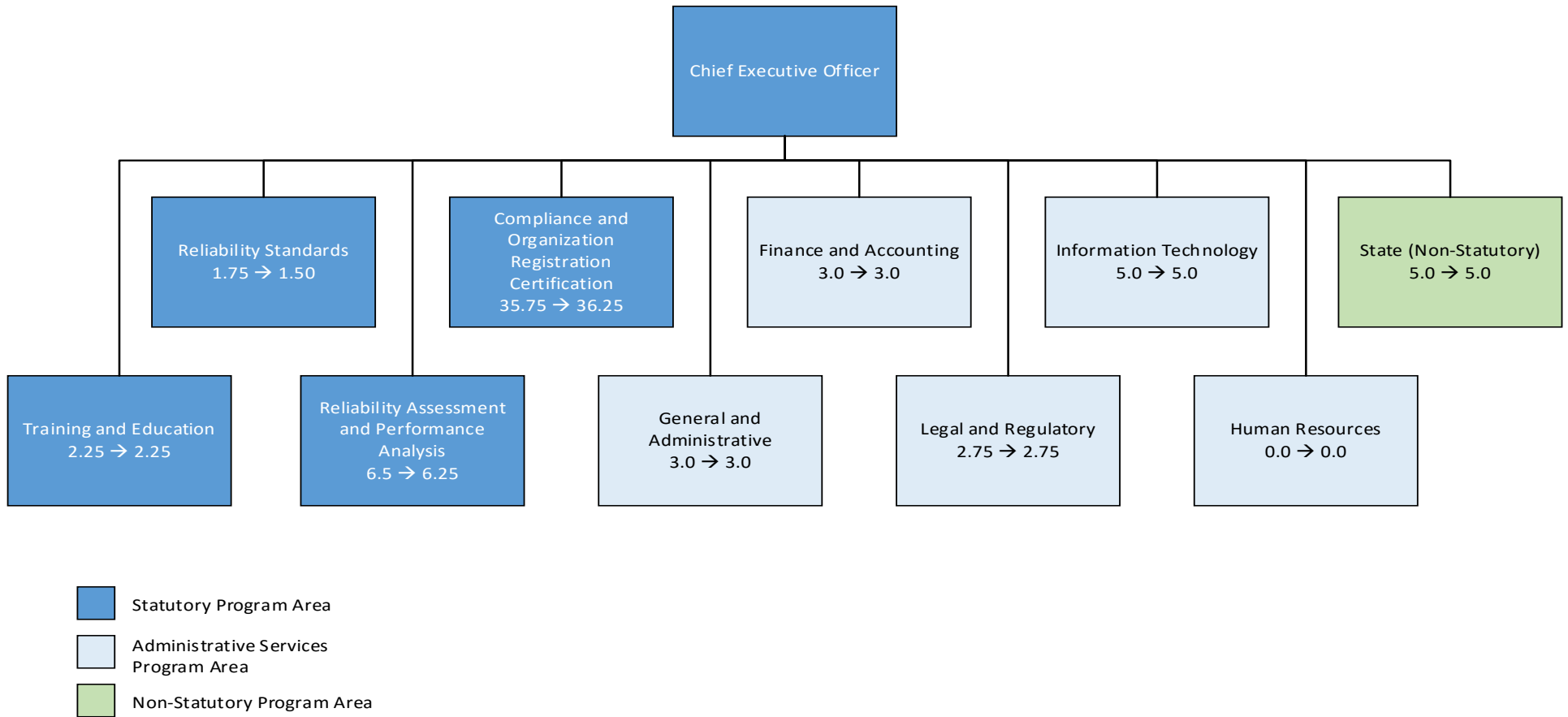
### 2017 Consolidated Statement of Activities by Program, Statutory and State (Non-Statutory)

Statement of Activities and Capital Expenditures by Program 2016 Budget	Total	Statutory Total	State (Non-Statutory) Total	Statutory Total	Reliability Standards (Section 300)	Compliance and Organization Registration and Certification (Section 400 & 401)	Reliability Assessment and Performance Analysis (Section 800)	Training and Education (Section 900)	General and Administrative	Legal and Regulatory	Information Technology	Human Resources	Accounting and Finance	State (Non-Statutory) Total
<b>Funding</b>														
<b>ERO Funding</b>														
NERC Assessments	9,595,256	9,595,256	-	9,595,256	311,198	7,520,606	1,296,656	466,796	-	-	-	-	-	-
Penalty Sanctions	50,000	50,000	-	50,000	1,622	39,189	6,757	2,432	-	-	-	-	-	-
<b>Total NERC Funding</b>	<b>9,645,256</b>	<b>9,645,256</b>	<b>-</b>	<b>9,645,256</b>	<b>312,819</b>	<b>7,559,795</b>	<b>1,303,413</b>	<b>469,229</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
PUCT Fees	1,059,945	-	1,059,945	-	-	-	-	-	-	-	-	-	-	1,059,945
Interest	2,000	2,000	-	2,000	65	1,568	270	97	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>10,707,201</b>	<b>9,647,256</b>	<b>1,059,945</b>	<b>9,647,256</b>	<b>312,884</b>	<b>7,561,363</b>	<b>1,303,683</b>	<b>469,326</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,059,945</b>
<b>Expenses</b>														
<b>Personnel Expenses</b>														
Salaries	7,393,722	6,739,715	654,007	6,739,715	198,994	3,653,924	888,746	188,474	723,102	338,834	442,148	-	305,493	654,007
Payroll Taxes	473,312	438,778	34,534	438,778	12,372	257,246	56,290	12,788	22,136	19,704	36,587	-	21,655	34,534
Benefits	1,429,663	1,283,357	146,306	1,283,357	39,470	693,090	162,569	43,494	67,855	44,880	154,808	-	77,191	146,306
Retirement Costs	1,004,238	912,670	91,568	912,670	27,935	513,071	124,787	26,467	67,844	47,578	62,092	-	42,896	91,568
<b>Total Personnel Expenses</b>	<b>10,300,935</b>	<b>9,374,519</b>	<b>926,415</b>	<b>9,374,519</b>	<b>278,770</b>	<b>5,117,331</b>	<b>1,232,393</b>	<b>271,223</b>	<b>880,937</b>	<b>450,995</b>	<b>695,635</b>	<b>-</b>	<b>447,235</b>	<b>926,415</b>
<b>Meeting Expenses</b>														
Meetings	49,080	49,080	-	49,080	-	2,080	-	30,000	5,500	-	1,500	10,000	-	-
Travel	367,845	366,045	1,800	366,045	13,950	165,587	78,858	3,270	64,475	14,250	17,750	4,000	3,905	1,800
Conference Calls	24,750	23,750	1,000	23,750	1,700	300	-	20,000	-	-	1,750	-	-	1,000
<b>Total Meeting Expenses</b>	<b>441,675</b>	<b>438,875</b>	<b>2,800</b>	<b>438,875</b>	<b>15,650</b>	<b>167,967</b>	<b>78,858</b>	<b>53,270</b>	<b>69,975</b>	<b>14,250</b>	<b>21,000</b>	<b>14,000</b>	<b>3,905</b>	<b>2,800</b>
<b>Operating Expenses</b>														
Consultants & Contracts	471,052	433,200	37,852	433,200	-	205,000	-	5,000	104,000	3,200	28,000	88,000	-	37,852
Office Rent	673,249	617,212	56,037	617,212	-	-	-	-	617,212	-	-	-	-	56,037
Office Costs	753,060	744,000	9,060	744,000	100	16,770	41,360	6,760	108,430	3,415	551,000	6,345	9,820	9,060
Professional Services	527,100	519,450	7,650	519,450	-	-	-	1,000	353,950	30,000	92,000	-	42,500	7,650
Depreciation	287,410	267,279	20,131	267,279	-	-	-	-	267,279	-	-	-	-	20,131
<b>Total Operating Expenses</b>	<b>2,711,871</b>	<b>2,581,141</b>	<b>130,730</b>	<b>2,581,141</b>	<b>100</b>	<b>221,770</b>	<b>41,360</b>	<b>12,760</b>	<b>1,450,871</b>	<b>36,615</b>	<b>671,000</b>	<b>94,345</b>	<b>52,320</b>	<b>130,730</b>
<b>Total Direct Expenses</b>	<b>13,454,480</b>	<b>12,394,535</b>	<b>1,059,945</b>	<b>12,394,535</b>	<b>294,520</b>	<b>5,507,068</b>	<b>1,352,611</b>	<b>337,253</b>	<b>2,401,783</b>	<b>501,860</b>	<b>1,387,635</b>	<b>108,345</b>	<b>503,460</b>	<b>1,059,945</b>
Indirect Expenses	-	-	-	-	159,019	3,842,957	662,579	238,528	(2,401,783)	(501,860)	(1,387,635)	(108,345)	(503,460)	-
Other Non-Operating Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Expenses (B)</b>	<b>13,454,480</b>	<b>12,394,535</b>	<b>1,059,946</b>	<b>12,394,535</b>	<b>453,539</b>	<b>9,350,025</b>	<b>2,015,189</b>	<b>575,782</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,059,945</b>
<b>Change in Assets</b>	<b>(2,747,279)</b>	<b>(2,747,279)</b>	<b>(0)</b>	<b>(2,747,279)</b>	<b>(140,655)</b>	<b>(1,788,662)</b>	<b>(711,506)</b>	<b>(106,456)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0</b>
<b>Fixed Assets</b>														
Depreciation	(267,279)	(267,279)	-	(267,279)	-	-	-	-	(267,279)	-	-	-	-	-
Computer & Software CapEx	40,000	40,000	-	40,000	-	-	-	-	-	-	40,000	-	-	-
Allocation of Fixed Assets	-	-	-	-	(7,371)	(178,138)	(30,713)	(11,057)	267,279	-	(40,000)	-	-	-
<b>Inc(Dec) in Fixed Assets ( C )</b>	<b>(227,279)</b>	<b>(227,279)</b>	<b>-</b>	<b>(227,279)</b>	<b>(7,371)</b>	<b>(178,138)</b>	<b>(30,713)</b>	<b>(11,057)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL BUDGET (=B + C)</b>	<b>12,167,256</b>	<b>12,167,256</b>	<b>-</b>	<b>12,167,256</b>	<b>446,168</b>	<b>9,171,887</b>	<b>1,984,476</b>	<b>564,725</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>(2,520,000)</b>	<b>(2,520,000)</b>	<b>(0)</b>	<b>(2,520,000)</b>	<b>(133,284)</b>	<b>(1,610,524)</b>	<b>(680,793)</b>	<b>(95,399)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0</b>
<b>FTEs</b>	<b>65.00</b>	<b>60.00</b>	<b>5.00</b>	<b>60.00</b>	<b>1.50</b>	<b>36.25</b>	<b>6.25</b>	<b>2.25</b>	<b>3.00</b>	<b>2.75</b>	<b>5.00</b>	<b>-</b>	<b>3.00</b>	<b>5.00</b>

## Statement of Financial Position

Statement of Financial Position			
STATUTORY and STATE (NON- STATUTORY)			
	(Per Audit) 31-Dec-15	Projected 31-Dec-16	Budget 31-Dec-17
<b>ASSETS</b>			
Cash	6,736,141	2,404,335	2,202,756
Accounts receivable, net of allowance for uncollec	-	-	-
Other Receivables	257,268	200,000	200,000
Prepaid expenses and other current assets	214,249	214,249	214,249
Security deposit	39,705	39,705	39,705
Cash value of insurance policies	-	-	-
Property and equipment	917,702	650,423	383,144
<b>Total Assets</b>	<b>8,165,065</b>	<b>3,508,712</b>	<b>3,039,854</b>
<b>LIABILITIES AND NET ASSETS</b>			
Liabilities			
Accounts payable and accrued expenses	573,813	573,813	573,813
Deferred income/rent	637,623	364,065	247,619
Deferred penalty income	-	-	-
Regional assessments	-	-	-
Deferred compensation	-	-	-
Accrued retirement liabilities			
Accrued incentive compensation			
<b>Total Liabilities</b>	<b>1,211,436</b>	<b>937,878</b>	<b>821,432</b>
Unrestricted Net Assets			
Undesignated	6,050,434	2,520,834	2,218,422
Regulator designated	903,195	50,000	-
Total Net Assets	6,953,629	2,570,834	2,218,422
<b>Total Liabilities and Net Assets</b>	<b>8,165,065</b>	<b>3,508,712</b>	<b>3,039,854</b>

2017 Texas RE Combined Statutory and Non-Statutory Organization Chart



Arrow indicates number of FTEs from 2016 to 2017.

**DOCKET NO. RR16-\_\_-000**

**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**2017 BUSINESS PLAN AND BUDGET FILING**

**ATTACHMENT 10**

**WESTERN ELECTRICITY COORDINATING COUNCIL**

**PROPOSED 2017 BUSINESS PLAN AND BUDGET**

# 2017 Business Plan and Budget

## *Western Electricity Coordinating Council*

Approved by: WECC Board of Directors

Date: June 16, 2016



155 North 400 West, Suite 200  
Salt Lake City, Utah 84103-1114

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## Introduction

TOTAL RESOURCES (in whole dollars)				
	2017 Budget	U.S.	Canada	Mexico
Statutory FTEs*	140.0			
Non-statutory FTEs	6.0			
<b>Total FTEs</b>	146.0			
Statutory Expenses	\$ 27,046,236			
Non-Statutory Expenses	\$ 1,750,859			
<b>Total Expenses</b>	\$ 28,797,095			
Statutory Inc(Dec) in Fixed Assets	\$ (249,308)			
Non-Statutory Inc(Dec) in Fixed Assets	\$ (6,550)			
<b>Total Inc(Dec) in Fixed Assets</b>	\$ (255,858)			
Statutory Working Capital Requirement**	\$ 207,448			
Non-Statutory Working Capital Requirement	\$ 24,801			
<b>Total Working Capital Requirement</b>	\$ 232,249			
Total Statutory Funding Requirement	\$ 27,004,376			
Total Non-Statutory Funding Requirement	\$ 1,769,110			
<b>Total Funding Requirement</b>	\$ 28,773,486			
<b>Statutory Funding Assessments</b>	\$ 25,282,000	\$ 22,015,983	\$ 2,865,616	\$ 400,401
<b>Non-Statutory Fees</b>	\$ 1,769,110	\$ 1,680,655	\$ 88,456	\$ -
NEL****	869,883,481	732,956,732	124,208,633	12,718,116
NEL%	100.00%	84.26%	14.28%	1.46%

\*An FTE is defined as a full-time equivalent employee.

\*\*Refer to the Statutory Reserve Analysis on page 44 in Section B.

\*\*\*Refer to the Non-Statutory Reserve Analysis on page 61 in Section C.

\*\*\*\*NEL is defined as Net Energy for Load.

## Organizational Overview

The Western Electricity Coordinating Council (WECC) is a 501(c)(4) entity operating “for the promotion of social welfare.” WECC’s objective is to “assure the near- and long-term reliability of the Western Interconnection.” WECC’s website is <http://www.wecc.biz>.

The Western Interconnection is a geographic area in which the use and generation of electricity is synchronized. This area includes all or part of 14 Western states in the United States, the Canadian provinces of British Columbia and Alberta, and a portion of Baja California Norte, Mexico. As articulated by its Bylaws, WECC will lead the stakeholders in the Western Interconnection to achieve appropriate system reliability, be the premier source of unbiased information, and serve as the trusted thought leader for the Western Interconnection by providing:

- 1) impartial independent review and analysis of reliability issues impacting the Western Interconnection;
- 2) development of electric Reliability Standards incorporating Western Interconnection experience and knowledge;
- 3) consistent and fair monitoring and enforcement activities for compliance with Reliability Standards;
- 4) event analysis and lessons-learned from system events; and



- 5) value for its membership through cost effective and efficient services and practices by:
- being a centralized repository of reliable information relating to the planning and operation of the Bulk Electric System (BES) in the Western Interconnection;
  - coordinating system planning and modeling;
  - sharing of, and providing comment on adherence to, recognized industry best practices;
  - facilitating resolution of market seams and coordination issues;
  - secure sharing of critical reliability data; and
  - providing a robust stakeholder forum.

WECC's business philosophy is guided by three fundamental principles:

***Independence*** – As a 501(c)(4) social welfare organization, our goal is to serve the public interest. WECC represents what is best for reliability within the Western Interconnection with an impartial and unbiased voice.

***Perspective*** – WECC is uniquely situated in a way that allows its subject-matter-experts to develop comprehensive and influential work products for the Western Interconnection.

***Partnering*** – WECC is focused on assuring a reliable Bulk Electric System in the West in collaboration with others who have the same reliability-driven mission.

Our organization and culture revolve around five core values:

***Integrity*** – We are honest, ethical, and trustworthy. We are complete in all of our interactions. We honor our commitments and take personal responsibility for our actions.

***Collaboration*** – We work collaboratively and focus on bringing the best expertise and experience possible to solve the complex reliability challenges faced by the Western Interconnection.

***Excellence*** – We strive for technical and managerial excellence in all that we do.

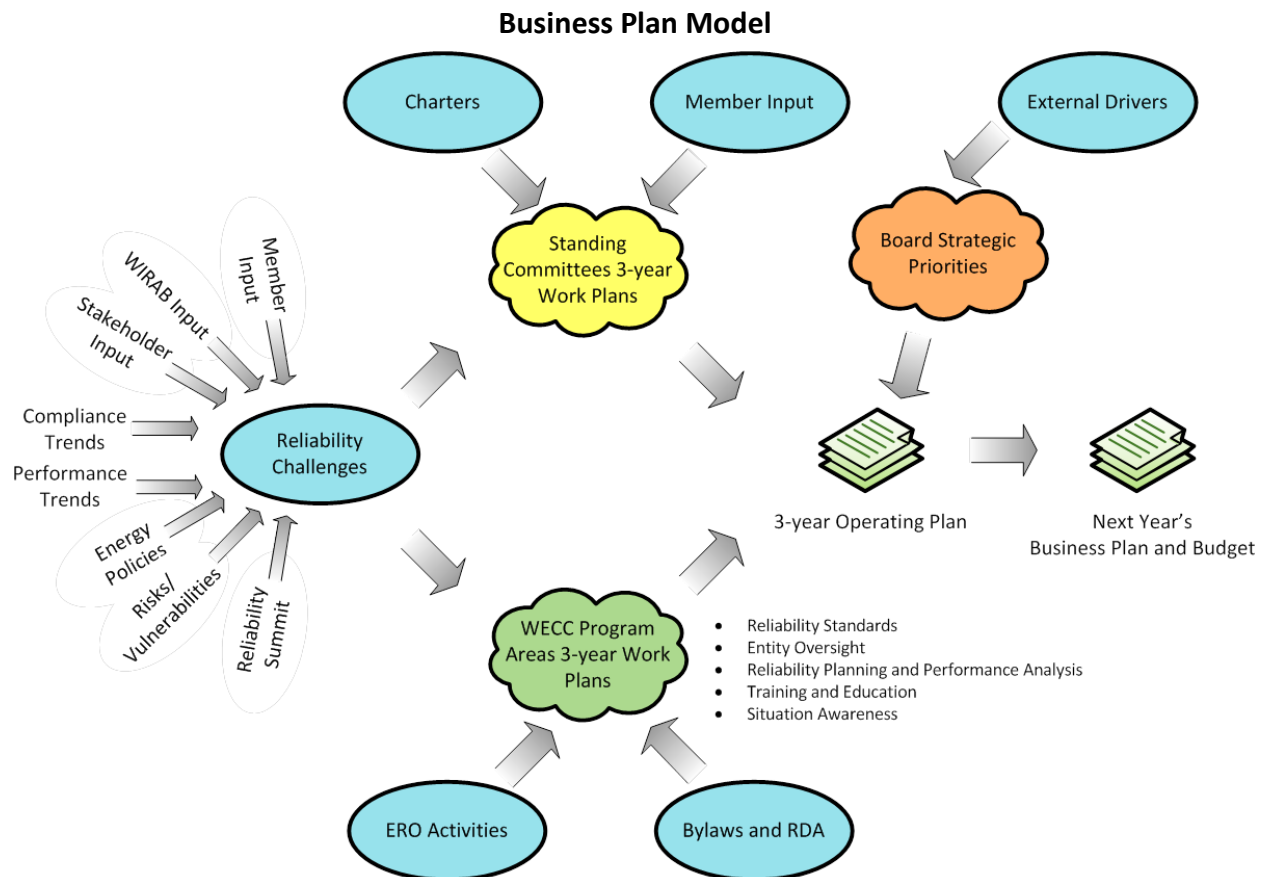
***Professionalism*** – We conduct ourselves with skill, good judgment, and respectful behavior across all of our interactions.

***Inclusiveness*** – We respect the broad set of constituents in the West and their unique needs and perspectives, and will foster an open and participatory environment that encourages contributions (time, talent, ideas, and perspectives) from our staff and our stakeholders.

### **Three-year Business Planning Model**

In 2015, as a direct result of its structure and governance review required by section 4.9 of the WECC Bylaws, the 4.9 Review Work Group and WECC developed a new strategic and operating planning process that builds upon and extends the 2014 Integrated Reliability Assurance Model to all of WECC's work, including committee work. The Business Plan Model highlights the relationships and interactions between the various stakeholders in the WECC business planning process.

A rolling three-year operating plan will provide better forward visibility into activities and costs and, more explicitly, inform the annual Business Plan and Budget filings. The Business Plan Model will help ensure the necessary alignment between the work of WECC management and staff, the work of the Standing Committees and the Transmission Expansion Planning Policy Committee (TEPPC), and the Member Advisory Committee (MAC). It will take several business cycles for the three-year Operating Plan to fully inform the annual Business Plan and Budget.



Key elements of the proposed Business Plan Model include:

- Identifying reliability challenges facing the Western Interconnection, continuing to be informed by member/stakeholder input and various external sources;
- Ensuring Board review and approval of WECC's strategic priorities to address these challenges;
- Developing and aligning the Standing Committees and TEPPC, and the WECC program area work plans. All these work plans will be informed by the reliability challenges, the Board-approved priorities, the requirements set by the North American Electric Reliability Corporation (NERC) and the Electric Reliability Organization (ERO) Enterprise, WECC's Regional Delegation Agreement, and WECC Bylaws;

- Enlisting the re-chartered Joint Guidance Committee (JGC) to play a strong role in ensuring that: 1) plans across the Standing Committees and TEPPC align with WECC's strategic priorities, 2) all of the required/desired work is reflected in the work plans, 3) any duplication of effort is minimized or eliminated, and 4) nothing falls through the cracks;
- Providing Board direction to WECC management or the Board Committees on any specific strategic initiatives in response to external developments as needed; and
- Integrating the various work plans into a three-year operating plan to inform the Business Plan and Budget, thus improving the transparency and linkages between annual budget needs and work plans.

### **Membership and Governance**

WECC has 353 members<sup>1</sup> divided into the following five Membership Classes:

1. Large Transmission Owners
2. Small Transmission Owners
3. Electric Line of Business Entities doing business in the Western Interconnection that do not own, control or operate transmission or distribution lines in the Western Interconnection
4. End Users and entities that represent the interests of end users
5. Representatives of State and Provincial Governments

WECC membership is open to any person or entity that has an interest in the reliable operation of the Western Interconnection BES. WECC membership is not a requirement for participation in the WECC Standards Development Process.<sup>2</sup>

WECC is governed by a nine-member Independent Board of Directors elected by the WECC membership, and WECC's Chief Executive Officer who is the tenth member per a Board resolution. The nine Independent Directors are compensated by WECC for their time.

WECC has five Board Committees that provide functional oversight of WECC operations:

- Finance and Audit Committee (FAC),
- Governance Committee (GC),
- Human Resources and Compensation Committee (HRCC),
- Nominating Committee (NC), and
- Compliance Hearing Body.

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<sup>1</sup> As of May 18, 2016.

<sup>2</sup> Non-WECC members may participate in standards drafting teams and participating stakeholders may vote on Regional Reliability Standards. A Participating Stakeholder is defined in Section 3.23 of the WECC Bylaws and the Participating Stakeholder Application Process is described in Section 8.7.4. WECC's Reliability Standards Voting Procedures are detailed in the Reliability Standards Development Procedures.

Two other Board committees actively engage in some of the core reliability work that WECC conducts:

- Transmission Expansion Planning Policy Committee (TEPPC), and
- Joint Guidance Committee (JGC).

Under the direction of the WECC Board, five Standing Committees provide the Board with technical work and policy recommendations.

1. **The Member Advisory Committee (MAC)** – advises the Board on any matters the Board requests the committee to evaluate or consider, and on matters the MAC deems appropriate. The MAC chair attends WECC Board meetings to provide advice or clarifications, or to respond to Directors’ questions. The Board gives serious consideration to the MAC’s recommendations and responds through a means that the Board determines appropriate. The MAC is comprised of three representatives from each of the five Member Classes and three international representatives, for a total of 18 members. MAC representatives communicate and obtain input from their respective class membership.
2. **WECC Standards Committee (WSC)** – oversees the process for responding to requests for Regional Reliability Standards and Regional Criteria in accordance with the Reliability Standards Development Procedures. The WECC Standards Committee consists of one member from each of the WECC Standards Voting Sectors and a member of the WECC Board who acts as chair of the committee.
3. **Planning Coordination Committee (PCC)** – advises the Board and makes recommendations on all matters within the jurisdiction of WECC pertaining to maintaining reliability through evaluating generation and load balance, and the adequacy of the physical infrastructure of the BES within the Western Interconnection. All member organizations are eligible for representation on the committee.
4. **Operating Committee (OC)** – advises the Board and makes recommendations on all matters within the jurisdiction of WECC pertaining to maintaining reliability through the operation and security of the BES in the Western Interconnection. All member organizations are eligible for representation on the committee.
5. **Market Interface Committee (MIC)** – advises the Board and makes recommendations on the development of consistent Market Interface practices and compatible commercial practices within the Western Interconnection. The MIC considers matters pertaining to the impact of NERC Reliability Standards and WECC Regional Reliability Standards, Regional Criteria, and procedures on the commercial electricity market in the Western Interconnection. The MIC also facilitates analysis regarding the impact of electricity market practices on electric system reliability. All member organizations are eligible for representation on the committee.

Pursuant to Section 215(j) of the Federal Power Act, the Western Governors created the Western Interconnection Regional Advisory Body (WIRAB). WIRAB’s purpose is to advise WECC, the ERO and the Federal Energy Regulatory Commission (FERC) on whether proposed Reliability Standards, and the governance and budgets of the ERO and WECC, are in the public interest.

FERC may request that WIRAB provide advice on other topics. Members are appointed by the Governors/Premiers from Alberta, Arizona, British Columbia, California, Colorado, Idaho, Montana, Nebraska, Nevada, New Mexico, Oregon, South Dakota, Utah, Texas, Washington, Wyoming and Mexico. WECC's budget does not include any costs related to WIRAB operations.

### Statutory Functional Scope

WECC has been approved by FERC as a Regional Entity with authority, pursuant to the WECC/NERC Delegation Agreement, to:

- Participate in the development of NERC Reliability Standards, or modifications thereof, and facilitate the development of regional standards or variances through WECC's Standards Development Process;
- Identify and register responsible entities with NERC and, as needed, certify such entities;
- Monitor and enforce compliance with approved Reliability Standards, in accordance with the NERC Rules of Procedure;
- Analyze and assess system events and disturbances;
- Assess the present and future reliability, adequacy, and security of the Western Interconnection;
- Provide effective training and education; and
- Maintain situation awareness as part of its role in periodic assessments and protection of critical infrastructure.

### 2017 Key Assumptions

NERC and the eight Regional Entities (collectively known as the ERO Enterprise) collaborated in the development of:

- the white paper *Improving Coordinated Operations Across The Electric Reliability Organization (ERO) Enterprise*, commonly referred to as the ERO Enterprise Operating Model;
- an ERO Enterprise Strategic Plan; and
- a set of business planning assumptions, goals, metrics and key deliverables for the 2016-through-2019 period.

NERC and the Regional Entities' business plans and budgets reflect the work mentioned above. The entire set of Common Assumptions is provided in Exhibit A to the NERC 2017 Business Plan and Budget. WECC supports these Common Assumptions as well as assumptions specific to WECC that are described in each statutory program area in [Section A](#).

### 2017 WECC Business Objectives

WECC has established the following long-term framework:

**Impact** - Measures progress toward the mission and long-term objectives that drive the organization.

Objectives:

- Assuring the near- and long-term reliability of the Western Interconnection

**Program** - Measures progress toward the goals and program implementations that drive organizational behavior

Objectives:

- Reliability Planning - address the reliability challenges facing the Interconnection in a meaningful way
- Performance Analysis - provide actionable information to stakeholders
- Risk-based Entity Oversight - focus oversight on the right reliability risks
- Outreach - ensure that WECC engages in the right forward-looking work

**Capacity** - Measures progress at all levels of the organization, thereby enabling it to get things done.

Objectives:

- Stewardship - ensure the organization's resources are being properly deployed
- Delivery - ensure the organization is positioned to succeed
- Capacity - implement key organizational and programmatic functions

### **2017 Overview of Cost Impacts**

WECC's proposed 2017 statutory budget is \$26.80 million, a \$588,000 (2.15 percent) decrease from the 2016 statutory budget. The decrease is mainly attributable to the completion of some Remedial Action Scheme (RAS) modeling software enhancements and other one-time projects, labor float assumption changes based on actual turnover and vacancy rates, market adjustments to salaries, and the elimination of WECC's System Operator Training Program.

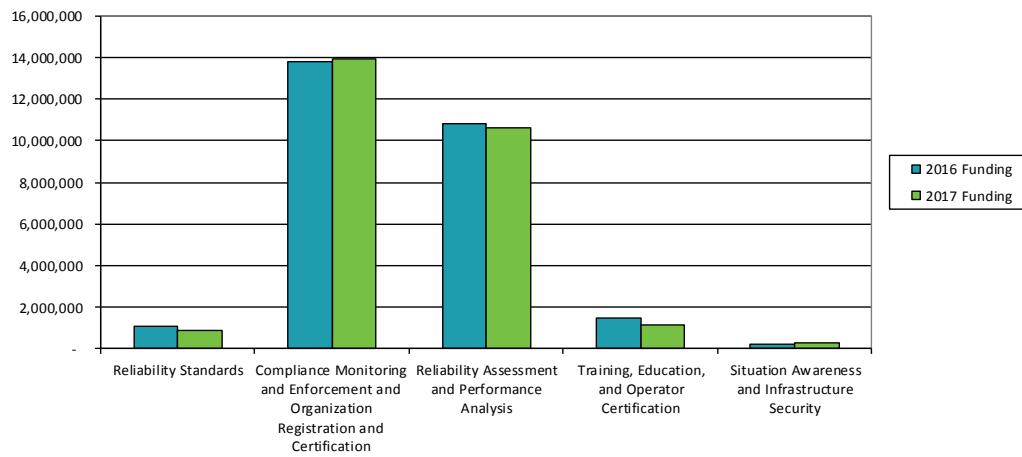
Full-time equivalents (FTE) represent the fractional allocation of a full-time position's cost to one or more functional areas. Headcount (HC) represents either vacant or filled positions. Major drivers of the change between the 2017 and 2016 statutory budgets are as follows:

- Workshops Revenue decreases by \$542,000, primarily due to the elimination of the System Operator Training Program and the elimination of one large revenue-generating outreach event.
- Personnel Expenses increase by a net of \$296,000, primarily due to an assumed three percent average merit increase, continued refinement of labor float percentages, the net reduction of 0.5 FTE, insurance premium rate increases, and increased employee training needs.
- Consultants and Contracts decrease by a net of \$773,000, primarily due to the completion of some RAS modeling enhancements and other one-time Reliability Assessment and Performance Analysis (RAPA) projects as well as the cessation of using consultants as trainers for the System Operator Training Program.
- Office Costs decrease by a net of \$101,000 primarily due to the cancellation of the license fees for the System Operator Training Program simulator and the license fees for the Base Case Coordination System, which was a project terminated in late 2015.

The following table and graphs present a summary of funding requirements for WECC’s primary statutory functional areas:

Program	Budget 2016	Projection 2016	Budget 2017	2016 Budget v 2017 Budget	
				Budget	Variance %
Reliability Standards	\$ 1,089,200	\$ 980,795	\$ 875,535	\$ (213,665)	(19.6%)
Compliance Monitoring and Enforcement and Organization Registration and Certification	13,811,437	13,806,586	13,963,714	152,277	1.1%
Reliability Assessment and Performance Analysis	10,789,121	10,444,733	10,601,213	(187,908)	(1.7%)
Training, Education, and Operator Certification	1,460,475	1,420,324	1,111,942	(348,533)	(23.9%)
Situation Awareness and Infrastructure Security	234,722	211,365	244,523	9,801	4.2%
<b>Total By Program</b>	<b>\$ 27,384,955</b>	<b>\$ 26,863,803</b>	<b>\$ 26,796,927</b>	<b>\$ (588,028)</b>	<b>(2.1%)</b>

**Comparison of 2017 to 2016 Budgeted Funding Requirements**



## Personnel Analysis

In the 2017 budget, there is a net decrease of 0.5 FTEs. WECC eliminated one position in Information Technology (IT) and one position added mid-year in 2016 is in the 2017 budget for the full year. Additionally, WECC realigned some positions between programs areas in 2017 where resources were needed most and to more appropriately classify costs based on the scope of work. Those shifts account for the balance of the changes in FTEs between 2017 and 2016. Details are discussed in the respective program area sections of the Business Plan and Budget.

Total FTEs by Program Area	Budget	Projection	Direct FTEs	Shared	Total FTEs	Change
	2016	2016	2017 Budget	FTEs* 2017 Budget	2017 Budget	from 2016 Budget
<b>STATUTORY</b>						
<b>Operational Programs</b>						
Reliability Standards	4.0	3.0	3.0	0.0	3.0	(1.0)
Compliance Monitoring and Enforcement and Organization Registration and Certification	54.0	54.0	55.0	0.0	55.0	1.0
Training and Education	2.6	2.0	2.0	0.0	2.0	(0.6)
Reliability Assessment and Performance Analysis	32.5	35.0	36.0	0.0	36.0	3.5
Situation Awareness and Infrastructure Security	1.0	1.0	1.0	0.0	1.0	-
<b>Total FTEs Operational Programs</b>	<b>94.1</b>	<b>95.0</b>	<b>97.0</b>	<b>0.0</b>	<b>97.0</b>	<b>2.9</b>
<b>Corporate Services</b>						
Technical Committees and Member Forums	0.0	0.0	0.0	0.0	0.0	-
General & Administrative	21.4	19.5	19.0	0.0	19.0	(2.4)
Information Technology	10.0	8.0	8.0	0.0	8.0	(2.0)
Legal and Regulatory	6.0	6.0	7.0	0.0	7.0	1.0
Human Resources	4.0	3.0	4.0	0.0	4.0	-
Finance and Accounting	5.0	4.7	5.0	0.0	5.0	-
<b>Total FTEs Corporate Services</b>	<b>46.4</b>	<b>41.2</b>	<b>43.0</b>	<b>0.0</b>	<b>43.0</b>	<b>(3.4)</b>
<b>Total FTEs</b>	<b>140.5</b>	<b>136.2</b>	<b>140.0</b>	<b>0.0</b>	<b>140.0</b>	<b>(0.5)</b>

\*A shared FTE is defined as an employee who performs both Statutory and Non-Statutory functions.



## 2016 Budget and Projection and 2017 Budget Comparisons

Statement of Activities, Fixed Assets Expenditures, and Change in Working Capital 2016 Budget & Projection, and 2017 Budget					
STATUTORY					
	2016 Budget	2016 Projection	Variance 2016 Budget v 2016 Projection Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>WECC Funding</b>					
WECC Assessments	\$ 25,032,134	\$ 25,032,138	\$ 4	\$ 25,282,000	\$ 249,866
Penalty Sanctions	1,983,700	1,983,700	-	1,059,500	(924,200)
<b>Total WECC Funding</b>	<b>\$ 27,015,834</b>	<b>\$ 27,015,838</b>	<b>\$ 4</b>	<b>\$ 26,341,500</b>	<b>\$ (674,334)</b>
Membership Dues	\$ -	\$ -	\$ -	\$ -	\$ -
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	1,129,500	775,321	(354,179)	587,876	(541,624)
Interest	84,000	93,249	9,249	75,000	(9,000)
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 28,229,334</b>	<b>\$ 27,884,408</b>	<b>\$ (344,926)</b>	<b>\$ 27,004,376</b>	<b>\$ (1,224,958)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 14,552,825	\$ 14,077,198	\$ (475,627)	\$ 14,681,223	\$ 128,398
Payroll Taxes	1,047,090	1,003,030	(44,060)	1,056,810	9,720
Benefits	2,074,608	2,211,633	137,025	2,219,528	144,920
Retirement Costs	1,259,074	1,299,671	40,597	1,272,165	13,091
<b>Total Personnel Expenses</b>	<b>\$ 18,933,597</b>	<b>\$ 18,591,531</b>	<b>\$ (342,066)</b>	<b>\$ 19,229,726</b>	<b>\$ 296,129</b>
<b>Meeting Expenses</b>					
Meetings	\$ 820,200	\$ 753,473	\$ (66,727)	\$ 726,768	\$ (93,432)
Travel	1,173,371	1,341,700	168,329	1,283,164	109,793
Conference Calls	70,823	105,391	34,568	72,397	1,574
<b>Total Meeting Expenses</b>	<b>\$ 2,064,394</b>	<b>\$ 2,200,563</b>	<b>\$ 136,169</b>	<b>\$ 2,082,329</b>	<b>\$ 17,935</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 3,271,170	\$ 3,131,030	\$ (140,140)	\$ 2,498,270	\$ (772,900)
Office Rent	936,988	941,138	4,150	938,050	1,062
Office Costs	1,655,424	1,457,554	(197,870)	1,554,255	(101,169)
Professional Services	1,051,975	1,018,852	(33,123)	986,450	(65,525)
Miscellaneous	-	-	-	-	-
Depreciation	948,609	716,407	(232,202)	367,858	(580,751)
<b>Total Operating Expenses</b>	<b>\$ 7,864,166</b>	<b>\$ 7,264,981</b>	<b>\$ (599,185)</b>	<b>\$ 6,344,883</b>	<b>\$ (1,519,283)</b>
<b>Total Direct Expenses</b>	<b>\$ 28,862,157</b>	<b>\$ 28,057,075</b>	<b>\$ (805,081)</b>	<b>\$ 27,656,938</b>	<b>\$ (1,205,219)</b>
<b>Indirect Expenses</b>	<b>\$ (628,953)</b>	<b>\$ (571,515)</b>	<b>\$ 57,438</b>	<b>\$ (610,702)</b>	<b>\$ 18,251</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 28,233,204</b>	<b>\$ 27,485,560</b>	<b>\$ (747,643)</b>	<b>\$ 27,046,236</b>	<b>\$ (1,186,968)</b>
<b>Change in Assets</b>	<b>\$ (3,870)</b>	<b>\$ 398,848</b>	<b>\$ 402,717</b>	<b>\$ (41,860)</b>	<b>\$ (37,990)</b>
<b>Fixed Assets</b>					
Depreciation	\$ (948,609)	\$ (716,407)	\$ 232,203	\$ (367,858)	\$ 580,751
Computer & Software CapEx	55,000	25,004	(29,996)	35,000	(20,000)
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	30,000	27,727	(2,273)	77,000	47,000
Leasehold Improvements	-	5,595	5,595	-	-
Allocation of Fixed Assets	15,361	11,780	(3,580)	6,550	(8,811)
<b>Incr(Dec) in Fixed Assets (C)</b>	<b>\$ (848,249)</b>	<b>\$ (646,300)</b>	<b>\$ 201,948</b>	<b>\$ (249,308)</b>	<b>\$ 598,940</b>
<b>TOTAL BUDGET (B+C)</b>	<b>\$ 27,384,955</b>	<b>\$ 26,839,260</b>	<b>\$ (545,695)</b>	<b>\$ 26,796,928</b>	<b>\$ (588,028)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (A-B-C)</b>	<b>\$ 844,379</b>	<b>\$ 1,045,148</b>	<b>\$ 200,769</b>	<b>\$ 207,448</b>	<b>\$ (636,930)</b>
FTEs	140.5	142.0	1.5	140.0	(0.5)
HC	141.0	142.0	1.0	140.0	(1.0)

# Section A

## Statutory Programs

### *2017 Business Plan and Budget*

## Section A — 2017 Business Plan and Budget - Statutory Programs

### Reliability Standards Program

Reliability Standards Program (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	4.0	3.0	(1.0)
Direct Expenses	\$ 680,140	\$ 573,461	\$ (106,679)
Indirect Expenses	\$ 419,301	\$ 305,349	\$ (113,952)
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ (10,241)	\$ (3,275)	\$ 6,966
Total Funding Requirement	\$ 1,089,200	\$ 875,535	\$ (213,665)

### Program Scope and Functional Description

The WECC Reliability Standards Program supports the NERC Reliability Standards Program as well as facilitates the development of WECC Regional Reliability Standards (RRS), WECC Regional Variances to NERC Reliability Standards, and WECC Regional Criteria. WECC supports the development of regional variances to a NERC Reliability Standard when it is necessary to address reliability issues within the Western Region that are necessitated by a physical difference in the BES or in instances where more stringent performance is desired by Region stakeholders. WECC will only develop an RRS (rather than a variance) when a NERC Reliability Standard addressing a reliability issue does not exist.

Regional Criteria may be necessary to implement, augment or comply with NERC Reliability Standards, but they are not Reliability Standards and are not enforceable. Regional Criteria may include acceptable operating or planning parameters, guides, or other documents used to enhance BES reliability.

### 2017 Key Assumptions

- WECC expects that a significant proportion of the work required to develop Regional Reliability Standards, variances to NERC Reliability Standards, and Regional Criteria will continue to be performed by voluntary stakeholder participation.
- WECC will continue to rely on stakeholder volunteers for the staffing of the majority of NERC Standards drafting teams. WECC staff may, at times, participate as drafting team members or observers.
- WECC Standards staff will take an active role in the coordination and communication of NERC Standards drafting teams' activities to the Western stakeholders.
- WECC may need to develop one or more RRSs to address any regional obligations in this area, depending on the final treatment of the NERC Fill-in-the-Blank Standards. However, WECC supports NERC's efforts to replace all fill-in-the-blank standards with standards applicable to the appropriate registered entity, and doesn't anticipate it will be necessary to develop additional RRSs to address fill-in-the-blank standards.
- WECC will evaluate information obtained from audit and enforcement experience as well as information learned through events analysis to determine whether any new RRSs or revisions to existing RRSs are necessary.

- WECC will complete several current WECC RRS and Regional Criteria projects to allow for development work on unforeseen future projects.
- WECC will undertake a review of existing WECC RRSs to determine whether any are candidates for incorporation as a regional variance to a continent-wide NERC Reliability Standard.
- Integration of renewable resources may require new or modified NERC Reliability Standards.
- WECC will support the concept of and will participate, when appropriate, in the enhanced periodic reviews of NERC Reliability Standards.
- The WECC Standards Development Process is assumed to have reached a steady state and one vacant position will transfer to RAPA to broaden analytical capabilities.

### **2017 Goals and Key Deliverables**

- Ensure the Western Interconnection perspective is represented in NERC Continent-wide Reliability Standards and, if necessary, through the development of regional variances.
- Ensure that the RRSs and Regional Criteria developed using the WECC Reliability Standards Development Procedure meet the needs of the Western stakeholders.
- Ensure that development of RRSs and Regional Criteria is in accordance with the most recent WECC Reliability Standards Development Procedures.
- Ensure that WECC members and stakeholders are informed and engaged in NERC Standards development efforts.
- Provide leadership and guidance to encourage Western Interconnection stakeholder awareness and participation in the development of NERC Results-Based Standards and participation in enhanced periodic reviews of existing NERC Standards.
- Undertake regular outreach to keep stakeholders informed about the status of NERC and WECC Standards development activities.
- Provide support to NERC's informal outreach and enhanced periodic review efforts.
- Post updates and provide enhancements to the WECC Standards Web pages.
- Facilitate and support the activities of the WECC Standards Committee.
- Continue support of the NERC Standards Committee and its subcommittees.
- Ensure that WECC's procedures are updated as necessary to meet expectations of any remaining fill-in-the-blank standards.

### **Resource Requirements/Explanation of Significant Changes**

#### **Personnel Expenses**

- Personnel Expenses decrease by a net of \$100,000 primarily due to the transfer of one position (1 FTE) to RAPA, continued refinement of the labor float rate based on actual turnover and vacancy rates, and a three-percent average merit increase.

#### **Meeting Expenses**

- No significant changes.

#### **Operating Expenses**

- No significant changes.

**Fixed Assets**

- No significant changes.

See Section B – Supplemental Financial Information for explanations of other variances between the 2016 and 2017 budgets.

## Reliability Standards Program

Funding sources and related expenses for the Reliability Standards section of the 2017 Business Plan and Budget are shown in the table below.

Statement of Activities, Fixed Assets Expenditures, and Change in Working Capital					
2016 Budget & Projection, and 2017 Budget					
RELIABILITY STANDARDS					
	2016 Budget	2016 Projection	Variance 2016 Budget v 2016 Projection Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>WECC Funding</b>					
WECC Assessments	\$ 1,034,890	\$ 1,034,890	\$ -	\$ 847,225	\$ (187,665)
Penalty Sanctions	84,323	84,323	-	32,768	(51,555)
<b>Total WECC Funding</b>	<b>\$ 1,119,213</b>	<b>\$ 1,119,213</b>	<b>\$ -</b>	<b>\$ 879,993</b>	<b>\$ (239,220)</b>
Membership Dues	-	-	-	-	-
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	3,571	3,964	393	2,320	(1,251)
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 1,122,784</b>	<b>\$ 1,123,177</b>	<b>\$ 393</b>	<b>\$ 882,313</b>	<b>\$ (240,471)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 518,048	\$ 435,015	\$ (83,033)	\$ 440,237	\$ (77,811)
Payroll Taxes	37,302	30,799	(6,503)	30,420	(6,882)
Benefits	44,778	30,544	(14,234)	36,238	(8,540)
Retirement Costs	43,757	39,151	(4,606)	37,185	(6,572)
<b>Total Personnel Expenses</b>	<b>\$ 643,885</b>	<b>\$ 535,509</b>	<b>\$ (108,376)</b>	<b>\$ 544,080</b>	<b>\$ (99,805)</b>
<b>Meeting Expenses</b>					
Meetings	\$ 1,420	\$ 1,206	\$ (214)	\$ 960	\$ (460)
Travel	26,925	22,630	(4,295)	19,175	(7,750)
Conference Calls	2,565	1,616	(949)	3,601	1,036
<b>Total Meeting Expenses</b>	<b>\$ 30,910</b>	<b>\$ 25,453</b>	<b>\$ (5,457)</b>	<b>\$ 23,736</b>	<b>\$ (7,174)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	-	-	-	-	-
Office Rent	-	-	-	-	-
Office Costs	5,345	4,608	(737)	5,645	300
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 5,345</b>	<b>\$ 4,608</b>	<b>\$ (737)</b>	<b>\$ 5,645</b>	<b>\$ 300</b>
<b>Total Direct Expenses</b>	<b>\$ 680,140</b>	<b>\$ 565,570</b>	<b>\$ (114,570)</b>	<b>\$ 573,461</b>	<b>\$ (106,679)</b>
<b>Indirect Expenses</b>	<b>\$ 419,301</b>	<b>\$ 421,116</b>	<b>\$ 1,815</b>	<b>\$ 305,349</b>	<b>\$ (113,952)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 1,099,441</b>	<b>\$ 986,686</b>	<b>\$ (112,755)</b>	<b>\$ 878,810</b>	<b>\$ (220,631)</b>
<b>Change in Assets</b>	<b>\$ 23,343</b>	<b>\$ 136,491</b>	<b>\$ 113,148</b>	<b>\$ 3,503</b>	<b>\$ (19,840)</b>
<b>Fixed Assets</b>					
Depreciation	-	-	-	-	-
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	(10,241)	(5,891)	4,350	(3,275)	6,966
<b>Incr(Dec) in Fixed Assets (C)</b>	<b>\$ (10,241)</b>	<b>\$ (5,891)</b>	<b>\$ 4,350</b>	<b>\$ (3,275)</b>	<b>\$ 6,966</b>
<b>TOTAL BUDGET (B+C)</b>	<b>\$ 1,089,200</b>	<b>\$ 980,795</b>	<b>\$ (108,405)</b>	<b>\$ 875,535</b>	<b>\$ (213,665)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (A-B-C)</b>	<b>\$ 33,584</b>	<b>\$ 142,382</b>	<b>\$ 108,798</b>	<b>\$ 6,778</b>	<b>\$ (26,806)</b>
FTEs	4.0	3.0	(1.0)	3.0	(1.0)
HC	4.0	3.0	(1.0)	3.0	(1.0)

## Compliance Monitoring and Enforcement and Organization Registration and Certification Program

Compliance Monitoring and Enforcement and Organization Registration and Certification Program (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	54.0	55.0	1.0
Direct Expenses	\$ 8,322,754	\$ 8,425,668	\$ 102,914
Indirect Expenses	\$ 5,660,573	\$ 5,598,091	\$ (62,482)
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ (171,890)	\$ (60,045)	\$ 111,845
Total Funding Requirement	\$ 13,811,437	\$ 13,963,714	\$ 152,277

### Program Scope and Functional Description

WECC's Compliance Monitoring and Enforcement and Organization Registration and Certification Program Area (CMEP) is implemented by WECC Registered Entity Oversight staff members who are independent of all users, owners, and operators of the BES. All approved and effective mandatory Reliability Standards are monitored and enforced under the CMEP, including Operations and Planning (O&P) Standards made mandatory pursuant to FERC Order 693, the Critical Infrastructure Protection (CIP) Standards under FERC Order 706 and various other FERC orders approving standards since Orders 693 and 706. To accomplish its objectives, Entity Oversight staff is divided into five main areas: 1) O&P Audits and Investigations, 2) CIP Audits and Investigations, 3) Enforcement, 4) Risk Analysis, and 5) Program Administration.

As WECC fully implements the risk-based concepts and tailors compliance monitoring strategies for individual entities, resource requirements are shifting to more comprehensive assessment of reliability, regional, and entity risk from the former one-size-fits-all approach to auditing. Auditors are supporting the Inherent Risk Assessment (IRA) and Internal Controls Evaluation (ICE), both critical to audit planning. This shift will allow for flexibility in the audit and compliance monitoring program to more effectively use audit staff and respond to potential reliability issues proactively. One example is more focus on misoperations and the various follow up activities and coordination between entities.

The recently codified Multi-Region Registered Entity, or Coordinated Oversight Program, has been implemented across the ERO with minimal impact to WECC. FERC has essentially approved phase I of the ongoing Risk-Based Registration initiative with some guidance for additional information.

### Compliance in Alberta, British Columbia, and Mexico

Alberta and British Columbia, Canada; and Baja California Norte, Mexico are all part of the WECC footprint, and have adopted or are adopting mandatory Reliability Standards based on FERC-approved Standards. WECC has entered into agreements with the Alberta Market Surveillance Administrator (MSA), the British Columbia Utilities Commission (BCUC), and Mexico's Comisión Federal de Electricidad (CFE) under which WECC performs compliance monitoring activities to help assure reliability across international borders within the Western Interconnection.

## 2017 Key Assumptions

- WECC provides support, as needed, for activities undertaken subject to the ERO-Enterprise Strategic Plan, and in fulfilling WECC's role as noted above.
- WECC Entity Oversight responds to FERC directives and orders as well as to significant new initiatives not currently identified that may be generated by FERC or by NERC and the Regional Entities.
- WECC has fully integrated risk-based concepts in compliance monitoring activities and will continue to refine the program working with the ERO to ensure a non-discriminatory process in assessing risk and conducting CMEP activities.
- Recommendations from the NERC review of the WECC IRA and ICE processes will be accomplished with existing resources, process improvements and reprioritized staff efforts. Any additional workload will be handled with our existing FTEs through identification of efficiencies and work process improvement.
- WECC will use compliance program results and system events to identify emerging reliability challenges and where existing NERC Reliability Standards can be improved or clarified.
- WECC will have completed IRAs of all three-year-audit entities in early 2017 and will shift focus to detailed compliance oversight plans for all the Balancing Authorities, Transmission Operators and the Reliability Coordinator.
- In consultation with the international compliance enforcement authorities in the Western Interconnection, WECC will incorporate some elements of the risk-based CMEP for international entities. WECC does not conduct an IRA or ICE for international entities at this time.
- WECC has planned 17 on-site audits, 18 offsite audits and three spot checks of registered entities for 2017. This may change based on broader Interconnection and sub-regional risk assessment, and the identification of emerging risks that require proactive compliance monitoring.<sup>3</sup>
- Additional off-site audits will be determined from risk-based analysis.
- WECC does not anticipate any hearings in 2017.
- WECC adds one engineer development position to the oversight staff in 2017. This position is a redistribution of an FTE from another program area within the current WECC budget.

## 2017 Goals and Key Deliverables

- Monitor and enforce compliance with mandatory standards in accordance with the WECC/NERC Delegation Agreement, including the Rules of Procedure and the CMEP within the U.S. With respect to non-U.S. jurisdictions, monitor compliance in accordance with the approved memoranda of understanding with Canadian and Mexican authorities.
- Work with registered entities within the WECC Region to promote a strong culture of compliance and reliability improvement. Provide feedback to the registration and standards programs as part of WECC's Business Plan Model.

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<sup>3</sup> The 2017 schedule of on-site audits, offsite audits, and spot checks is based on the risk assessment and analysis process, and is subject to change.



- Identify key areas needing improvement based on compliance program results and system events, and implement educational efforts to improve compliance in those areas.
- Identify where existing NERC Reliability Standards can be improved or clarified.
- Participate in and represent the Western Interconnection on issues that will impact WECC in regard to NERC and regional initiatives, for example: refining risk-based concepts in compliance monitoring and enforcement for the risk-based CMEP, streamlining enforcement processing, increasing consistency across the Regions, and reviewing information technology needs.
- Monitor and manage enforcement measures and metrics in support of the ERO-Enterprise Strategic Plan including caseload index, violation aging, and mitigation plan aging; collaborate with the ERO enterprise to develop better measures of program effectiveness.
- Develop processes to demonstrate rigor and competency in the implementation of risk-based compliance monitoring activities.
- Develop a process to increase flexibility in the use of compliance monitoring resources while meeting statutory obligations and addressing emerging reliability risks in a proactive manner.
- Capture resource changes and impacts of the full integration of risk-based concepts in the compliance monitoring activities.
- Conduct outreach to the industry in various forums; webinars, conferences and entity specific engagement as part of the Business Plan Model demonstrating feedback loops and inter-relationships across WECC.

### **Resource Requirements/Explanation of Significant Changes**

#### **Personnel Expenses**

- Personnel Expenses increase by a net of \$94,000 due to the reclassification of one position (1 FTE) from General and Administrative, continued refinement of the labor float rate based on actual turnover and vacancy rates, and a three-percent average merit increase.

#### **Meeting Expenses**

- Travel Expense increases by \$10,000 due to additional entity outreach and travel for an offsite WECC Annual Board Meeting.

#### **Operating Expenses**

- Consultants and Contracts decrease by \$22,000 due to an overall reduction in contractual labor for compliance audits.
- Office Costs increase by \$48,000, primarily due to webCDMS enhancements, equipment rental fees for a printer, and increases in office supplies to align the budget with historical needs.

#### **Fixed Assets**

- No significant changes.

See Section B – Supplemental Financial Information for explanations of other variances between the 2016 and 2017 budgets.

## Compliance Monitoring and Enforcement and Organization Registration and Certification Program

Funding sources and related expenses for the Compliance Monitoring and Enforcement and Organization Registration and Certification section of the 2017 Business Plan are shown in the table below.

Statement of Activities, Fixed Assets Expenditures, and Change in Working Capital 2016 Budget & Projection, and 2017 Budget					
COMPLIANCE MONITORING AND ENFORCEMENT AND ORGANIZATION REGISTRATION AND CERTIFICATION					
	2016 Budget	2016 Projection	Variance 2016 Budget v 2016 Projection Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>WECC Funding</b>					
WECC Assessments	\$ 13,047,128	\$ 13,047,131	\$ 3	\$ 13,428,540	\$ 381,412
Penalty Sanctions	1,138,361	1,138,361	-	600,748	(537,613)
<b>Total WECC Funding</b>	<b>\$ 14,185,489</b>	<b>\$ 14,185,492</b>	<b>\$ 3</b>	<b>\$ 14,029,288</b>	<b>\$ (156,201)</b>
Membership Dues	\$ -	\$ -	\$ -	\$ -	\$ -
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	3,600	-	(3,600)	-	(3,600)
Interest	48,204	53,512	5,308	42,526	(5,678)
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 14,237,293</b>	<b>\$ 14,239,004</b>	<b>\$ 1,711</b>	<b>\$ 14,071,814</b>	<b>\$ (165,479)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 5,288,714	\$ 5,183,829	\$ (104,885)	\$ 5,335,104	\$ 46,390
Payroll Taxes	411,811	385,996	(25,815)	415,384	3,573
Benefits	648,318	708,206	59,888	693,285	44,967
Retirement Costs	451,633	436,705	(14,928)	450,238	(1,395)
<b>Total Personnel Expenses</b>	<b>\$ 6,800,476</b>	<b>\$ 6,714,735</b>	<b>\$ (85,741)</b>	<b>\$ 6,894,011</b>	<b>\$ 93,535</b>
<b>Meeting Expenses</b>					
Meetings	\$ 1,948	\$ 1,690	\$ (258)	\$ 9,810	\$ 7,862
Travel	696,704	772,074	75,370	706,338	9,634
Conference Calls	13,339	11,946	(1,393)	12,900	(439)
<b>Total Meeting Expenses</b>	<b>\$ 711,991</b>	<b>\$ 785,711</b>	<b>\$ 73,720</b>	<b>\$ 729,048</b>	<b>\$ 17,057</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 472,170	\$ 423,432	\$ (48,738)	\$ 450,270	\$ (21,900)
Office Rent	-	-	-	-	-
Office Costs	304,481	305,630	1,149	352,339	47,858
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	33,636	-	(33,636)	-	(33,636)
<b>Total Operating Expenses</b>	<b>\$ 810,287</b>	<b>\$ 729,062</b>	<b>\$ (81,225)</b>	<b>\$ 802,609</b>	<b>\$ (7,678)</b>
<b>Total Direct Expenses</b>	<b>\$ 8,322,754</b>	<b>\$ 8,229,508</b>	<b>\$ (93,246)</b>	<b>\$ 8,425,668</b>	<b>\$ 102,914</b>
<b>Indirect Expenses</b>	<b>\$ 5,660,573</b>	<b>\$ 5,685,075</b>	<b>\$ 24,502</b>	<b>\$ 5,598,091</b>	<b>\$ (62,482)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 13,983,327</b>	<b>\$ 13,914,583</b>	<b>\$ (68,744)</b>	<b>\$ 14,023,759</b>	<b>\$ 40,432</b>
<b>Change in Assets</b>	<b>\$ 253,966</b>	<b>\$ 324,421</b>	<b>\$ 70,455</b>	<b>\$ 48,055</b>	<b>\$ (205,911)</b>
<b>Fixed Assets</b>					
Depreciation	\$ (33,636)	\$ -	\$ 33,636	\$ -	\$ 33,636
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	(138,254)	(107,997)	30,257	(60,045)	78,209
<b>Incr(Dec) in Fixed Assets (C)</b>	<b>\$ (171,890)</b>	<b>\$ (107,997)</b>	<b>\$ 63,893</b>	<b>\$ (60,045)</b>	<b>\$ 111,845</b>
<b>TOTAL BUDGET (B+C)</b>	<b>\$ 13,811,437</b>	<b>\$ 13,806,586</b>	<b>\$ (4,851)</b>	<b>\$ 13,963,714</b>	<b>\$ 152,277</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (A-B-C)</b>	<b>\$ 425,856</b>	<b>\$ 432,418</b>	<b>\$ 6,562</b>	<b>\$ 108,100</b>	<b>\$ (317,756)</b>
FTEs	54.0	54.0	-	55.0	1.0
HC	54.0	54.0	-	55.0	1.0

**Reliability Assessment and Performance Analysis Program**

<b>Reliability Assessment and Performance Analysis</b> (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	32.5	36.0	3.5
Direct Expenses	\$ 8,035,786	\$ 7,119,721	\$ (916,065)
Indirect Expenses	\$ 3,410,320	\$ 3,664,205	\$ 253,885
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ (656,985)	\$ (182,713)	\$ 474,272
Total Funding Requirement	\$ 10,789,121	\$ 10,601,213	\$ (187,908)

**Program Scope and Functional Description**

WECC conducts a variety of assessments and studies essential to the reliable planning and operation of the BES in the Western Interconnection. In addition, WECC compiles and distributes planning data and information that is used by WECC stakeholders to aid in local planning studies. These integrated assessment and planning efforts enhance WECC's overall ability to participate in, and respond to, the major reliability and public policy issues emerging both in the Western Interconnection and nationally.

The RAPA program area is organized into three departments:

1. The Performance Analysis Department conducts robust analyses on the historical operation and performance of the Western Interconnection to assess Interconnection-wide risks and vulnerabilities, and to identify best practices.
2. The Events Analysis Department performs analyses to recognize and study, in detail, system conditions that impact or have the potential to impact reliable operations. This is to ensure a full understanding of and learning from any events.
3. The Reliability Planning Department develops and maintains WECC's integrated capability to study Western Interconnection reliability issues for the near- and long-term planning horizon. The studies, made in close collaboration with the WECC Member Committees, consider both system adequacy and system stability.

In 2014, the WECC Board affirmed the following as key strategic priorities for the organization:

- recognition of reliability implications of the West's changing resource mix;
- institutionalization of operating practices across our registered entities, which will improve reliability; and
- improvement in timeliness and dissemination of lessons learned from event analyses.

It is expected that the WECC Board will refresh the strategic priorities in December 2016, which will inform work within the RAPA program area. While it is not expected that the list will change dramatically, to the extent that it does, RAPA will revise its work plan as needed.

## 2017 Key Assumptions

- WECC will continue to play a leadership role in the identification of emerging reliability challenges in the Western Interconnection.
- WECC will use its suite of planning models to perform integrated reliability analyses of strategic priority challenges identified as a result of its three-year planning process.
- WECC will add three engineering positions in 2017 to broaden analytical capabilities and for workforce planning.
  - One position will transfer from Standards to RAPA to support development of special reliability assessments and data collection in conjunction with NERC and ERO initiatives.
  - One position will transfer from Information Technology for the Engineer Development Program.
  - One position will transfer from Training and Education to broaden technical knowledge and capabilities related to the impact of fuel availability for the resource fleet in the Western Interconnection.
- WECC will continue the development of RAS and contingency definition models for use in power flow and stability simulation programs.
- The Environmental Protection Agency's (EPA) proposed Clean Power Plan will continue to work its way through the legal process. WECC will study Interconnection-wide reliability impacts of state plans, should the rule be upheld.
- As the resource mix in the West continues to change, the dependence on natural gas used for electric generation will continue to increase. WECC will take an active role in understanding how the adequacy of the natural gas infrastructure affects electric reliability.
- The JGC will implement the three-year planning process with the Member Committees to ensure alignment between staff and Member Committee work plans.

## 2017 Goals and Key Deliverables

- Implement the three-year planning cycle, in conjunction with the JGC, to align staff and Member Committee work plans in support of the Board-approved strategic priorities.
- Proactively coordinate internally and with stakeholders to ensure that emerging reliability challenges are identified and addressed in work plans.
- Produce Interconnection-wide base cases that include RAS by requesting RAS owners to provide data as part of the Base Case Development Process.
- Prepare Interconnection-wide power flow and stability base cases and conduct studies to address key reliability challenges facing the Interconnection.
- Facilitate dynamic model development.
- Develop and maintain a database for production cost and capital cost models and conduct system adequacy analyses to meet the needs of NERC, WECC and stakeholders.
- Enhance probabilistic-based planning and analysis tools and capabilities.

- Conduct reliability assessments evaluating the adequacy and security of the system in the planning horizon, including fuel infrastructure adequacy used for generation resources.
- Use data from actual system disturbances to validate power flow and stability base case models, and to identify near-misses.
- Publish WECC Transmission Maps of the existing and planned system.
- Oversee and facilitate the Project Coordination and Project Rating Review Process.
- Process BES Definition exception requests.
- Verify and submit NERC Transmission Availability Data System (TADS), Generator Availability Data System (GADS), and Demand Response Availability Data System (DADS) filings.
- Analyze trends and patterns in historical system performance, resource and load composition, and publish in reports such as the Annual State of the Interconnection.
- Conduct the annual Operational Practices Survey and accompanying summary report to identify best practices and potential risk to Interconnection-wide reliability.
- Evaluate historical system performance trends to identify reliability risk metrics and key indicators.
- Complete Events Analysis reports and develop Lessons Learned to support a high level of reliability within the BES while minimizing the possibility of major significant events and preventing reoccurrence of similar type events.
- Ensure the Western Interconnection is represented in reliability matters by participating in various NERC committees and industry forums.

### **Resource Requirements/Explanation of Significant Changes**

#### **Personnel Expenses**

- Personnel Expenses increase by a net of \$357,000 primarily due to the addition of three positions reclassified from other areas: one position (1 FTE) from Standards, one position (1 FTE) from Corporate Services, and one position (1 FTE) from Training and Education. Additionally, FTEs increase by an additional 0.5 for a position added in 2016 that was budgeted for half of the year in 2016 and is budgeted for the full year in 2017. The increase also relates to continued refinement of the labor float rate based on actual turnover and vacancy rates and a three-percent average merit increase.

#### **Meeting Expenses**

- Meeting Expenses decrease by \$18,000 due to an overall reduction in RAPA meetings.
- Travel Expenses increase by \$42,000 for NERC-required onsite reliability assessments and staff travel to an offsite WECC Annual Board Meeting.

#### **Operating Expenses**

- Consultants and Contracts decrease by \$788,000 due to the completion of some RAS modeling enhancements and other one-time RAPA consulting projects budgeted in 2016, which included scenario revision and software enhancements.

- Office Costs decrease by \$82,000 primarily due to the termination of the Base Case Coordination System project in 2015. Annual maintenance fees will no longer be incurred.

**Fixed Assets**

- No significant changes.

See Section B – Supplemental Financial Information for explanations of other variances between the 2016 and 2017 budgets.

## Reliability Assessment and Performance Analysis Program

Funding sources and related expenses for the Reliability Assessment and Performance Analysis section of the 2017 Business Plan are shown in the table below.

Statement of Activities, Fixed Assets Expenditures, and Change in Working Capital					
2016 Budget & Projection, and 2017 Budget					
RELIABILITY ASSESSMENT AND PERFORMANCE ANALYSIS					
	2016 Budget	2016 Projection	Variance 2016 Budget v 2016 Projection Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>WECC Funding</b>					
WECC Assessments	\$ 10,406,920	\$ 10,406,921	\$ 1	\$ 10,262,232	\$ (144,688)
Penalty Sanctions	685,828	685,828	-	393,216	(292,612)
<b>Total WECC Funding</b>	<b>\$ 11,092,748</b>	<b>\$ 11,092,749</b>	<b>\$ 1</b>	<b>\$ 10,655,448</b>	<b>\$ (437,300)</b>
Membership Dues	\$ -	\$ -	\$ -	\$ -	\$ -
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	29,041	32,239	3,198	27,835	(1,206)
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 11,121,789</b>	<b>\$ 11,124,988</b>	<b>\$ 3,198</b>	<b>\$ 10,683,283</b>	<b>\$ (438,506)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 3,446,796	\$ 3,380,432	\$ (66,364)	\$ 3,707,303	\$ 260,507
Payroll Taxes	268,330	248,282	(20,048)	286,691	18,361
Benefits	373,565	432,096	58,531	445,792	72,227
Retirement Costs	307,085	326,277	19,192	313,141	6,056
<b>Total Personnel Expenses</b>	<b>\$ 4,395,776</b>	<b>\$ 4,387,087</b>	<b>\$ (8,689)</b>	<b>\$ 4,752,927</b>	<b>\$ 357,151</b>
<b>Meeting Expenses</b>					
Meetings	\$ 130,934	\$ 104,179	\$ (26,755)	\$ 112,698	\$ (18,236)
Travel	209,375	256,800	47,425	251,825	42,450
Conference Calls	32,100	26,662	(5,438)	34,800	2,700
<b>Total Meeting Expenses</b>	<b>\$ 372,409</b>	<b>\$ 387,640</b>	<b>\$ 15,231</b>	<b>\$ 399,323</b>	<b>\$ 26,914</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 2,324,000	\$ 2,144,349	\$ (179,651)	\$ 1,536,000	\$ (788,000)
Office Rent	-	-	-	-	-
Office Costs	369,910	171,264	(198,646)	288,060	(81,850)
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	573,691	431,289	(142,402)	143,411	(430,280)
<b>Total Operating Expenses</b>	<b>\$ 3,267,601</b>	<b>\$ 2,746,903</b>	<b>\$ (520,698)</b>	<b>\$ 1,967,471</b>	<b>\$ (1,300,130)</b>
<b>Total Direct Expenses</b>	<b>\$ 8,035,786</b>	<b>\$ 7,521,630</b>	<b>\$ (514,156)</b>	<b>\$ 7,119,721</b>	<b>\$ (916,065)</b>
<b>Indirect Expenses</b>	<b>\$ 3,410,320</b>	<b>\$ 3,425,082</b>	<b>\$ 14,762</b>	<b>\$ 3,664,205</b>	<b>\$ 253,885</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 11,446,106</b>	<b>\$ 10,946,712</b>	<b>\$ (499,394)</b>	<b>\$ 10,783,926</b>	<b>\$ (662,180)</b>
<b>Change in Assets</b>	<b>\$ (324,317)</b>	<b>\$ 178,276</b>	<b>\$ 502,592</b>	<b>\$ (100,643)</b>	<b>\$ 223,674</b>
<b>Fixed Assets</b>					
Depreciation	\$ (573,691)	\$ (431,289)	\$ 142,402	\$ (143,411)	\$ 430,280
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	(83,294)	(70,689)	12,605	(39,302)	43,992
<b>Incr(Dec) in Fixed Assets (C)</b>	<b>\$ (656,985)</b>	<b>\$ (501,978)</b>	<b>\$ 155,007</b>	<b>\$ (182,713)</b>	<b>\$ 474,272</b>
<b>TOTAL BUDGET (B+C)</b>	<b>\$ 10,789,121</b>	<b>\$ 10,444,733</b>	<b>\$ (344,388)</b>	<b>\$ 10,601,213</b>	<b>\$ (187,908)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (A-B-C)</b>	<b>\$ 332,668</b>	<b>\$ 680,254</b>	<b>\$ 347,585</b>	<b>\$ 82,070</b>	<b>\$ (250,598)</b>
FTEs	32.5	35.0	2.5	36.0	3.5
HC	33.0	35.0	2.0	36.0	3.0

**Training, Education, and Operator Certification Program**

<b>Training, Education, and Operator Certification</b> (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	2.6	2.0	(0.6)
Direct Expenses	\$ 1,194,586	\$ 910,558	\$ (284,028)
Indirect Expenses	\$ 272,546	\$ 203,567	\$ (68,979)
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ (6,657)	\$ (2,183)	\$ 4,474
Total Funding Requirement	\$ 1,460,475	\$ 1,111,942	\$ (348,533)

**Program Scope and Functional Description**

The Training, Education, and Operator Certification Program Area provides education and training on the application of standards, compliance issues, and improvement of compliance programs.

In 2017, WECC will eliminate its System Operator Training Program. Due to declining attendance and increased training offerings from other NERC-approved training providers, continuing to provide training for NERC certification is no longer in the best interest of WECC or its stakeholders. WECC will continue to offer other types of training and outreach.

**2017 Key Assumptions**

- The System Operator Training Program is eliminated.
- WECC will deliver two Compliance Workshops.
- WECC will conduct one reliability summit in 2017 to enhance outreach to all stakeholders as part of the three-year planning process.
- WECC will conduct education webinars and workshops to expand awareness of reliability planning tools, modeling capabilities, and results.

**2017 Goals and Key Deliverables**

- Create and deliver additional outreach to low impact entities for CIP version 5 ahead of the July 1, 2017 effective date.
- Provide eight “Compliance Open-Webs.”
- Deliver Overview of System Operations workshops.
- Deliver Train-the-Trainer workshop.
- Create and deliver Human Performance Work Group conference.
- Deliver Compliance Workshops.
- Hold Reliability Summit to identify and analyze risks and challenges to reliability of the BES.
- Create and deliver educational outreach in the form of webinars and workshops regarding reliability planning tools, modeling capabilities—including base case and common case studies; contingency studies and analysis, TEPPC studies, scenario planning and regulatory issues and trends.



## Resource Requirements/Explanation of Significant Changes

### Personnel Expenses

- Personnel Expenses do not change by a significant amount. However, the 0.6 decrease in FTEs warrants explanation: one vacant training position (1 FTE) is transferred to RAPA due to the elimination of the System Operator Training Program; 0.6 FTE is transferred to Legal and Regulatory for the Assistant Corporate Secretary; and one position (1 FTE) is transferred from Corporate Services to manage stakeholder outreach.

### Meeting Expenses

- Meetings decrease by a net of \$101,000 primarily due to the refinement of hotel cost assumptions for Compliance outreach events.  
Travel Expense increases by \$12,000 due to offsite classes and workshops.

### Operating Expenses

- Consulting and Contracts decrease by \$68,000 due to the elimination of consultants used to conduct system operator training after the elimination of the program.
- Office Rent decreases by \$45,000 due to the reallocation of all rent to General and Administrative after the elimination of the System Operator Training Program.
- Office Costs decrease by \$79,000 primarily due to the cancelation of the license for the operator training simulator. Additionally, merchant credit card fees are lower due to the elimination of the System Operator Training Program.

### Fixed Assets

- No significant changes.

See Section B – Supplemental Financial Information for explanations of other variances between the 2016 and 2017 budgets.

## Training, Education, and Operator Certification Program

Funding sources and related expenses for the Training, Education, and Operator Certification section of the 2017 Business Plan are shown in the table below.

Statement of Activities, Fixed Assets Expenditures, and Change in Working Capital					
2016 Budget & Projection, and 2017 Budget					
TRAINING AND EDUCATION					
	2016 Budget	2016 Projection	Variance 2016 Budget v 2016 Projection Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>WECC Funding</b>					
WECC Assessments	\$ 322,476	\$ 322,477	\$ 1	\$ 509,283	\$ 186,807
Penalty Sanctions	54,810	54,810	-	21,845	(32,965)
<b>Total WECC Funding</b>	<b>\$ 377,286</b>	<b>\$ 377,287</b>	<b>\$ 1</b>	<b>\$ 531,128</b>	<b>\$ 153,842</b>
Membership Dues	\$ -	\$ -	\$ -	\$ -	\$ -
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	1,125,900	775,321	(350,579)	587,876	(538,024)
Interest	2,321	2,577	256	1,546	(775)
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 1,505,507</b>	<b>\$ 1,155,185</b>	<b>\$ (350,322)</b>	<b>\$ 1,120,550</b>	<b>\$ (384,957)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 310,800	\$ 309,568	\$ (1,232)	\$ 314,604	\$ 3,804
Payroll Taxes	22,861	24,233	1,372	19,997	(2,864)
Benefits	28,113	13,865	(14,248)	25,322	(2,791)
Retirement Costs	26,252	27,720	1,468	26,573	321
<b>Total Personnel Expenses</b>	<b>\$ 388,026</b>	<b>\$ 375,386</b>	<b>\$ (12,640)</b>	<b>\$ 386,496</b>	<b>\$ (1,530)</b>
<b>Meeting Expenses</b>					
Meetings	\$ 571,000	\$ 515,828	\$ (55,172)	\$ 469,650	\$ (101,350)
Travel	9,220	17,289	8,069	20,796	11,576
Conference Calls	5,980	3,924	(2,056)	5,706	(274)
<b>Total Meeting Expenses</b>	<b>\$ 586,200</b>	<b>\$ 537,041</b>	<b>\$ (49,159)</b>	<b>\$ 496,152</b>	<b>\$ (90,048)</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 68,000	\$ 153,636	\$ 85,636	\$ -	\$ (68,000)
Office Rent	45,000	27,187	(17,813)	-	(45,000)
Office Costs	107,360	57,276	(50,084)	27,910	(79,450)
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 220,360</b>	<b>\$ 238,098</b>	<b>\$ 17,738</b>	<b>\$ 27,910</b>	<b>\$ (192,450)</b>
<b>Total Direct Expenses</b>	<b>\$ 1,194,586</b>	<b>\$ 1,150,525</b>	<b>\$ (44,061)</b>	<b>\$ 910,558</b>	<b>\$ (284,028)</b>
<b>Indirect Expenses</b>	<b>\$ 272,546</b>	<b>\$ 273,726</b>	<b>\$ 1,180</b>	<b>\$ 203,567</b>	<b>\$ (68,979)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 1,467,132</b>	<b>\$ 1,424,251</b>	<b>\$ (42,881)</b>	<b>\$ 1,114,125</b>	<b>\$ (353,007)</b>
<b>Change in Assets</b>	<b>\$ 38,375</b>	<b>\$ (269,066)</b>	<b>\$ (307,441)</b>	<b>\$ 6,425</b>	<b>\$ (31,950)</b>
<b>Fixed Assets</b>					
Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	(6,657)	(3,927)	2,730	(2,183)	4,474
<b>Incr(Dec) in Fixed Assets (C)</b>	<b>\$ (6,657)</b>	<b>\$ (3,927)</b>	<b>\$ 2,730</b>	<b>\$ (2,183)</b>	<b>\$ 4,474</b>
<b>TOTAL BUDGET (B+C)</b>	<b>\$ 1,460,475</b>	<b>\$ 1,420,324</b>	<b>\$ (40,151)</b>	<b>\$ 1,111,942</b>	<b>\$ (348,533)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (A-B-C)</b>	<b>\$ 45,032</b>	<b>\$ (265,139)</b>	<b>\$ (310,171)</b>	<b>\$ 8,608</b>	<b>\$ (36,424)</b>
FTEs	2.6	2.0	(0.6)	2.0	(0.6)
HC	3.0	2.0	(1.0)	2.0	(1.0)

## Situation Awareness and Infrastructure Security Program

Situation Awareness and Infrastructure Security (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	1.0	1.0	-
Direct Expenses	\$ 135,866	\$ 143,832	\$ 7,966
Indirect Expenses	\$ 101,331	\$ 101,783	\$ 452
Other Non-Operating Expenses	\$ -	\$ -	\$ -
Inc(Dec) in Fixed Assets	\$ (2,475)	\$ (1,092)	\$ 1,383
Total Funding Requirement	\$ 234,722	\$ 244,523	\$ 9,801

### Program Scope and Functional Description

WECC's Situation Awareness and Infrastructure Security (SAIS) Program Area maintains near Real-time awareness about the conditions and significant occurrences on the Bulk Electric System in the Western Interconnection, with the objective of recognizing conditions and situations that could impact the reliability of the BES. WECC has access to limited Real-time data via the Situation Awareness for FERC, NERC, and the Regions (SAFNR) tool and the University of Tennessee Frequency Monitoring NETWORK (FNET).

WECC's role is to understand system issues when they emerge and coordinate with relevant parties (typically NERC and FERC) about the conditions of the BES. Through this coordination, WECC is seeking to discern patterns and identify trends aimed at helping to build a stronger and more resilient system. Additionally, WECC staff responds to events by providing coordination, assistance and communication with Peak Reliability, stakeholders, WECC management, and NERC SAIS personnel.

### 2017 Key Assumptions

- The SAFNR tool will continue to provide situation awareness capabilities to WECC.
- WECC will use its situation awareness capabilities to support NERC and FERC's efforts for situation awareness of current system conditions.
- WECC will continue working with stakeholders, government agencies, NERC and the Electricity Information Sharing and Analysis Center (E-ISAC) to ensure appropriate event information is being disseminated in a timely manner to industry.
- WECC will collaborate with specific stakeholder groups in the development of lessons learned and recommendations from events and identified risks.

### 2017 Goals and Key Deliverables

- WECC SAIS staff will monitor system events, collect information, and coordinate the distribution of timely updates on system events to WECC management, industry stakeholders, and NERC SAIS personnel.
- Staff will continue to work with NERC to monitor system data, weather, and technological developments to understand trends that affect reliability for the near- and long-term horizons.
- Staff will participate on daily NERC SAIS calls to coordinate, report, and receive any critical information.

- Staff will keep stakeholders informed of emerging reliability threats and risks to the BES, including any expected actions.
- Staff will continue to work and support efforts to develop and enhance ways to improve the use of SAFNR data to further support SAIS.
- WECC will ensure the Western Interconnection is represented in reliability matters by participating in various NERC committees and industry forums.
- WECC staff will participate as appropriate in periodic wide-area security exercises (e.g., GridEx).
- Staff will enhance risk analysis capabilities through increased analysis of risk data sources, such as event analysis reports, TADS, GADS, and protection system misoperations.

### **Resource Requirements/Explanation of Significant Changes**

#### **Personnel Expenses**

- No significant changes.

#### **Meeting Expenses**

- No significant changes.

#### **Operating Expenses**

- No significant changes.

#### **Fixed Assets**

- No significant changes.

See Section B – Supplemental Financial Information for explanations of other variances between the 2016 and 2017 budgets.

## Situation Awareness and Infrastructure Security Program

Funding sources and related expenses for the Situation Awareness and Infrastructure Security section of the 2017 Business Plan are shown in the table below.

Statement of Activities, Fixed Assets Expenditures, and Change in Working Capital					
2016 Budget & Projection, and 2017 Budget					
SITUATION AWARENESS AND INFRASTRUCTURE SECURITY					
	2016 Budget	2016 Projection	Variance 2016 Budget v 2016 Projection Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>WECC Funding</b>					
WECC Assessments	\$ 220,719	\$ 220,719	\$ -	\$ 234,720	\$ 14,001
Penalty Sanctions	20,378	20,378	-	10,923	(9,455)
<b>Total WECC Funding</b>	<b>\$ 241,097</b>	<b>\$ 241,097</b>	<b>\$ -</b>	<b>\$ 245,643</b>	<b>\$ 4,546</b>
Membership Dues	\$ -	\$ -	\$ -	\$ -	\$ -
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	863	958	95	773	(90)
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 241,960</b>	<b>\$ 242,055</b>	<b>\$ 95</b>	<b>\$ 246,416</b>	<b>\$ 4,456</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 107,448	\$ 80,946	\$ (26,502)	\$ 114,033	\$ 6,585
Payroll Taxes	8,806	6,087	(2,719)	8,823	17
Benefits	10,494	15,743	5,249	11,344	850
Retirement Costs	9,118	8,784	(334)	9,632	514
<b>Total Personnel Expenses</b>	<b>\$ 135,866</b>	<b>\$ 111,560</b>	<b>\$ (24,306)</b>	<b>\$ 143,832</b>	<b>\$ 7,966</b>
<b>Meeting Expenses</b>					
Meetings	\$ -	\$ -	\$ -	\$ -	\$ -
Travel	-	-	-	-	-
Conference Calls	-	-	-	-	-
<b>Total Meeting Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ -	\$ -	\$ -	\$ -	\$ -
Office Rent	-	-	-	-	-
Office Costs	-	-	-	-	-
Professional Services	-	-	-	-	-
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Direct Expenses</b>	<b>\$ 135,866</b>	<b>\$ 111,560</b>	<b>\$ (24,306)</b>	<b>\$ 143,832</b>	<b>\$ 7,966</b>
<b>Indirect Expenses</b>	<b>\$ 101,331</b>	<b>\$ 101,770</b>	<b>\$ 439</b>	<b>\$ 101,783</b>	<b>\$ 452</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 237,197</b>	<b>\$ 213,329</b>	<b>\$ (23,868)</b>	<b>\$ 245,615</b>	<b>\$ 8,418</b>
<b>Change in Assets</b>	<b>\$ 4,763</b>	<b>\$ 28,726</b>	<b>\$ 23,963</b>	<b>\$ 801</b>	<b>\$ (3,962)</b>
<b>Fixed Assets</b>					
Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	(2,475)	(1,964)	511	(1,092)	1,383
<b>Incr(Dec) in Fixed Assets (C)</b>	<b>\$ (2,475)</b>	<b>\$ (1,964)</b>	<b>\$ 511</b>	<b>\$ (1,092)</b>	<b>\$ 1,383</b>
<b>TOTAL BUDGET (B+C)</b>	<b>\$ 234,722</b>	<b>\$ 211,365</b>	<b>\$ (23,357)</b>	<b>\$ 244,523</b>	<b>\$ 9,801</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (A-B-C)</b>	<b>\$ 7,238</b>	<b>\$ 30,690</b>	<b>\$ 23,452</b>	<b>\$ 1,893</b>	<b>\$ (5,345)</b>
FTEs	1.0	1.0	-	1.0	-
HC	1.0	1.0	-	1.0	-

## Corporate Services

Corporate Services (in whole dollars) Direct Expenses and Fixes Assets						
	2016 Budget	2017 Budget	Increase (Decrease)	FTEs 2016 Budget	FTEs 2017 Budget	Increase (Decrease)
Committee and Member Forums	\$ 1,275,312	\$ 16,190	\$ (1,259,122)	-	-	-
General and Administrative	\$ 4,665,973	\$ 5,685,133	\$ 1,019,160	21.40	19.00	(2.40)
Legal and Regulatory	\$ 1,168,659	\$ 1,292,279	\$ 123,620	6.00	7.00	1.00
Information Technology	\$ 1,594,545	\$ 1,565,272	\$ (29,273)	10.00	8.00	(2.00)
Human Resources	\$ 1,043,908	\$ 1,099,406	\$ 55,498	4.00	4.00	-
Accounting and Finance	\$ 744,628	\$ 712,971	\$ (31,657)	5.00	5.00	-
Total Corporate Services	\$ 10,493,025	\$ 10,371,251	\$ (121,774)	46.40	43.00	(3.40)

### Program Scope and Functional Description

WECC's Corporate Services encompasses the following program areas and includes all business and administrative functions of the organization:

- Technical Committees and Member Forums
- General and Administrative
- Legal and Regulatory
- Information Technology
- Human Resources
- Finance and Accounting

These functions are necessary for the existence and operation of the organization and support the performance of WECC's statutory activities. This area provides executive leadership; communications and external affairs; and administrative support for WECC staff, committees, members and management. Corporate Services includes Board fees and expenses, and provides logistics support for the Salt Lake City office and meeting facilities, and the Vancouver office.

### Methodology for Allocation of Corporate Services Expenses to Programs

Corporate Services expenses are allocated to statutory and non-statutory program areas based on FTEs.

### Technical Committees and Member Forums

#### Program Scope and Functional Description

WECC provides forums for members and other interested stakeholders within its footprint to discuss and share reliability, compliance, and operating concerns through the Standing Committees and the JGC.

#### 2017 Key Assumptions

- The 2017 budget for the Board of Directors is reclassified from Technical Committees and Member Forums to General and Administrative resulting in a significant budget decrease in Technical Committees and Member Forums.
- The same level of meetings and meeting support for the Standing Committees and the JGC will carry forward into 2017.
- The majority of all meetings will be held in Salt Lake City.

**Resource Requirements/Explanation of Significant Changes****Personnel Expenses**

- No significant changes.

**Meeting Expenses**

- Meeting expenses decrease by \$96,000 due to the transfer of the Board of Directors budget from Technical Committees and Member Forums to General and Administrative in 2017.

**Operating Expenses**

- Consultants and Contracts decrease by \$260,000 due to the transfer of the Board of Directors search fees from Technical Committees and Member Forums to General and Administrative in 2017.
- Professional Services decrease by \$824,000 due to the transfer of Board Director compensation from Technical Committees and Member Forums to General and Administrative.

**Fixed Assets**

- No significant changes.

## **General and Administrative**

### **Program Scope and Functional Description**

The General and Administrative Department provides executive leadership; communications; and administrative support for WECC staff, committees, members, and management, as well as logistics support of the Salt Lake City office and meeting facilities. In addition, indirect costs such as Office Rent that benefit multiple functional areas are accounted for in this budget.

Beginning in 2017, the Board of Directors' budget will be accounted for in General and Administrative as opposed to Technical Committees and Member Forums, where it was historically accounted for. This move aligns more closely with the other Regional Entities.

### **2017 Key Assumptions**

- One position is transferred to Training and Education to manage stakeholder outreach.
- One position is transferred to Compliance for the Engineer Development Program.
- 0.4 FTE is transferred to Legal and Regulatory for the Assistant Corporate Secretary position.
- The 2017 budget for the Board of Directors moves to General and Administrative.
- The same level of meetings and meeting support for the Board of Directors and Board Committees will carry forward into 2017. However, the Annual Meeting will be rotated around the Interconnection starting in 2017 and not held in Salt Lake City every year.
- Board members will be compensated for meeting participation in accordance with the Board Compensation Schedule.

### **2017 Goals and Deliverables**

- Provide excellent executive leadership and strong strategic guidance for the activities undertaken by WECC.
- Support and coordinate the logistics for the Board of Directors and Board Committees.
- Continue to enhance the Business Services group to drive efficiencies and effective services throughout WECC.
- Continue to enhance the external relations and outreach programs.

### **Resource Requirements/Explanation of Significant Changes**

#### **Personnel Expenses**

- Personnel expenses decrease by a net of \$217,000 primarily due to the transfer of 2.4 FTE: one position (1 FTE) to Training and Education, once position (1 FTE) to Compliance, and 0.4 FTE to Legal and Regulatory. The change also relates to continued refinement of the labor float rate based on actual turnover and vacancy rates, and a three-percent average merit increase.

#### **Meeting Expenses**

- Meetings Expense increases by a net of \$114,000 primarily due to the transfer of the Board of Directors budget from Technical Committees and Member Forums to General and Administrative and the addition of an offsite WECC Annual Board Meeting.



- Travel Expense increases by \$120,000 due to increased executive travel, Board Director travel due to the transfer of the Board budget from Technical Committees to General and Administrative and the addition of an offsite WECC Annual Board Meeting.

### **Operating Expenses**

- Consultants and Contracts increase by \$105,000 primarily due to a net increase of \$65,000 for HRCC requested consulting and a net increase of \$30,000 for contractors and consultants to be used in lieu of IT staff.
- Office Rent increases by \$43,000 due to the elimination of System Operator Training Program and the reallocation of rent to General and Administrative.
- Office Costs increase by a net of \$13,000 primarily due to the new Diligent Board Books license and maintenance fees.
- Professional Services increase by \$815,000 due to the transfer of Board Director compensation from Technical Committees and Member Forums to General and Administrative.

### **Fixed Assets**

- No significant changes.

## Legal and Regulatory

### Program Scope and Functional Description

The Legal and Regulatory Department provides coordinated legal services to the WECC Board, committees and staff, in addition to consistent legal interpretations of relevant statutes, regulations, court opinions, and regulatory decisions. The department also develops specific subject matter expertise to further assist WECC with its legal needs. On occasion, major efforts may be outsourced to select law firms, but the responsibility for all legal matters remains with the Legal and Regulatory Department.

WECC's international operations and its broad scope of activities require significant legal support and review. Arranging for legal support is complicated by the technical nature of this developing area of law and there are many potential areas of conflict prohibiting the use of law firms with energy practices.

### 2017 Key Assumptions

- Maintain the scope of its current operations.
- One position (1 FTE) is transferred to Legal and Regulatory for the Assistant Corporate Secretary position (0.6 FTE from Training and Education and 0.4 FTE from General and Administrative). The Assistant Corporate Secretary will provide full-time Board and Board Committee support in the areas of meeting planning and materials preparation; the posting, preparation, and approval of meeting minutes; and improved maintenance of corporate records.

### 2017 Goals and Deliverables

- Provide efficient, cost-effective legal support to the WECC Board, committees, and staff through a combination of in-house and outside resources.
- Advise WECC departments on specified legal matters and general matters relating to WECC business.

### Resource Requirements/Explanation of Significant Changes

#### Personnel Expenses

- Personnel Expenses increase by \$129,000 primarily due to the addition of the Assistant Corporate Secretary, continued refinement of the labor float rate based on actual turnover and vacancy rates, and a three-percent average merit increase.

#### Meeting Expenses

- No significant changes.

#### Operating Expenses

- No significant changes.

#### Fixed Assets

- No significant changes.

## Information Technology

### Program Scope and Functional Description

WECC's Information Technology (IT) Department provides systems support including: servers, data, email, telephone systems, and Internet and Intranet website maintenance. In addition, IT includes development of new technology solutions using both internal staff and working with external service providers. IT provides resources and tools to enable the organization to meet the evolving requirements to support activities and responsibilities as directed by NERC and FERC.

### 2017 Key Assumptions

- Use consultants on an as-needed basis as opposed to maintaining headcount. One position (1 FTE) is transferred to RAPA and one position (1 FTE) is eliminated.
- Replace personal computer equipment on a four-year refresh cycle, refresh servers every five years, and replace network equipment every seven-to-10 years.
- WECC supports the ERO Enterprise IT Strategy and is committed to working collaboratively to minimize duplication of effort and investments, and improve operational efficiency.

### 2017 Goals and Deliverables

- Continue to provide increased data support, analysis, and communication. Create centralized databases, automated processes, and tools to organize a growing volume of electronic data that will be in high demand.
- Enhance video and messaging capabilities by deploying a new phone system to replace the current system at the end of its useful life.
- Add to WECC's security monitoring capabilities with additional internal log monitoring and retention services.
- Deploy improved document management and records retention solutions.

### Resource Requirements/Explanation of Significant Changes

#### Personnel Expenses

- Personnel Expenses decrease by a net of \$50,000 primarily due to the transfer of one position (1 FTE) to RAPA, the elimination of one position (1 FTE), continued refinement of the labor float rate based on actual turnover and vacancy rates, and a three-percent average merit increase.

#### Meeting Expenses

- No significant changes.

#### Operating Expenses

- Consulting and Contracts increase by \$25,000 due to the use of consultants on an as-needed basis in lieu of maintaining staff for IT projects.

#### Fixed Assets

- Fixed Assets increase by a net of \$27,000 due to server equipment refresh.

## Human Resources

### Program Scope and Functional Description

Human Resources (HR) is responsible for the delivery of all HR functions to WECC, including: recruitment, staffing, compensation, benefits, safety, health and wellness, employee relations, performance management, succession planning, and employee training and development. It maintains Human Resources-related databases and ensures compliance with all federal and state requirements.

### 2017 Key Assumptions

- Maintain current headcount budget.
- Limit cost to maintain current benefit levels to minimal increase.
- Conduct an analysis of current compensation to market (will increase budget slightly).
- Maintain current training and development levels to meet the needs of the organization.

### 2017 Goals and Deliverables

- Commission a salary survey for non-executive positions to ensure compensation is managed within approved philosophy.
- Enhance the scope of succession planning, employee development and training, which are vital to ensuring that WECC maintains a highly skilled, qualified and diverse workforce.
- Manage all employee benefits to deliver an attractive benefit package to employees, and to attract potential employees, while managing overall costs to the organization.
- Broaden our Wellness Program beyond nutrition and fitness by including financial and emotional wellness in an effort to promote a greater sense of well-being.

### Resource Requirements/Explanation of Significant Changes

#### Personnel Expenses

- Personnel Expenses increase by a net of \$50,000 due to continued refinement of the labor float rate based on actual turnover and vacancy rates, a three-percent average merit increase, and WECC-sponsored employee training.

#### Meeting Expenses

- No significant changes.

#### Operating Expenses

- Office Costs increase by a net of \$20,000 due to increases in recruiting costs, costs to obtain data from Towers Watson surveys, and membership dues.

#### Fixed Assets

- No significant changes.

## **Finance and Accounting**

### **Program Scope and Functional Description**

The Finance and Accounting Department provides accounting and financial analysis support to WECC. The department is responsible for accounts payable, billing, accounts receivable, budgeting, fixed asset management, banking, cash management, payroll, and financial reporting.

### **2017 Key Assumptions**

- Audit and tax fees decrease due to the retention of a new audit firm.

### **2017 Goals and Deliverables**

- Identify and implement efficiencies in financial processes.
- Provide improved reporting and financial analysis to WECC managers, the FAC, and the WECC Board.

### **Resource Requirements/Explanation of Significant Changes**

#### **Personnel Expenses**

- Personnel Expenses increase by \$27,000 primarily due to continued refinement of the labor float rate based on actual turnover and vacancy rates, and a three-percent average merit increase.

#### **Meeting Expenses**

- No significant changes.

#### **Operating Expenses**

- Office Costs decrease by \$11,000 due to a reduction of expense reporting fees based on the pricing in the contract signed in late 2015.
- Professional Fees decrease by \$44,000 due to the retention of a new audit firm.

#### **Fixed Assets**

- No significant changes.

See Section B – Supplemental Financial Information for explanations of other variances between the 2016 and 2017 budgets.

## Corporate Services

Funding sources and related expenses for the Corporate Services section of the 2017 Business Plan are shown in the table below.

Statement of Activities, Fixed Assets Expenditures, and Change in Working Capital 2016 Budget & Projection, and 2017 Budget					
CORPORATE SERVICES					
	2016 Budget	2016 Projection	Variance 2016 Budget v 2016 Projection Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>WECC Funding</b>					
WECC Assessments	\$ -	\$ -	\$ -	\$ -	\$ -
Penalty Sanctions	-	-	-	-	-
<b>Total WECC Funding</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Membership Dues	\$ -	\$ -	\$ -	\$ -	\$ -
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	-	-	-	-	-
Interest	-	-	-	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 4,881,019	\$ 4,687,407	\$ (193,612)	\$ 4,769,942	\$ (111,077)
Payroll Taxes	297,980	307,633	9,653	295,495	(2,485)
Benefits	969,340	1,011,180	41,840	1,007,547	38,207
Retirement Costs	421,229	461,033	39,804	435,396	14,167
<b>Total Personnel Expenses</b>	<u>\$ 6,569,568</u>	<u>\$ 6,467,253</u>	<u>\$ (102,315)</u>	<u>\$ 6,508,380</u>	<u>\$ (61,188)</u>
<b>Meeting Expenses</b>					
Meetings	\$ 114,898	\$ 130,570	\$ 15,672	\$ 133,650	\$ 18,752
Travel	231,147	272,906	41,759	285,030	53,883
Conference Calls	16,839	61,243	44,404	15,390	(1,449)
<b>Total Meeting Expenses</b>	<u>\$ 362,884</u>	<u>\$ 464,719</u>	<u>\$ 101,835</u>	<u>\$ 434,070</u>	<u>\$ 71,186</u>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 407,000	\$ 409,614	\$ 2,614	\$ 512,000	\$ 105,000
Office Rent	891,988	913,952	21,964	938,050	46,062
Office Costs	868,328	918,776	50,448	880,301	11,973
Professional Services	1,051,975	1,018,852	(33,123)	986,450	(65,525)
Miscellaneous	-	-	-	-	-
Depreciation	341,282	285,117	(56,165)	224,447	(116,835)
<b>Total Operating Expenses</b>	<u>\$ 3,560,573</u>	<u>\$ 3,546,311</u>	<u>\$ (14,262)</u>	<u>\$ 3,541,248</u>	<u>\$ (19,325)</u>
<b>Total Direct Expenses</b>	<u>\$ 10,493,025</u>	<u>\$ 10,478,283</u>	<u>\$ (14,742)</u>	<u>\$ 10,483,698</u>	<u>\$ (9,327)</u>
<b>Indirect Expenses</b>	<u>\$ (10,493,025)</u>	<u>\$ (10,478,283)</u>	<u>\$ 14,742</u>	<u>\$ (10,483,698)</u>	<u>\$ 9,327</u>
<b>Other Non-Operating Expenses</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Total Expenses (B)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Change in Assets</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Fixed Assets</b>					
Depreciation	\$ (341,282)	\$ (285,117)	\$ 56,165	\$ (224,447)	\$ 116,835
Computer & Software CapEx	55,000	25,004	(29,996)	35,000	(20,000)
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	30,000	27,727	(2,273)	77,000	47,000
Leasehold Improvements	-	5,595	5,595	-	-
Allocation of Fixed Assets	256,282	226,791	(29,491)	112,447	(143,835)
<b>Incr(Dec) in Fixed Assets (C)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>TOTAL BUDGET (B+C)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
<b>TOTAL CHANGE IN WORKING CAPITAL (A-B-C)</b>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
FTEs	44.9	43.0	(1.9)	43.0	(1.9)
HC	45.0	43.0	(2.0)	43.0	(2.0)

## Section B Supplemental Financial Information

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### *2017 Business Plan and Budget*

## Section B — Supplemental Financial Information

## Reserve Balance

Table B-1

Working Capital Reserve Analysis 2016-2017	
STATUTORY	
Beginning Working Capital Reserve (Deficit), December 31, 2015	\$ 3,944,969
Plus: 2016 Funding (from Load-Serving Entities (LSE) or designees)	27,015,834
Plus: 2016 Other funding sources	868,570
Less: 2016 Projected expenses & capital expenditures	(26,839,260)
<b>Projected Working Capital Reserve (Deficit), December 31, 2016</b>	<b><u>\$ 4,990,113</u></b>
Projected Working Capital Reserve, December 31, 2017	<sup>1</sup> \$ 5,197,561
Less: Projected Working Capital Reserve, December 31, 2016	(4,990,113)
<b>Increase(Decrease) in Assessments to Achieve Projected Working Capital Reserve</b>	<b><u>\$ 207,448</u></b>
2017 Expenses and Capital Expenditures	\$ 26,796,928
Less: Penalty Sanctions <sup>2</sup>	(1,059,500)
Less: Other Funding Sources	(662,876)
Adjustment to achieve desired Working Capital Reserve	207,448
<b>2017 WECC Assessment</b>	<b><u>\$ 25,282,000</u></b>

1 – On June 16, 2016, the WECC Board of Directors approved this reserve level.

2 – Represents collections of Penalty Sanctions from July 1, 2015 through June 30, 2016. See page 46 for full disclosure.

WECC's Board has approved a Working Capital Reserve balance equal to one-to-two months of Personnel, Meeting, and Operating Expenses per its Reserve Policy approved by the Finance and Audit Committee on June 23, 2015. Additional reserves have been approved as part of WECC's assessment stabilization initiative.



### **Breakdown by Statement of Activity Sections**

The following detailed schedules are in support of the Statutory Statement of Activities and Capital Expenditures on page 13.

#### **Monetary Penalties**

As documented in the NERC Policy *Accounting, Financial Statement and Budgetary Treatment of Penalties Imposed and Received for Violations of Reliability Standards*, penalty monies received on or prior to June 30, 2016 will be used to offset assessments in the 2017 WECC Budget.

All penalty monies received on or prior to June 30, 2016 are listed in Table B-2, including the amount and the date received.

Allocation Method: Penalty monies received have been allocated to the following Statutory Programs to reduce assessments:

- Reliability Standards;
- Compliance Monitoring and Enforcement and Organization Registration and Certification;
- Reliability Assessment and Performance Analysis;
- Training, Education, and Operator Certification; and
- Situation Awareness and Infrastructure Security.

Penalty monies are allocated based on the number of FTEs in the functional areas divided by the aggregate total FTEs in the programs receiving the allocation.

#### **Civil Penalty Sanctions**

WECC recognized civil penalty expense in its 2013 and 2014 financial statements as a result of the FERC Order pertaining to the Arizona-Southern California outage that occurred on September 8, 2011. In 2013, \$1 million was recognized and in 2014, \$2 million was recognized. As of May 31, 2016, \$2 million has been paid. The remaining \$1 million liability will be paid in May 2017 and is in accrued expenses on WECC's balance sheet. These penalties do not impact the 2017 budget.

## Penalty Sanctions

Table B-2

Penalty Sanctions Received on or Prior to June 30, 2016	
Date Received	Amount Received
7/7/2015	\$ 60,000
7/7/2015	30,000
7/23/2015	97,000
8/11/2015	20,000
9/14/2015	10,000
10/30/2015	50,000
10/30/2015	90,000
11/6/2015	6,000
1/5/2016	55,000
1/6/2016	160,000
2/26/2016	200,000
3/7/2016	25,000
3/10/2016	36,000
3/14/2016	205,000
5/5/2016	15,500
<b>Total Penalties Received</b>	<b>\$ 1,059,500</b>
<b>Penalties Offset to Assessments</b>	<b>\$ <u>1,059,500</u></b>

## Supplemental Funding

Table B-3

Outside Funding Breakdown By Program (Excluding WECC Assessments & Penalty Sanctions)	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget
<b>Reliability Standards</b>				
Interest	\$ 3,571	\$ 3,964	\$ 2,320	\$ (1,251)
Miscellaneous	-	-	-	-
<b>Total</b>	<b>\$ 3,571</b>	<b>\$ 3,964</b>	<b>\$ 2,320</b>	<b>\$ (1,251)</b>
<b>Compliance Monitoring, Enforcement &amp; Org. Registration</b>				
Workshops	\$ 3,600	\$ -	\$ -	\$ (3,600)
Interest	48,204	53,512	42,526	(5,678)
Miscellaneous	-	-	-	-
<b>Total</b>	<b>\$ 51,804</b>	<b>\$ 53,512</b>	<b>\$ 42,526</b>	<b>\$ (9,278)</b>
<b>Reliability Assessment and Performance Analysis</b>				
Federal Grants	\$ -	\$ -	\$ -	\$ -
Interest	29,041	32,239	27,835	(1,206)
Miscellaneous	-	-	-	-
<b>Total</b>	<b>\$ 29,041</b>	<b>\$ 32,239</b>	<b>\$ 27,835</b>	<b>\$ (1,206)</b>
<b>Training and Education</b>				
Workshops	\$ 1,125,900	\$ 775,321	\$ 587,876	\$ (538,024)
Interest	2,321	2,577	1,546	(775)
Miscellaneous	-	-	-	-
<b>Total</b>	<b>\$ 1,128,221</b>	<b>\$ 777,898</b>	<b>\$ 589,422</b>	<b>\$ (538,799)</b>
<b>Situation Awareness and Infrastructure Security</b>				
Federal Grants	\$ -	\$ -	\$ -	\$ -
Interest	863	958	773	(90)
Miscellaneous	-	-	-	-
<b>Total</b>	<b>\$ 863</b>	<b>\$ 958</b>	<b>\$ 773</b>	<b>\$ (90)</b>
<b>Corporate Services</b>				
Federal Grants	\$ -	\$ -	\$ -	\$ -
Interest	-	-	-	-
<b>Total</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Outside Funding</b>	<b>\$ 1,213,500</b>	<b>\$ 868,571</b>	<b>\$ 662,876</b>	<b>\$ (550,624)</b>

**Explanation of Significant Variances – 2017 Budget versus 2016 Budget**

WECC anticipates its investments will earn interest of approximately \$75,000 in 2017. This revenue is allocated to the Statutory Programs based on FTEs.

**Compliance Monitoring and Enforcement and Organization Registration and Certification**

- No significant changes.

**Training and Education**

- Workshops Revenue decreases by \$538,000 due to the elimination of the System Operator Training Program and a reduction in revenue from outreach meetings.

**Situation Awareness and Infrastructure Security**

- No significant changes.

**Corporate Services**

- Not applicable.

## Personnel Expenses

Table B-4

Personnel Expenses	Budget		Projection		Variance	
	2016	2016	2017	2017 Budget v 2016 Budget	Variance %	
<b>Salaries</b>						
Salaries	\$ 14,552,825	\$ 14,077,198	\$ 14,681,222	\$ 128,397	0.9%	
Employment Agency Fees	-	-	-	-		
Temporary Office Services	-	-	-	-		
<b>Total Salaries</b>	<b>\$ 14,552,825</b>	<b>\$ 14,077,198</b>	<b>\$ 14,681,222</b>	<b>\$ 128,397</b>	<b>0.9%</b>	
<b>Total Payroll Taxes</b>						
	\$ 1,047,090	\$ 1,003,030	\$ 1,056,809	\$ 9,719	0.9%	
<b>Benefits</b>						
Workers Compensation	\$ 15,000	\$ 20,076	\$ 22,004	\$ 7,004	46.7%	
Medical Insurance	1,664,684	1,736,574	1,735,873	71,189	4.3%	
Life-LTD-STD Insurance	83,188	85,479	75,477	(7,711)	(9.3%)	
Education	257,381	293,751	312,696	55,315	21.5%	
Relocation	40,000	64,072	60,000	20,000	50.0%	
Other	14,355	11,681	13,480	(875)	(6.1%)	
<b>Total Benefits</b>	<b>\$ 2,074,608</b>	<b>\$ 2,211,633</b>	<b>\$ 2,219,530</b>	<b>\$ 144,922</b>	<b>7.0%</b>	
<b>Retirement</b>						
Discretionary 401k Contribution	\$ 1,229,074	\$ 1,280,571	\$ 1,239,665	\$ 10,591	0.9%	
Retirement Administration Fees	30,000	19,100	32,500	2,500	8.3%	
<b>Total Retirement</b>	<b>\$ 1,259,074</b>	<b>\$ 1,299,671</b>	<b>\$ 1,272,165</b>	<b>\$ 13,091</b>	<b>1.0%</b>	
<b>Total Personnel Costs</b>						
	\$ 18,933,597	\$ 18,591,531	\$ 19,229,726	\$ 296,129	1.6%	
<b>FTEs</b>						
	140.5	140.5	140.0	(0.5)	(0.4%)	
<b>Cost per FTE</b>						
Salaries	\$ 103,579	\$ 100,194	\$ 104,866	\$ 1,287	1.2%	
Payroll Taxes	7,453	7,139	7,549	96	1.3%	
Benefits	14,766	15,741	15,854	1,088	7.4%	
Retirement	8,961	9,250	9,087	126	1.4%	
<b>Total Cost per FTE</b>	<b>\$ 134,759</b>	<b>\$ 132,324</b>	<b>\$ 137,355</b>	<b>\$ 2,596</b>	<b>1.9%</b>	

## Explanation of Significant Variances – 2017 Budget versus 2016 Budget

## Salaries

- Salaries increase by a net of \$128,000 primarily due to a three-percent average merit increase, the continued refinement of labor float rate, and the elimination of 0.5 FTE.

## Payroll Taxes

- Payroll Taxes increase by \$10,000 due to the increase in Salaries.

## Benefits

- Workers Compensation increases by \$7,000 based on estimated renewal premiums.
- Medical Insurance increases by \$71,000 due to potential premium increases.
- Life, Long-Term Disability, and Short-Term Disability Insurance decrease by \$8,000 due to decreased enrollment in term life insurance.
- Education increases by \$55,000 due to increased use of this benefit.
- Relocation increases by \$20,000 due to anticipated increases in relocation costs required to attract qualified technical candidates.

## Retirement

- Contributions to 401(k) plans increase by \$11,000 due to the increase in Salaries.

## Meeting Expenses

Table B-5

Meeting Expense	Budget 2016	Projection 2016	Budget 2017	Variance	
				2017 Budget v 2016 Budget	Variance %
Reliability Standards	\$ 1,420	\$ 1,206	\$ 960	\$ (460)	(32.4%)
Compliance Monitoring and Enforcement and Organization Registration and Certification	1,948	1,690	9,810	7,862	403.6%
Reliability Assessment and Performance Analysis	130,934	104,179	112,698	(18,236)	(13.9%)
Training and Education	571,000	515,828	469,650	(101,350)	(17.7%)
Situation Awareness	-	-	-	-	-
Corporate Services	114,898	130,570	133,650	18,752	16.3%
<b>Total Meeting Expenses</b>	<b>\$ 820,200</b>	<b>\$ 753,472</b>	<b>\$ 726,768</b>	<b>\$ (93,432)</b>	<b>(11.4%)</b>

Travel Expense	Budget 2016	Projection 2016	Budget 2017	Variance	
				2016 Budget v 2017 Budget	Variance %
Reliability Standards	\$ 26,925	\$ 22,630	\$ 19,175	\$ (7,750.00)	(28.8%)
Compliance Monitoring and Enforcement and Organization Registration and Certification	696,704	772,074	706,338	9,634	1.4%
Reliability Assessment and Performance Analysis	209,375	256,800	251,825	42,450	20.3%
Training and Education	9,220	17,289	20,796	11,576	125.6%
Situation Awareness	-	-	-	-	-
Corporate Services	231,147	272,906	285,030	53,883	23.3%
<b>Total Travel Expenses</b>	<b>\$ 1,173,371</b>	<b>\$ 1,341,699</b>	<b>\$ 1,283,164</b>	<b>\$ 109,793</b>	<b>9.4%</b>

Conference Call Expense	Budget 2016	Projection 2016	Budget 2017	Variance	
				2016 Budget v 2017 Budget	Variance %
Reliability Standards	\$ 2,565	\$ 1,616	\$ 3,601	\$ 1,036.00	40.4%
Compliance Monitoring and Enforcement and Organization Registration and Certification	13,339	11,946	12,900	(439)	(3.3%)
Reliability Assessment and Performance Analysis	32,100	26,662	34,800	2,700	8.4%
Training and Education	5,980	3,924	5,706	(274)	(4.6%)
Situation Awareness	-	-	-	-	-
Corporate Services	16,839	61,243	15,390	(1,449)	(8.6%)
<b>Total Conference Call Expenses</b>	<b>\$ 70,823</b>	<b>\$ 105,391</b>	<b>\$ 72,397</b>	<b>\$ 1,574</b>	<b>2.2%</b>

## Explanation of Significant Variances – 2017 Budget versus 2016 Budget

## Meeting Expense

- RAPA decreases by \$18,000 due to a decrease in estimated catering and facilities costs for committee meetings.
- Training and Education decreases by \$101,000 primarily due to the elimination of the System Operator Training Program and reduction from three to two Compliance Workshops.
- Corporate Services increases by a net of \$19,000 primarily due to three WECC Board meetings being held in WECC's Salt Lake City meeting facilities and the Annual/Board meeting being held offsite.

## Travel Expense

- RAPA increases by a net of \$42,000 due to the addition of NERC onsite reliability assessments and staff travel to one offsite board meeting.
- Training and Education increases by a net of \$12,000 due to travel for training to be offered at offsite stakeholder facilities.
- Corporate Services increases by a net of \$54,000 primarily due to increased executive travel requirements and staff travel to one offsite Board meeting.

## Conference Calls

- No significant changes.

## Consultants and Contracts

Table B-6

Consultants	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
<b>Consultants</b>					
Reliability Standards	\$ -	\$ -	\$ -	\$ -	
Compliance Monitoring and Enforcement and Organization Registration	-	8,504	-	-	
Reliability Assessment and Performance Analysis	2,324,000	2,144,349	1,536,000	(788,000)	(33.9%)
Training and Education	68,000	153,636	-	(68,000)	(100.0%)
Situation Awareness and Infrastructure Security	-	-	-	-	
Corporate Services	377,000	379,614	467,000	90,000	23.9%
<b>Consultants Total</b>	<b>\$ 2,769,000</b>	<b>\$ 2,686,102</b>	<b>\$ 2,003,000</b>	<b>\$ (766,000)</b>	<b>(27.7%)</b>
Contracts	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
<b>Contracts</b>					
Reliability Standards	\$ -	\$ -	\$ -	\$ -	
Compliance Monitoring and Enforcement and Organization Registration	472,170	414,928	450,270	(21,900)	(4.6%)
Reliability Assessment and Performance Analysis	-	-	-	-	
Training and Education	-	-	-	-	
Situation Awareness and Infrastructure Security	-	-	-	-	
Corporate Services	30,000	30,000	45,000	15,000	50.0%
<b>Contracts Total</b>	<b>\$ 502,170</b>	<b>\$ 444,928</b>	<b>\$ 495,270</b>	<b>\$ (6,900)</b>	<b>(1.4%)</b>
<b>Total Consulting and Contracts</b>	<b>\$ 3,271,170</b>	<b>\$ 3,131,030</b>	<b>\$ 2,498,270</b>	<b>\$ (772,900)</b>	<b>(23.6%)</b>

## Explanation of Significant Variances – 2017 Budget versus 2016 Budget

## Consultants

- RAPA decreases by a net of \$788,000 due to the completion of some RAS modeling enhancements and 2016 one-time RAPA projects.
- Training and Education consultants decrease by \$68,000 due to the elimination of the System Operator Training Program.
- Corporate Services increases by a net of \$90,000 primarily due to the following:
  - General and Administrative consulting increases by \$65,000 due to HRCC compensation surveys.
  - Information Technology consulting increases by \$25,000 due to anticipated use of consultants in lieu of staff for IT projects.

## Contracts

- Compliance and Organization Registration and Certification contracts decrease by \$22,000 due to an overall reduction in consulting hours needed to augment staff expertise on audits and other oversight activities.
- Corporate Services contracts increase by a net of \$15,000 due to contractual labor in lieu of staff for IT projects.

## Office Rent

Table B-7

Office Rent	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Office Rent	\$ 926,748	\$ 924,967	\$ 925,080	\$ (1,668)	(0.2%)
Utilities	-	-	-	-	0.0%
Maintenance	10,240	16,171	12,970	2,730	26.7%
Security	-	-	-	-	0.0%
<b>Total Office Rent</b>	<b>\$ 936,988</b>	<b>\$ 941,138</b>	<b>\$ 938,050</b>	<b>\$ 1,062</b>	<b>0.1%</b>

## Explanation of Significant Variances – 2017 Budget versus 2016 Budget

- No significant changes.

## Office Costs

Table B-8

Office Costs	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Telephone	\$ 78,640	\$ 62,151	\$ 77,190	\$ (1,450)	(1.8%)
Internet	68,836	69,886	74,861	6,025	8.8%
Office Supplies	94,921	106,120	106,917	11,996	12.6%
Computer Supplies and Maintenance	1,017,268	796,950	895,490	(121,778)	(12.0%)
Publications & Subscriptions	38,170	38,092	49,720	11,550	30.3%
Dues and Fees	178,258	200,579	181,054	2,796	1.6%
Postage	5,376	3,946	5,445	69	1.3%
Express Shipping	6,430	8,831	6,473	43	0.7%
Copying	39,850	41,211	35,845	(4,005)	(10.1%)
Bank Charges	66,000	71,661	59,760	(6,240)	(9.5%)
Taxes	61,675	58,127	61,500	(175)	(0.3%)
<b>Total Office Costs</b>	<b>\$ 1,655,424</b>	<b>\$ 1,457,554</b>	<b>\$ 1,554,255</b>	<b>\$ (101,169)</b>	<b>(6.1%)</b>

## Explanation of Significant Variances – 2017 Budget versus 2016 Budget

- Office Supplies increase by \$12,000 primarily due to equipment rental costs for WECC's printers.
- Computer Supplies and Maintenance decreases by a net of \$122,000 primarily due to the end of maintenance for the Base Case Coordination System and the training simulator program.
- Publications and Subscriptions increase by \$12,000 primarily due to the Diligent Board Books software subscription.



## Professional Services

Table B-9

Professional Services	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Board Director fees	\$ 824,250	\$ 832,931	\$ 814,750	\$ (9,500)	(1.2%)
Outside Legal	31,600	38,308	33,000	1,400	4.4%
Accounting & Auditing Fees	86,125	46,310	38,700	(47,425)	(55.1%)
Insurance Commercial	110,000	101,303	100,000	(10,000)	(9.1%)
<b>Total Services</b>	<b>\$ 1,051,975</b>	<b>\$ 1,018,852</b>	<b>\$ 986,450</b>	<b>\$ (65,525)</b>	<b>(6.2%)</b>

## Explanation of Significant Variances – 2017 Budget versus 2016 Budget

- Board of Director fees decrease by \$10,000 due to a decrease in anticipated compensable meetings.
- Accounting and Auditing Fees decrease by \$47,000 due to the retention of a new audit firm.
- Insurance Commercial decreases by \$10,000 due to estimated premium renewal rates.

## Other Non-Operating

Table B-10

Other Non-Operating Expenses	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %
Interest Expense	\$ -	\$ -	\$ -	\$ -	-
Line of Credit Payment	-	-	-	-	-
Office Relocation	-	-	-	-	-
<b>Total Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>

## Explanation of Significant Variances – 2017 Budget versus 2016 Budget

- Not applicable.

## Fixed Assets

Table B-11

Fixed Assets	Budget		Projection		Variance				
	2016	2016	2016	2017	2017 Budget v 2016 Budget	Variance %			
Computer & Software CapEx	\$	55,000	\$	25,004	\$	35,000	\$	(20,000)	(36.4%)
Furniture & Fixtures CapEx		-		-		-		-	
Equipment CapEx		30,000		27,727		77,000		47,000	156.7%
Leasehold Improvements		-		5,595		-		-	
	<b>\$</b>	<b>85,000</b>	<b>\$</b>	<b>58,326</b>	<b>\$</b>	<b>112,000</b>	<b>\$</b>	<b>27,000</b>	<b>31.8%</b>

## Explanation of Significant Variances – 2017 Budget versus 2016 Budget

- Equipment CapEx increases by \$47,000 primarily due to scheduled server equipment refresh.

## Section C

# Non-Statutory Activities

### *2017 Business Plan and Budget*

## Section C — 2017 Budget - Non-Statutory Activities

<b>Western Renewable Energy Generation Information System</b> (in whole dollars)			
	2016 Budget	2017 Budget	Increase (Decrease)
Total FTEs	6.0	6.0	-
Direct Expenses	\$ 1,182,420	\$ 1,140,158	\$ (42,262)
Indirect Expenses	\$ 628,953	\$ 610,701	\$ (18,252)
Inc(Dec) in Fixed Assets	\$ (15,362)	\$ (6,550)	\$ 8,812
Total Funding Requirement	\$ (29,759)	\$ 24,801	\$ 54,560

### Western Renewable Energy Generation Information System (WREGIS)

WREGIS is an independent, renewable energy database for the Western Interconnection. WREGIS creates renewable energy certificates (REC) for verifiable renewable generation from units that are registered in the database.

WREGIS was developed through a collaborative process between the Western Governors' Association, the Western Regional Air Partnership, and the California Energy Commission (CEC). This development was further guided by stakeholder input from more than 400 participants over a period greater than three years.

The program's governance was integrated into WECC on March 31, 2012 following the expiration of WECC's contract that had previously provided for backstop funding from the CEC. WREGIS is overseen by a WECC Member Committee consisting of representatives from the WECC membership and various WREGIS stakeholder groups.

WREGIS costs fall outside Section 215 of the Federal Power Act. Participants fund WREGIS through registration and transaction fees. To avoid any crossover of Section 215 dollars, WREGIS pays a portion of WECC's overhead costs according to a formula implemented following a FERC audit.

WREGIS consists of two parts: the information system software and the administrative operations. The WREGIS staff oversees the software contractor and performs all of the administrative tasks required to operate the program including:

- registering account holders and generation units;
- training WREGIS users;
- auditing generation and other data; and
- managing the budgeting, billing, and financial reporting.

### Major 2017 Assumptions and Cost Impacts

WREGIS is funded entirely by user fees and is not subsidized by Section 215 funding. There are several types of user fees. Annual fees are paid by all users and are based on size (generation capacity) and user type. Usage fees are paid by all but micro, small, and medium generation owners (as defined by the WREGIS fee matrix). WREGIS also charges various fees for specific usage to only those requesting the services.

- User fees are based on size (generation capacity) and user type.
  - Approximately 18 percent of revenues are based on size.

- Approximately 77 percent of revenues are based on usage levels, which can depend on factors such as weather (wind and solar generation levels) and state regulatory policies (retirement, transfers, etc.).
- Approximately 5 percent of revenues are attributable to fees for specific, requested functions such as tracking e-Tags.
- Revenues can vary greatly from year to year; therefore, WECC holds large WREGIS reserves to allow for normal operations during years in which fee levels are low and to fund large, non-recurring expenditures such as major software upgrades.

### **2017 Primary Goals and Objectives**

- Implement the WREGIS program as required by the participating states, provinces, and voluntary programs.
- Register program participants, whether mandatory or voluntary.
- Refine the WREGIS software to ensure optimum performance in terms of both efficiency and ease of use for account holders.
- Keep abreast of possible needs to increase WREGIS's functionality.

### **Funding Sources and Requirements — Explanation of Increase (Decrease)**

#### **Funding Sources (Other than ERO Assessments)**

- WREGIS account holders pay an initial registration fee and annual renewal fees. Amounts vary by the size and category of the account holder.
- Volumetric-based fees are assessed when RECs are traded, retired, reserved, or transferred.
- Nominal fees are charged for users who attend training.

#### **Personnel Expenses**

- Personnel Expenses decrease by \$48,000 mainly due to continued refinement of the labor float rate based on actual turnover and vacancy rates.

#### **Meeting Expenses**

- No significant changes.

#### **Operating Expenses**

- No significant changes.

#### **Indirect Expenses**

- Indirect Expenses are allocated based on FTEs. WECC calculates a quarterly allocation for WREGIS's indirect costs, based on actual results.

#### **Other Non-Operating Expenses**

- Not applicable

## 2016 Budget and Projection and 2017 Budget Comparisons

Statement of Activities, Fixed Assets Expenditures, and Change in Working Capital 2016 Budget & Projection, and 2017 Budget					
NON-STATUTORY					
	2016 Budget	2016 Projection	Variance 2017 Budget v 2016 Projection Over(Under)	2017 Budget	Variance 2017 Budget v 2016 Budget Over(Under)
<b>Funding</b>					
<b>WECC Funding</b>					
WECC Assessments	\$ -	\$ -	\$ -	\$ -	\$ -
Penalty Sanctions	-	-	-	-	-
<b>Total WECC Funding</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Membership Dues	\$ 1,900,000	\$ 2,026,620	\$ 126,620	\$ 1,766,860	\$ (133,140)
Federal Grants	-	-	-	-	-
Services & Software	-	-	-	-	-
Workshops	2,250	1,575	(675)	2,250	-
Interest	-	17,038	17,038	-	-
Miscellaneous	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 1,902,250</b>	<b>\$ 2,045,233</b>	<b>\$ 142,983</b>	<b>\$ 1,769,110</b>	<b>\$ (133,140)</b>
<b>Expenses</b>					
<b>Personnel Expenses</b>					
Salaries	\$ 411,618	\$ 364,904	\$ (46,714)	\$ 375,536	\$ (36,082)
Payroll Taxes	34,402	28,469	(5,933)	30,027	(4,375)
Benefits	63,249	36,376	(26,873)	58,942	(4,307)
Retirement Costs	34,870	30,529	(4,341)	31,673	(3,197)
<b>Total Personnel Expenses</b>	<b>\$ 544,139</b>	<b>\$ 460,278</b>	<b>\$ (83,861)</b>	<b>\$ 496,178</b>	<b>\$ (47,961)</b>
<b>Meeting Expenses</b>					
Meetings	\$ 4,200	\$ 2,563	\$ (1,637)	\$ 3,195	\$ (1,005)
Travel	27,575	19,631	(7,944)	29,850	2,275
Conference Calls	850	513	(337)	975	125
<b>Total Meeting Expenses</b>	<b>\$ 32,625</b>	<b>\$ 22,707</b>	<b>\$ (9,918)</b>	<b>\$ 34,020</b>	<b>\$ 1,395</b>
<b>Operating Expenses</b>					
Consultants & Contracts	\$ 2,400	\$ 5,330	\$ 2,930	\$ 3,000	\$ 600
Office Rent	-	-	-	-	-
Office Costs	594,256	589,597	(4,659)	594,960	704
Professional Services	9,000	3,375	(5,625)	12,000	3,000
Miscellaneous	-	-	-	-	-
Depreciation	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 605,656</b>	<b>\$ 598,302</b>	<b>\$ (7,354)</b>	<b>\$ 609,960</b>	<b>\$ 4,304</b>
<b>Total Direct Expenses</b>	<b>\$ 1,182,420</b>	<b>\$ 1,081,287</b>	<b>\$ (101,133)</b>	<b>\$ 1,140,158</b>	<b>\$ (42,262)</b>
<b>Indirect Expenses</b>	<b>\$ 628,953</b>	<b>\$ 571,515</b>	<b>\$ (57,438)</b>	<b>\$ 610,701</b>	<b>\$ (18,252)</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Expenses (B)</b>	<b>\$ 1,811,373</b>	<b>\$ 1,652,802</b>	<b>\$ (158,571)</b>	<b>\$ 1,750,859</b>	<b>\$ (60,514)</b>
<b>Change in Assets</b>	<b>\$ 90,877</b>	<b>\$ 392,431</b>	<b>\$ 301,554</b>	<b>\$ 18,251</b>	<b>\$ (72,626)</b>
<b>Fixed Assets</b>					
Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -
Computer & Software CapEx	-	-	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-
Equipment CapEx	-	-	-	-	-
Leasehold Improvements	-	-	-	-	-
Allocation of Fixed Assets	(15,362)	(11,780)	3,582	(6,550)	8,812
<b>Incr(Dec) in Fixed Assets (C)</b>	<b>\$ (15,362)</b>	<b>\$ (11,780)</b>	<b>\$ 3,582</b>	<b>\$ (6,550)</b>	<b>\$ 8,812</b>
<b>TOTAL BUDGET (=B+C)</b>	<b>\$ 1,796,011</b>	<b>\$ 1,641,021</b>	<b>\$ (154,990)</b>	<b>\$ 1,744,309</b>	<b>\$ (51,702)</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (=A-B-C)</b>	<b>\$ 244,820</b>	<b>\$ 404,211</b>	<b>\$ 297,972</b>	<b>\$ 24,801</b>	<b>\$ (81,438)</b>
FTEs	6.0	6.0	-	6.0	-
HC	6.0	6.0	-	6.0	-

### Personnel Analysis

FTEs are defined as full-time equivalent employees only. Fractional FTEs reflect part-time employees or employees who worked in fewer than all four quarters of the year.

Total FTEs by Program Area	Budget 2016	Projection 2016	Direct FTEs 2016 Budget	Shared FTEs <sup>1</sup> 2017 Budget	Total FTEs 2017 Budget	Change from 2016 Budget
NON-STATUTORY						
Operational Programs						
Total FTEs Operational Programs	0.0	0.0	0.0	0.0	0.0	0.0
Administrative Programs						
WREGIS	6.0	6.0	6.0	0.0	6.0	0.0
Total FTEs Administrative Programs	6.0	6.0	6.0	0.0	6.0	0.0
Total FTEs	6.0	6.0	6.0	0.0	6.0	0.0



## Reserve Analysis — 2016–2017

Working Capital Reserve Analysis	
NON-STATUTORY	
WREGIS Reserves	
<b>Beginning Working Capital Reserve (Deficit), December 31, 2015</b>	\$ 5,115,511
Plus: 2016 Funding	2,045,233
Plus: 2016 Other funding sources	
Less: 2016 Projected expenses & capital expenditures	(1,641,021)
<b>Projected Working Capital Reserve (Deficit), December 31, 2016</b>	<u>\$ 5,519,722</u>
<b>Projected Working Capital Reserve, December 31, 2017</b>	5,544,523
Less: Projected Working Capital Reserve, December 31, 2016	(5,519,722)
<b>2017 Reserve Increase (Decrease)</b>	<u>\$ 24,801</u>

# Section D

## Additional Financial Information

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### *2017 Business Plan and Budget*

# Section D – Additional Financial Information

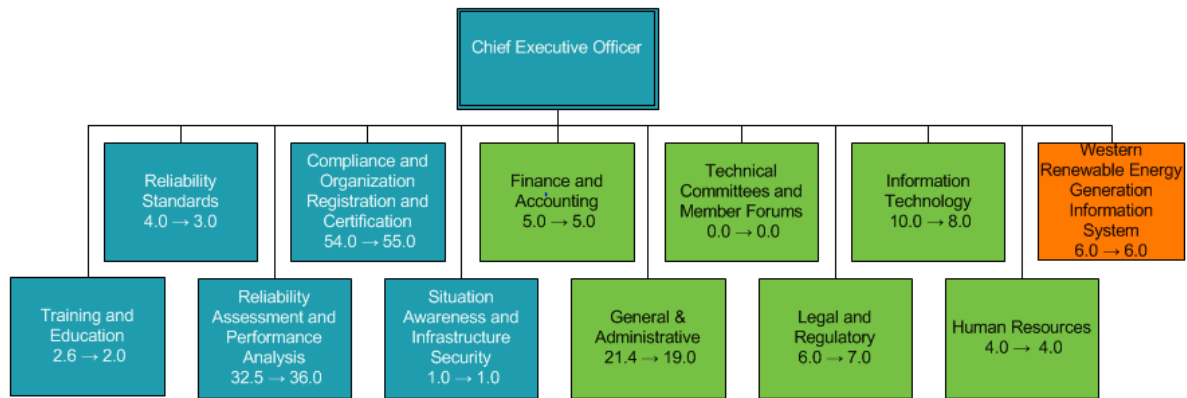
## 2017 Consolidated Statement of Activities by Program, Statutory, and Non-Statutory

Statement of Activities and Capital Expenditures by Program 2016 Budget	Total	Statutory Total	Non-Statutory Total	Functions in Delegation Agreement															
				Statutory Total	Reliability Standards (Section 300)	Compliance and Organization Registration and Certification (Section 400 & 500)	Reliability Assessment and Performance Analysis (Section 800)	Training and Education (Section 900)	Situation Awareness and Infrastructure Security (Section 1000)	Corporate Services	Committee and Member Forums	General and Administrative	Legal and Regulatory	Information Technology					
<b>Funding</b>																			
<b>WECC Funding</b>																			
WECC Assessments	\$ 25,282,000	\$ 25,282,000	\$ -	\$ 25,282,000	\$ 847,225	\$ 13,428,540	\$ 10,262,232	\$ 509,283	\$ 234,720	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Penalty Sanctions	1,059,500	1,059,500	-	1,059,500	32,768	600,748	393,216	21,845	10,923	-	-	-	-	-	-	-	-	-	-
<b>Total WECC Funding</b>	<b>\$ 26,341,500</b>	<b>\$ 26,341,500</b>	<b>\$ -</b>	<b>\$ 26,341,500</b>	<b>\$ 879,993</b>	<b>\$ 14,029,288</b>	<b>\$ 10,655,448</b>	<b>\$ 531,128</b>	<b>\$ 245,643</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Non-statutory Funding</b>																			
Federal Grants	\$ 1,766,860	\$ -	\$ 1,766,860	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Services & Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Workshops	590,126	587,876	2,250	587,876	-	-	-	587,876	-	-	-	-	-	-	-	-	-	-	-
Interest	75,000	75,000	-	75,000	2,320	42,526	27,835	1,546	-	773	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 28,773,486</b>	<b>\$ 27,004,376</b>	<b>\$ 1,769,110</b>	<b>\$ 27,004,376</b>	<b>\$ 882,313</b>	<b>\$ 14,071,814</b>	<b>\$ 10,683,283</b>	<b>\$ 1,120,550</b>	<b>\$ 246,416</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Expenses</b>																			
<b>Personnel Expenses</b>																			
Salaries	\$ 15,056,759	\$ 14,681,223	\$ 375,536	\$ 14,681,223	\$ 440,237	\$ 5,335,104	\$ 3,707,303	\$ 314,604	\$ 114,033	\$ 4,769,942	\$ -	\$ 2,395,127	\$ 887,384	\$ 701,565					
Payroll Taxes	1,086,837	1,056,810	30,027	1,056,810	30,420	415,384	286,691	19,997	8,823	295,495	-	120,534	58,279	96,969					
Benefits	2,278,470	2,219,528	58,942	2,219,528	36,238	693,285	445,792	25,322	11,344	1,007,547	-	257,935	84,659	56,580					
Retirement Costs	1,303,838	1,272,165	31,673	1,272,165	37,185	450,238	313,141	26,573	9,632	435,396	-	202,637	74,937	59,738					
<b>Total Personnel Expenses</b>	<b>\$ 19,725,904</b>	<b>\$ 19,229,726</b>	<b>\$ 496,178</b>	<b>\$ 19,229,726</b>	<b>\$ 544,080</b>	<b>\$ 6,894,011</b>	<b>\$ 4,752,927</b>	<b>\$ 386,496</b>	<b>\$ 143,832</b>	<b>\$ 6,508,380</b>	<b>\$ -</b>	<b>\$ 2,976,233</b>	<b>\$ 1,105,259</b>	<b>\$ 916,690</b>					
<b>Meeting Expenses</b>																			
Meetings	\$ 729,963	\$ 726,768	\$ 3,195	\$ 726,768	\$ 960	\$ 9,810	\$ 112,698	\$ 469,650	\$ -	\$ 133,650	\$ 15,350	\$ 117,400	\$ -	\$ -					
Travel	1,313,014	1,283,164	29,850	1,283,164	19,175	706,338	251,825	20,796	-	285,030	840	216,865	28,850	10,550					
Conference Calls	73,372	72,397	975	72,397	3,601	12,900	34,800	5,706	-	15,390	-	10,740	-	3,110					
<b>Total Meeting Expenses</b>	<b>\$ 2,116,349</b>	<b>\$ 2,082,329</b>	<b>\$ 34,020</b>	<b>\$ 2,082,329</b>	<b>\$ 23,736</b>	<b>\$ 729,048</b>	<b>\$ 399,323</b>	<b>\$ 496,152</b>	<b>\$ -</b>	<b>\$ 434,070</b>	<b>\$ 16,190</b>	<b>\$ 345,005</b>	<b>\$ 28,850</b>	<b>\$ 14,770</b>					
<b>Operating Expenses</b>																			
Consultants & Contracts	\$ 2,501,270	\$ 2,498,270	\$ 3,000	\$ 2,498,270	\$ -	\$ 450,270	\$ 1,536,000	\$ -	\$ -	\$ 512,000	\$ -	\$ 417,000	\$ -	\$ 95,270					
Office Rent	938,050	938,050	-	938,050	-	-	-	-	-	938,050	-	937,650	-	-					
Office Costs	2,149,215	1,554,255	594,960	1,554,255	5,645	352,339	288,060	27,910	-	880,301	-	194,495	28,170	427,810					
Professional Services	998,450	986,450	12,000	986,450	-	-	-	-	-	986,450	-	814,750	130,000	-					
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Depreciation	367,858	367,858	-	367,858	-	-	143,411	-	-	224,447	-	142,890	-	80,567					
<b>Total Operating Expenses</b>	<b>\$ 6,954,843</b>	<b>\$ 6,344,883</b>	<b>\$ 609,960</b>	<b>\$ 6,344,883</b>	<b>\$ 5,645</b>	<b>\$ 802,609</b>	<b>\$ 1,967,471</b>	<b>\$ 27,910</b>	<b>\$ -</b>	<b>\$ 3,541,248</b>	<b>\$ -</b>	<b>\$ 2,506,785</b>	<b>\$ 158,170</b>	<b>\$ 604,817</b>					
<b>Total Direct Expenses</b>	<b>\$ 28,797,096</b>	<b>\$ 27,656,938</b>	<b>\$ 1,140,158</b>	<b>\$ 27,656,938</b>	<b>\$ 573,461</b>	<b>\$ 8,425,668</b>	<b>\$ 7,119,721</b>	<b>\$ 910,558</b>	<b>\$ 143,832</b>	<b>\$ 10,483,698</b>	<b>\$ 16,190</b>	<b>\$ 5,828,023</b>	<b>\$ 1,292,279</b>	<b>\$ 1,534,460</b>					
<b>Indirect Expenses</b>																			
	\$ -	\$ (610,702)	\$ 610,701	\$ (610,702)	\$ 305,349	\$ 5,598,091	\$ 3,664,205	\$ 203,567	\$ 101,783	\$ (10,483,698)	\$ (16,190)	\$ (5,828,023)	\$ (1,292,279)	\$ (1,534,460)					
<b>Other Non-Operating Expenses</b>																			
	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					
<b>Total Expenses (B)</b>	<b>\$ 28,797,096</b>	<b>\$ 27,046,236</b>	<b>\$ 1,750,859</b>	<b>\$ 27,046,236</b>	<b>\$ 878,810</b>	<b>\$ 14,023,759</b>	<b>\$ 10,783,926</b>	<b>\$ 1,114,125</b>	<b>\$ 245,615</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>					
<b>Change in Assets</b>																			
	\$ (23,610)	\$ (41,860)	\$ 18,251	\$ (41,860)	\$ 3,503	\$ 48,055	\$ (100,643)	\$ 6,425	\$ 801	\$ -	\$ -	\$ -	\$ -	\$ -					
<b>Fixed Assets</b>																			
Depreciation	\$ (367,858)	\$ (367,858)	\$ -	\$ (367,858)	\$ -	\$ -	\$ (143,411)	\$ -	\$ -	\$ (224,447)	\$ -	\$ (142,890)	\$ -	\$ (80,567)					
Computer & Software CapEx	35,000	35,000	-	35,000	-	-	-	-	-	35,000	-	-	-	35,000					
Furniture & Fixtures CapEx	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Equipment CapEx	77,000	77,000	-	77,000	-	-	-	-	-	77,000	-	-	-	77,000					
Leasehold Improvements	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Allocation of Fixed Assets	-	6,550	(6,550)	6,550	(3,275)	(60,045)	(39,302)	(2,183)	(1,092)	112,447	-	142,890	-	(31,745)					
<b>Inc(Dec) in Fixed Assets (C)</b>	<b>\$ (255,858)</b>	<b>\$ (249,308)</b>	<b>\$ (6,550)</b>	<b>\$ (249,308)</b>	<b>\$ (3,275)</b>	<b>\$ (60,045)</b>	<b>\$ (182,713)</b>	<b>\$ (2,183)</b>	<b>\$ (1,092)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>					
<b>TOTAL BUDGET (B+C)</b>	<b>\$ 28,541,238</b>	<b>\$ 26,796,928</b>	<b>\$ 1,744,309</b>	<b>\$ 26,796,928</b>	<b>\$ 875,535</b>	<b>\$ 13,963,714</b>	<b>\$ 10,601,213</b>	<b>\$ 1,111,942</b>	<b>\$ 244,523</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>					
<b>TOTAL CHANGE IN WORKING CAPITAL (A-B-C)</b>	<b>\$ 232,248</b>	<b>\$ 207,448</b>	<b>\$ 24,801</b>	<b>\$ 207,448</b>	<b>\$ 6,778</b>	<b>\$ 108,100</b>	<b>\$ 82,070</b>	<b>\$ 8,608</b>	<b>\$ 1,893</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>					
<b>FTEs</b>	<b>146.0</b>	<b>140.0</b>	<b>6.0</b>	<b>140.0</b>	<b>3.0</b>	<b>55.0</b>	<b>36.0</b>	<b>2.0</b>	<b>1.0</b>	<b>43.0</b>	<b>-</b>	<b>19.0</b>	<b>7.0</b>						
<b>HC</b>	<b>146.0</b>	<b>140.0</b>	<b>6.0</b>	<b>140.0</b>	<b>3.0</b>	<b>55.0</b>	<b>36.0</b>	<b>2.0</b>	<b>1.0</b>	<b>43.0</b>	<b>-</b>	<b>19.0</b>	<b>7.0</b>						

## Statement of Financial Position

Statement of Financial Position			
2015 Audited, 2016 Projection, and 2017 Budget			
STATUTORY and NON-STATUTORY			
	(Per Audit)	Projected	Budget
	31-Dec-15	31-Dec-16	31-Dec-17
<b>ASSETS</b>			
Cash and cash equivalents	\$ 25,149,130	\$ 25,400,621	\$ 25,654,627
Certificates of deposit	5,190,388	5,242,292	5,294,715
Investments	581,249	587,061	592,932
Accounts receivable, net	1,657,654	1,690,807	1,724,623
Prepaid expenses and other assets	473,559	475,000	475,000
Property and equipment	1,202,655	787,655	537,655
Total Assets	<b>\$ 34,254,635</b>	<b>\$ 34,183,436</b>	<b>\$ 34,279,552</b>
<b>LIABILITIES AND NET ASSETS</b>			
Liabilities			
Accounts payable	\$ 5,122,182	\$ 3,551,137	\$ 4,324,488
Accrued Expenses	3,475,223	3,475,223	2,475,223
Deferred revenue	15,199,645	15,351,641	15,505,158
Other liabilities	1,222,289	1,159,289	1,096,289
Total Liabilities	<b>\$ 25,019,339</b>	<b>\$ 23,537,290</b>	<b>\$ 23,401,158</b>
Unrestricted net assets	9,235,296	10,684,655	10,916,903
Total Liabilities and Net Assets	<b>\$ 34,254,635</b>	<b>\$ 34,221,946</b>	<b>\$ 34,318,061</b>

## Appendix A: Organizational Chart



- Statutory Program Area
- Corporate Services Program Area
- Non-statutory Program Area

## Appendix B: 2017 Budget & Projected 2018 and 2019 Budgets

### Key Assumptions

#### Personnel Expenses

- A three-percent average merit increase in Salaries.
- A three-percent increase in Payroll Taxes and Retirements Costs.
- A four-percent increase in Benefits.

#### Meeting Expenses

- Travel, Meetings, and Conference Calls are assumed to remain at 2017 budgeted levels.

#### Operating Expenses

- A net reduction in Consultants and Contracts of \$600,000 in 2018 due to the completion of RAS modeling enhancements and a planned reduction in the reliance on contractors in Compliance. Consultants used for ongoing studies and assessments remain at current levels.
- A net reduction in Consultants and Contracts of \$100,000 in 2019 due to a planned reduction in the reliance on contractors in Compliance. Consultants used for ongoing studies and assessments remain at current levels.
- **Fixed Assets** \$35,000 per year in Equipment CapEx to maintain the current operating level of cloud-based data storage and planned server refreshes.

Appendix B – 2017 Budget & Projected 2018 and 2019 Budgets

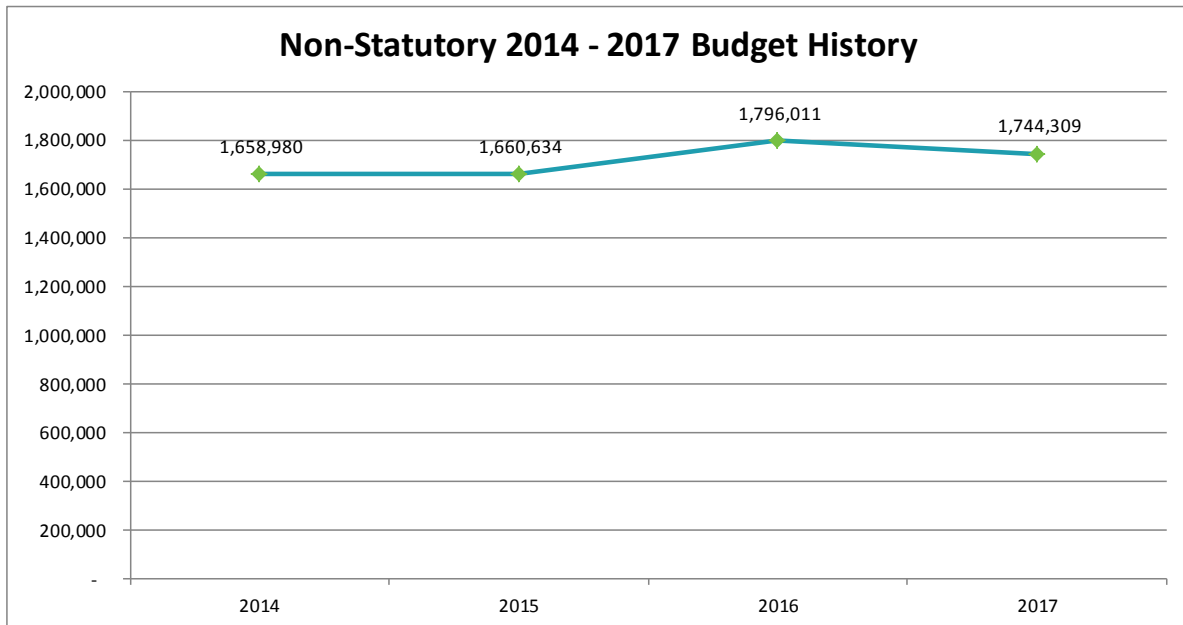
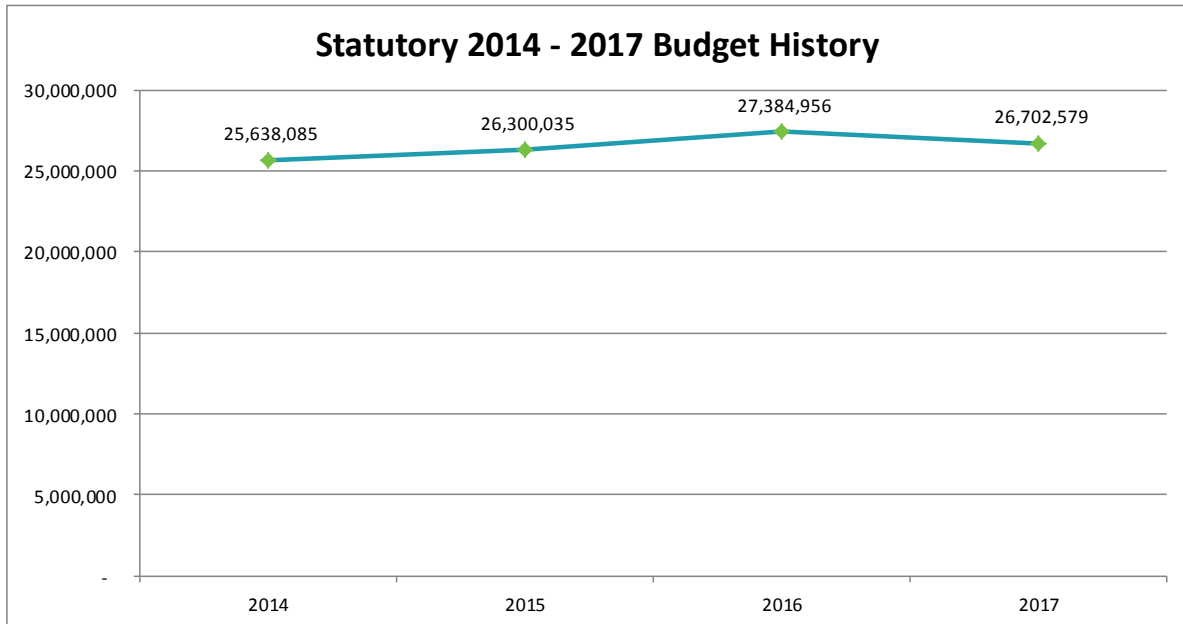
Statement of Activities and Capital Expenditures							
2017 Budget & Projected 2018 and 2019 Budgets							
Statutory							
	2017	2018	\$ Change	% Change	2019	\$ Change	% Change
	Budget	Projection	17 v 18	17 v 18	Projection	18 v 19	18 v 19
<b>Funding</b>							
<b>ERO Funding</b>							
WECC Assessments	\$ 25,282,000	\$ 25,534,820	\$ 252,820	1.0%	\$ 25,790,168	\$ 255,348	1.0%
Penalty Sanctions	1,059,500	-	(1,059,500)	(100.0%)	-	-	-
<b>Total ERO Funding</b>	<b>\$ 26,341,500</b>	<b>\$ 25,534,820</b>	<b>\$ (806,680)</b>	<b>(3.1%)</b>	<b>\$ 25,790,168</b>	<b>\$ 255,348</b>	<b>1.0%</b>
Membership Dues	\$ -	\$ -	\$ -	-	\$ -	\$ -	-
Federal Grants	-	-	-	-	-	-	-
Workshops	587,876	593,755	5,879	1.0%	599,692	5,938	1.0%
Interest	75,000	75,000	-	0.0%	75,000	-	0.0%
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 27,004,376</b>	<b>\$ 26,203,575</b>	<b>\$ (800,801)</b>	<b>(3.0%)</b>	<b>\$ 26,464,861</b>	<b>\$ 261,286</b>	<b>1.0%</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	\$ 14,681,223	\$ 15,121,660	\$ 440,437	3.0%	\$ 15,575,309	\$ 453,650	3.0%
Payroll Taxes	1,056,810	1,088,514	31,704	3.0%	1,121,170	32,655	3.0%
Benefits	2,219,528	2,308,309	88,781	4.0%	2,400,641	92,332	4.0%
Retirement Costs	1,272,165	1,310,330	38,165	3.0%	1,349,640	39,310	3.0%
<b>Total Personnel Expenses</b>	<b>\$ 19,229,726</b>	<b>\$ 19,828,813</b>	<b>\$ 599,087</b>	<b>3.1%</b>	<b>\$ 20,446,761</b>	<b>\$ 617,947</b>	<b>3.1%</b>
<b>Meeting Expenses</b>							
Meetings	\$ 726,768	\$ 726,768	\$ -	0.0%	\$ 726,768	\$ -	0.0%
Travel	1,283,164	1,283,164	-	0.0%	1,283,164	-	0.0%
Conference Calls	72,397	72,397	-	0.0%	72,397	-	0.0%
<b>Total Meeting Expenses</b>	<b>\$ 2,082,329</b>	<b>\$ 2,082,329</b>	<b>\$ -</b>	<b>0.0%</b>	<b>\$ 2,082,329</b>	<b>\$ -</b>	<b>0.0%</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 2,498,270	\$ 1,898,270	(600,000)	(24.0%)	\$ 1,798,270	(100,000)	(5.3%)
Office Rent	938,050	940,000	1,950	0.2%	940,000	-	0.0%
Office Costs	1,554,255	1,569,798	15,543	1.0%	1,585,496	15,698	1.0%
Professional Services	986,450	1,010,000	23,550	2.4%	1,010,000	-	0.0%
Miscellaneous	-	-	-	-	-	-	-
Depreciation	367,858	367,858	-	0.0%	367,858	-	0.0%
<b>Total Operating Expenses</b>	<b>\$ 6,344,883</b>	<b>\$ 5,785,926</b>	<b>\$ (558,957)</b>	<b>(8.8%)</b>	<b>\$ 5,701,624</b>	<b>\$ (84,302)</b>	<b>(1.5%)</b>
<b>Total Direct Expenses</b>	<b>\$ 27,656,938</b>	<b>\$ 27,697,068</b>	<b>\$ 40,130</b>	<b>0.1%</b>	<b>\$ 28,230,713</b>	<b>\$ 533,645</b>	<b>1.9%</b>
<b>Indirect Expenses</b>	<b>\$ (610,702.00)</b>	<b>\$ (610,702.00)</b>	<b>\$ -</b>	<b>0.0%</b>	<b>\$ (610,702.00)</b>	<b>\$ -</b>	<b>0.0%</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>
<b>Total Expenses (B)</b>	<b>\$ 27,046,236</b>	<b>\$ 27,086,366</b>	<b>\$ 40,130</b>	<b>0.1%</b>	<b>\$ 27,620,011</b>	<b>\$ 533,645</b>	<b>2.0%</b>
<b>Change in Assets</b>	<b>\$ (41,860)</b>	<b>\$ (882,791)</b>	<b>\$ (840,931)</b>	<b>2,008.9%</b>	<b>\$ (1,155,151)</b>	<b>\$ (272,360)</b>	<b>30.9%</b>
<b>Fixed Assets</b>							
Depreciation	\$ (367,858)	\$ (367,858)	\$ -	0.0%	\$ (367,858)	\$ -	0.0%
Computer & Software CapEx	35,000	-	(35,000)	(100.0%)	-	-	-
Furniture & Fixtures CapEx	-	-	-	-	-	-	-
Equipment CapEx	77,000	35,000	(42,000)	(54.5%)	35,000	-	0.0%
Leasehold Improvements	-	-	-	-	-	-	-
Allocation of Fixed Assets	6,550	-	(6,550)	(100.0%)	-	-	-
<b>Incr(Dec) in Fixed Assets (C)</b>	<b>\$ (249,308)</b>	<b>\$ (332,858)</b>	<b>\$ (83,550)</b>	<b>33.5%</b>	<b>\$ (332,858)</b>	<b>\$ -</b>	<b>0.0%</b>
<b>TOTAL BUDGET (B+C)</b>	<b>\$ 26,796,928</b>	<b>\$ 26,753,508</b>	<b>\$ (43,420)</b>	<b>(0.2%)</b>	<b>\$ 27,287,153</b>	<b>\$ 533,645</b>	<b>2.0%</b>
<b>TOTAL CHANGE IN WORKING CAPITAL (A-B-C)</b>	<b>\$ 207,448</b>	<b>\$ (549,933)</b>	<b>\$ (757,381)</b>	<b>(100.0%)</b>	<b>\$ (822,293)</b>	<b>\$ (272,360)</b>	<b>49.5%</b>
FTEs	140.0	140.0	-	0.0%	140.0	-	0.0%
HC	140.0	140.0	-	0.0%	140.0	-	0.0%

## Appendix C: Adjustment to the Alberta Electric System Operator (AESO) Assessment

Adjustment to the AESO 2016 and 2017 Assessments		
Credit for WECC Compliance Costs		
	2016	2017
	Compliance Budget	Compliance Budget
	AESO NEL Allocation	AESO NEL Allocation
<b>WECC Compliance Costs</b>		
Direct Costs less Direct Revenue	\$ 8,270,950	\$ 8,383,142
Indirect Costs	5,660,573	5,598,091
Fixed Asset Expenditures	(171,890)	(60,045)
<b>Total Net Costs, including Fixed Assets</b>	<b>\$ 13,759,633</b>	<b>\$ 13,921,188</b>
<b>Net total to be allocated</b>	<b>\$ 13,759,633</b>	<b>\$ 13,921,188</b>
AESO NEL Share (2014 & 2015)	6.975%	7.197%
<b>AESO Proportional Share of Compliance Costs, including Fixed Assets</b>	<b>\$ 959,752</b>	<b>\$ 1,001,861</b>
% Credit (52.8 of 54 FTE for 2016; 53.23 of 55 FTE for 2017)	97.78%	96.78%
<b>AESO Credit for Compliance Costs</b>	<b>\$ 938,424</b>	<b>\$ 969,620</b>



## Appendix D: Statutory and Non Statutory Budget History Charts



**DOCKET NO. RR16-\_\_-000**

**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**2017 BUSINESS PLAN AND BUDGET FILING**

**ATTACHMENT 11**

**WESTERN INTERCONNECTION  
REGIONAL ADVISORY BODY**

**PROPOSED 2017 BUSINESS PLAN AND BUDGET**

# **Western Interconnection Regional Advisory Body**

## **2017 Business Plan and Budget**

**July 5, 2016**

**Approved by:  
Appointed Members of the  
Western Interconnection Regional Advisory Body**

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## Introduction

The Western Interconnection Regional Advisory Body (WIRAB) proposed budget for 2017 is \$1,229,080. This amount is \$141,194 (10%) lower than the amount in WIRAB's approved budget for 2016. Total proposed FTEs for 2017 remain constant at 5.5. The total funding requirement is \$902,102. WIRAB's proposed funding assessment is \$901,452, a reduction of \$338,546 (27%) from last year's funding assessment. WIRAB's proposed funding assessment is allocated \$759,556 (84%) to the U.S. portion, \$128,716 (14%) to the Canadian portion, and \$13,180 (2%) to the Mexican portion of the Western Interconnection. The following table summarizes the WIRAB proposed budget for 2017.

WIRAB - Total Resources (in whole dollars)	2017 Budget	U.S.	Canada	Mexico
Statutory FTEs	5.50			
Non-statutory FTEs				
<b>Total FTEs</b>	5.50			
Statutory Expenses	\$ 1,229,080			
Non-Statutory Expenses				
<b>Total Expenses</b>	\$ 1,229,080			
Statutory Inc(Dec) in Fixed Assets				
Non-Statutory Inc(Dec) in Fixed Assets				
<b>Total Inc(Dec) in Fixed Assets</b>	\$ -			
Statutory Working Capital Requirement	\$ (326,978)			
Non-Statutory Working Capital Requirement	0			
<b>Total Working Capital Requirement</b>	\$ (326,978)			
Total Statutory Funding Requirement	\$ 902,102			
Total Non-Statutory Funding Requirement	\$ -			
<b>Total Funding Requirement</b>	\$ 902,102			
<b>Statutory Funding Assessments</b>	\$ 901,452	\$ 759,556	\$ 128,716	\$ 13,180
<b>Non-Statutory Fees</b>				
NEL	869,883,481	732,956,732	124,208,633	12,718,116
NEL%	100.00%	84.26%	14.28%	1.46%

**Table 1. WIRAB Budget for 2017**

## Organizational Overview

In April 2006, ten Western Governors petitioned the Federal Energy Regulatory Commission (FERC or Commission) to create the Western Interconnection Regional Advisory Body (WIRAB) under Section 215(j) of the Federal Power Act. The Governors indicated their interest in inviting all U.S. states, Canadian provinces, and Mexican jurisdictions which have territory in the Western Interconnection to join WIRAB.

In July 2006, FERC issued an order granting the petition to establish WIRAB.<sup>1</sup> In its order the Commission determined that WIRAB should receive funding for its Section 215(j) activities and directed WIRAB to annually develop a budget and related information for submission through the Electric Reliability Organization (ERO) budget approval process. The Commission instructed WIRAB to develop a budget in a form similar to that specified for regional entities as set forth in Order 672.<sup>2</sup> The Commission also required WIRAB to identify the portion of its funding to be received from Canada and Mexico.

The Governors created WIRAB as a standing advisory committee to the Western Interstate Nuclear Board (WINB), which was formed pursuant to the Western Interstate Nuclear Compact, P.L. 91-461. WIRAB has the same status under the compact as the Western Interstate Energy Board (WIEB). WIRAB operates under the bylaws of WINB as revised on April 4, 2006. Below is a chart that illustrates these organizational relationships.

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<sup>1</sup> Order on Petition to Establish a Regional Advisory Body for the Western Interconnection, 116 FERC ¶ 61,061, Docket No. RR06-2-000, July 20, 2006.

<sup>2</sup> Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Reliability Standards, Order 672, Docket RM05-30-000, Feb. 3, 2006, P. 228. "Each Regional Entity must submit its complete business plan, entire budget and organizational chart to the ERO for it to submit to the Commission. The complete business plan and the entire budget will provide the Commission with necessary information about any non-statutory activities, the source of their funding, and whether the pursuit of such activities presents a conflict of interest for the Regional Entity. For a Cross-Border Regional Entity, this information will also inform the Commission as to what portion of the budget is expended upon activities within the United States."

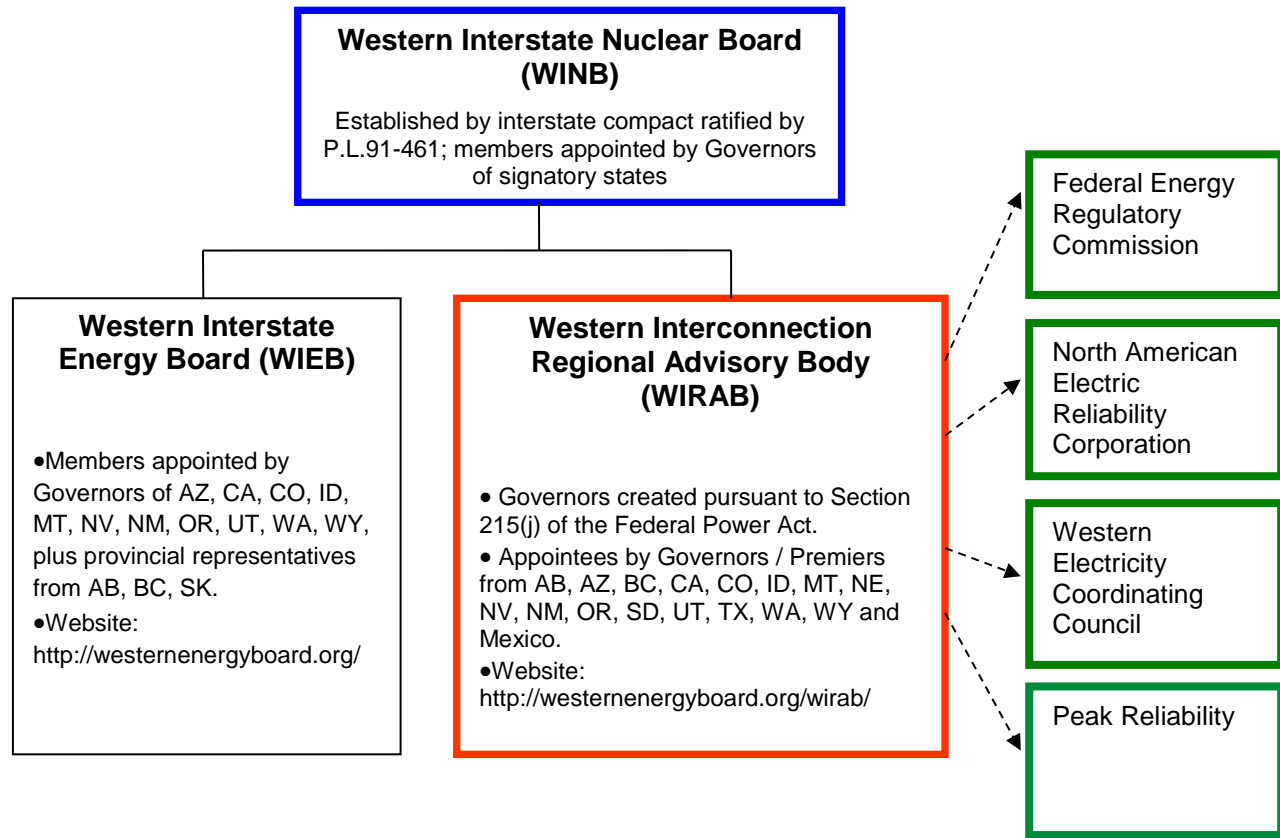


Figure 1. Organizational Relationships.

## Membership and Governance

All of the states with territory in the Western Interconnection (AZ, CA, CO, ID, MT, NE, NV, NM, OR, SD, TX, UT, WA, WY), the Canadian provinces of Alberta and British Columbia, and Mexico are members of WIRAB. Members of WIRAB are appointees of the Governors and Premiers or their alternates. Below is the list of current members:

WIRAB - Membership List		
Alberta	Christine Lazaruk	Executive Director, Strategy and Integration, Alberta Energy
Arizona	Vacant	
British Columbia	Les MacLaren	Assistant Deputy Minister, Electricity & Alternative Energy Division, Ministry of Energy & Mines
California	Janea Scott	Commissioner, California Energy Commission
Colorado	Chris Worley	Director of Policy & Research, Colorado Energy Office
Idaho	John Chatburn	Director, Idaho Governor's Office of Energy Resources
Mexico	Marcos Valenzuela	Comision Federal de Electricidad
Montana	Jeff Blend	Economist, Montana Department of Environmental Quality
Nebraska	Tim Texel	Executive Director, Nebraska Power Review Board
Nevada	Paul Thomsen	Chair, Nevada Public Utilities Commission
New Mexico	Vacant	
Oregon	John Savage	Commissioner, Oregon Public Utility Commission
South Dakota	Greg Rislov	Commission Advisor, South Dakota Public Utility Commission
Texas	Vacant	
Utah	David Clark	Commissioner, Utah Public Service Commission
Washington	Tony Usibelli	Assistant Director, State Energy Office, Washington Department of Commerce
Wyoming	Bill Russell	Commissioner, Wyoming Public Service Commission

**Figure 2. WIRAB Membership List.**

WIRAB holds two in-person meetings each year, typically in April and October. The meetings are open to the public. WIRAB holds quarterly conference calls to discuss emerging issues and hosts periodic webinars with presentations from subject matter experts on key reliability topics.



## Statutory Functional Scope

FERC established WIRAB as a Regional Advisory Body under section 215(j) of the Federal Power Act. The language in Section 215(j) specifically provides for WIRAB's authority to advise NERC, FERC and WECC on whether reliability standards, budgets and fees, governance, compliance, assessments, strategic direction and other activities conducted pursuant to Section 215 are just, reasonable, not unduly discriminatory or preferential, and in the public interest.

FERC has additionally authorized WIRAB to advise Peak Reliability on these topics: "[D]eference to WIRAB is appropriate here because Peak Reliability funding implicates the following topics listed in FPA section 215(j) on which a Regional Advisory Body may give advice: 'governance of an existing or proposed regional entity ... [and] whether fees proposed to be assessed within the region are just, reasonable, not unduly discriminatory or preferential, and in the public interest.'" FERC Order on Rehearing, Docket No. EL13-52 et al., P. 46 (Dec. 6, 2013).

WIRAB's advice to FERC, NERC, WECC, and Peak Reliability can be grouped into four categories that are appropriately funded under Section 215 of the FPA:

1. Governance and Strategic Planning
2. Emerging Trends and System Risks
3. Periodic Reliability Assessments
4. Reliability Standards and Proactive Enforcement

WIRAB's activities in each of these categories are described in Section A – Statutory Activities.

## 2017 Strategic Priorities and Goals

The resource mix of the Western power system is rapidly changing. Utility-scale wind and solar generation is being built in many parts of the West. California and the Desert Southwest are experiencing rapid growth in the installation of rooftop solar photovoltaic generation. Environmental regulations, including those to reduce regional haze and to reduce mercury emissions, and efforts to transition to a lower carbon economy have resulted in announced retirements of coal-fired generating units. These changes to the generation resource mix will present new reliability challenges and opportunities as more non-synchronous generation is added to the system and synchronous spinning mass generation is retired.

The structure of Western power markets is also undergoing significant change. The California ISO Energy Imbalance Market (EIM) will gain new participants in 2016, 2017 and 2018. Utility executives, state policymakers, and stakeholders are engaged in discussions regarding the potential transformation of the California ISO into a regional multi-state ISO. These market reforms could result in changes in system operations (e.g., transmission scheduling, congestion management) and create new reliability challenges and opportunities.

The modernization of the electric grid has also resulted in an increasing focus on physical and cyber security. These threats will continue to impact the availability of data and the transparency of periodic reliability assessments. At the same time there is also a greater need for research and development of new technologies and operational tools that can be used to improve system reliability.

In response to these on-going changes in the Western Interconnection, WIRAB has identified four strategic initiatives that it will pursue in 2017:

**Initiative 1: Encourage WECC and Peak Reliability to set strategic planning priorities and align budgets and work plans based on rigorous analyses of existing and emerging risks to reliability in the Western Interconnection.**

The WECC Board of Directors recently established a new three year strategic planning process to set WECC's strategic priorities. This process will enable the WECC Board of Directors to pursue a comprehensive review of existing and emerging risks to

reliability and to identify strategic initiatives to address the most significant challenges. The new Three Year Strategic Plan should provide a strong basis for addressing the question of what level of resources is needed for WECC to fulfill its reliability mandate. WIRAB has recommended that the Peak Reliability Board of Directors conduct a similar review of risks to reliability in the real-time operating time horizon to set its strategic priorities.

Recent strategic planning and budget discussions at WECC have been predominately focused on cost containment and assessment stabilization. Recent strategic planning discussions at Peak Reliability have been focused on establishing value beyond Peak's role as the Reliability Coordinator. WIRAB believes the strategic planning processes at both WECC and Peak Reliability can be improved with a renewed focus on emerging reliability risks and challenges.

The goals of this initiative are for:

- The Board of Directors of Peak Reliability to set strategic priorities for Peak Reliability based on an open, transparent, and rigorous assessment of the risks to the real-time operation of the bulk-power system in the Western Interconnection prior to the development of the 2018 Business Plan and Budget.
- The Board of Directors of WECC to set strategic priorities for WECC based on an open, transparent, and rigorous assessment of the existing and emerging risks to reliability in the Western Interconnection prior to the development of the 2018 Business Plan and Budget.

The actions that WIRAB staff will take to achieve these goals include:

- Providing advice to Peak Reliability on strategic priorities and risks to the real-time operation of the bulk-power system in the Western Interconnection.
- Providing advice to WECC on strategic priorities and the existing and emerging risks to reliability in the Western Interconnection.
- Providing advice to Peak Reliability and WECC on strategic plans, budgets, and work plans to align those plans with risk analyses.

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**Initiative 2: Encourage Peak Reliability and WECC to develop policies to protect Critical Electricity Infrastructure Information (CEII) and to promote sharing of non-CEII data with third parties to foster research and development.**

The Fixing America's Surface Transportation Act ("FAST Act") was signed into law in December 2015. The FAST Act includes provisions relating to energy security and critical energy infrastructure. The law amends the Federal Power Act ("FPA") and creates a new FPA Section, Section 215A, addressing critical electric infrastructure security. The Federal Energy Regulatory Commission ("FERC") is directed to "establish criteria and procedures to designate information as Critical Electric Infrastructure Information ("CEII"); prohibit the unauthorized disclosure of [CEII];... (and) facilitate voluntary sharing of [CEII]..." FERC has one year to enact such regulations.

The Board of Directors of Peak Reliability approved a new Universal Data Sharing Agreement (UDSA) in December 2015. The new UDSA was the product of a contentious 11 month stakeholder input process. After passage of the FAST Act, Peak Reliability questioned whether it should modify the new UDSA, which includes procedures for sharing data with third parties. In March 2016, the Board of Directors amended the UDSA to delete the third party data sharing provisions included in the UDSA Exhibit A. This effectively ends all data sharing between Peak Reliability and third party researchers interested in developing tools and methodologies to improve the reliability of the Western Interconnection. The Board of Directors did, however, adopt a provision to revisit third party data sharing once FERC rules on CEII are promulgated. Proper sharing of data with third party researchers and developers can lead to reliability discoveries unforeseen by Peak or its members.

The goals of this initiative are for:

- Peak Reliability and WECC to update their data sharing policies to reflect FERC decisions regarding the definition of Critical Electricity Infrastructure Information (CEII) under Section 215A of the FPA.
- Peak Reliability and WECC to strengthen protection of CEII data while at the same time ensuring that non-CEII data is available to third parties to conduct needed research and development to improve the reliability of the Western Interconnection.

The actions that WIRAB staff will take to achieve these goals include:

- Providing advice to FERC in a rulemaking to clearly define Critical Electricity Infrastructure Information (CEII) under Section 215A of the FPA.
- Working with Peak Reliability and WECC to develop procedurally fair data sharing policies that appropriately balance the protection of CEII data and the sharing of non-CEII data.

### **Initiative 3: Encourage WECC to systematically assess the availability of Essential Reliability Services under a wide-range of future resource scenarios.**

WECC does not currently have the integrated data sets and analytical tools needed to conduct systematic assessments of the availability of Essential Reliability Services under future resource scenarios. WIRAB staff is currently participating on the WECC Transmission Expansion Planning and Policy Task Force that is leading an effort to create a single “Anchor Data Set” to enable WECC to conduct integrated production cost modeling and power flow modeling to systematically assess the availability of Essential Reliability Services.

A systematic assessment of Essential Reliability Services includes identification of potential concerns such as insufficient ramping capability, insufficient frequency response, or insufficient voltage stability as we add more non-synchronous, variable generation to the grid. It also includes evaluation of mitigation measures when reliability concerns are identified, including measures that would need to be taken by Registered Entities such as the installation of synchronous condensers to improve system response to frequency disturbances.<sup>3</sup>

The goals of this initiative are for:

- WECC to complete an integrated assessment of system frequency response in a future with high utility-scale development of non-synchronous wind and solar

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<sup>3</sup> In 2015, the State-Provincial Steering Committee funded work by GE Energy Consulting to develop a roadmap for assessing the reliability challenges associated with high levels of variable energy resources and the retirement of coal plants in the Western Interconnection. The report discusses the types of analysis and data needed to identify and quantify potential reliability problems, as well as the identification and analysis of mitigation options that can provide promising solutions.

generation and significant retirements of coal-fired generation in the Western Interconnection.

- WECC to complete an integrated assessment of system frequency response in a future with high penetration of distributed energy resources, including rooftop solar photovoltaics. WECC should evaluate the impact of the simultaneous large-scale tripping of solar photovoltaics without smart inverters.
- WECC to complete and publicly disseminate written reports describing the methodology and results of the frequency response assessments.
- WECC to present the findings and results of the frequency response assessments at WECC Member Advisory Committee meetings.

The actions that WIRAB staff will take to achieve these goals include:

- Participating on the WECC Transmission Expansion Planning and Policy Task Force to accelerate development of the integrated data sets and analytical tools needed to conduct systematic assessments of the availability of Essential Reliability Services.
- Working with WECC to develop and disseminate the finding and results of the frequency response assessment to regulators and policymakers in the Western Interconnection.
- Providing advice to WECC on the design of the reliability assessments and on the interpretation of the results of the analyses.

#### **Initiative 4: Encourage and work with Peak Reliability to identify, disseminate, and promote best operational practices.**

The September 8, 2011 Southwest outage highlighted significant deficiencies in the operation of the Western grid. Gaps still exist in Registered Entity operating practices in the Western Interconnection in the following areas: (1) coordination of next-day studies; (2) effectiveness of operational studies; (3) accuracy of the load, interchange and generation forecasts used in next-day studies; (4) failure to use real-time tools for Real-Time Contingency Analysis; (5) failure to share relay overload trip settings and (6) accuracy and coordination of seasonal studies. In order to address

these on-going concerns, WIRAB will continue to work with Peak Reliability to encourage the adoption of best operating practices by Registered Entities in the Western Interconnection.

The goals of this initiative are for:

- Peak Reliability to complete assessments and identify best operating practices in two of the areas of concern;
- Peak Reliability to present the assessment results and best practices at a Peak Reliability User Group meeting;
- Peak Reliability to disseminate written guidance to Registered Entities on the steps to take in implementing the best practices.

The actions that WIRAB staff will take to achieve these goals include:

- Working with Peak Reliability to identify the areas of concern where the identification of best practices can be expected to improve reliability performance.
- Working with Peak Reliability to encourage active participation of Registered Entities in the identification of best practices.
- Working with Peak Reliability to disseminate the best practices and guidance to Registered Entities, regulators, and policymakers in the Western Interconnection.

In addition to WIRAB's four strategic initiatives for 2017, with their associated goals and actions, WIRAB will strive to achieve the following goals as opportunities arise at WECC and Peak Reliability:

- WECC and/or Peak Reliability to investigate the reliability impacts of Western Interconnection market reforms such as energy imbalance markets, changes to reserve sharing practices, and congestion management tools.
- WECC and/or Peak Reliability to investigate the reliability impacts of the increased use of natural gas generation and the need for natural gas and electric industry coordination.
- WECC and/or Peak Reliability to investigate the feasibility of a new dynamic path transfer capability methodology to replace the current static path transfer

methodology to more accurately reflect grid conditions and to improve system reliability.

- WECC and/or Peak Reliability to investigate the impacts of high penetrations of distributed generation resources and the need for better two-way communication between distribution system operators with large amounts of distributed energy resources and bulk power system operators.
- WECC and/or Peak Reliability to investigate the reliability impacts of the implementation of the EPA's Clean Power Plan and related EPA regulation of electric generating units.

The actions that WIRAB takes to achieve these on-going goals are described in Section A – Statutory Activities. WIRAB's public meetings in the spring and fall will continue to be a forum for policymakers and regulators to discuss important reliability issues and exchange views on existing and emerging reliability risks.

## **2017 Budget and Assessment Impacts**

The WIRAB proposed budget for 2017 is \$1,229,080. This amount is \$141,194 (10%) lower than the amount in WIRAB's approved budget for 2016. Total proposed FTEs for 2017 remain constant at 5.5. The total funding requirement is \$902,102. WIRAB's proposed funding assessment is \$901,452, a reduction of \$338,546 (27%) from last year's funding assessment.

## **Personnel and Indirect Expenses**

Personnel expenses drop from \$539,500 in the 2016 Budget to \$465,653 in the 2017 Budget due to turn-over in personnel and a correction in salary cost (all holiday, vacation and sick leave cost estimates were moved to overhead). WIRAB uses a single rate method for indirect expenses. The indirect expenses include office expenses, medical and retirement expenses as well as holiday, vacation and sick leave for WIRAB staff. The indirect rate is a percent of direct staff time spent on WIRAB. It is estimated that the indirect rate will remain constant at 96% of direct labor costs. Table 2 shows personnel and indirect expenses per FTE for the approved 2016 Budget and the proposed 2017 Budget.



WIRAB - Personnel and Indirect Expense Analysis 2016-2017						
STATUTORY						
	Budget 2016	Projection 2016	Budget 2017	Variance 2017 Budget v 2016 Budget	Variance %	
Salary Expense	\$ 539,500	\$ 490,000	\$ 465,653	\$ (73,847)	-13.7%	
FTEs	5.50	5.20	5.50	-	0.0%	
Cost per FTE	\$ 98,091	\$ 94,231	\$ 84,664	\$ (13,427)	-13.7%	
Indirect Rate	96%	96%	96%			
Indirect Expense	\$ 517,920	\$ 470,400	\$ 447,027	\$ (70,893)	-13.7%	
FTEs	5.50	5.20	5.50	-	0.0%	
Cost per FTE	\$ 94,167	\$ 90,462	\$ 81,278	\$ (12,890)	-13.7%	

**Table 2. Personnel and Indirect Expense Analysis, 2016-2017.**

### Meetings, Travel and Conference Calls

Meeting costs increase by \$2,900 to \$60,900. WIRAB will hold two major in-person meetings per year that include participation by state/provincial agencies with electric power responsibilities in the Western Interconnection. Wherever feasible, WIRAB meetings will be coordinated with other meetings of Western states and provinces.

Travel costs increases by \$2,900 to \$99,500. This amount covers WIRAB staff travel and state/provincial travel to attend meetings of WIRAB and both WECC and Peak Reliability. The increase in hotel and travel costs is based on cost increases we have experienced in the last year.

Conference call and webinar costs drop slightly from \$8,254 to \$6,000. We have found webinars to be very valuable in providing information to members between the two annual meetings.

### Consultants and Contracts

The budget includes \$150,000 (the same as in 2016) for contracting for technical expertise on issues related to improved grid operating practices, standards and

compliance. This expertise will help WIRAB prepare technically-sound advice under Section 215(j).

### **Budget Comparison**

Table 3 shows the 2016 Budget and 2016 Projection compared to the 2017 Budget.

WIRAB - Statement of Activities and Change in Working Capital 2016 Budget & Projection, and 2017 Budget							
STATUTORY							
	2016 Budget	2016 Projection	Variance 2016 Projection v 2016 Budget		2017 Budget	Variance 2017 Budget v 2016 Budget	
			Over(Under)	% Change		Over(Under)	% Change
<b>Funding</b>							
<b>WIRAB Funding</b>							
Assessments	\$ 1,239,998	\$ 1,239,998	\$ -	0.0%	\$ 901,452	\$ (338,546)	-27.3%
Penalty Sanctions	-	-	-	-	-	-	-
<b>Total WIRAB Funding</b>	<b>\$ 1,239,998</b>	<b>\$ 1,239,998</b>	<b>\$ -</b>	<b>0.0%</b>	<b>\$ 901,452</b>	<b>\$ (338,546)</b>	<b>-27.3%</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-
Workshops	-	-	-	-	-	-	-
Interest	550	600	\$ 50	9.1%	650	\$ 100	18.2%
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 1,240,548</b>	<b>\$ 1,240,598</b>	<b>\$ 50</b>	<b>0.0%</b>	<b>\$ 902,102</b>	<b>\$ (338,446)</b>	<b>-27.3%</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	539,500	490,000	(49,500)	-9.2%	465,653	\$ (73,847)	-13.7%
Payroll Taxes	-	-	-	-	-	-	-
Benefits	-	-	-	-	-	-	-
Retirement Costs	-	-	-	-	-	-	-
<b>Total Personnel Expenses</b>	<b>\$ 539,500</b>	<b>\$ 490,000</b>	<b>\$ (49,500)</b>	<b>-9.2%</b>	<b>\$ 465,653</b>	<b>\$ (73,847)</b>	<b>-13.7%</b>
<b>Meeting Expenses</b>							
WIRAB Meetings	\$ 58,000	\$ 58,000	\$ -	0.0%	\$ 60,900	\$ 2,900	5.0%
Travel	96,600	96,600	\$ -	0.0%	99,500	\$ 2,900	3.0%
Conference Calls	8,254	5,000	\$ (3,254)	-39.4%	6,000	\$ (2,254)	-27.3%
<b>Total Meeting Expenses</b>	<b>\$ 162,854</b>	<b>\$ 159,600</b>	<b>\$ (3,254)</b>	<b>-2.0%</b>	<b>\$ 166,400</b>	<b>\$ 3,546</b>	<b>2.2%</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 150,000	\$ 150,000	\$ -	0.0%	\$ 150,000	\$ -	0.0%
Office Rent	-	-	-	-	-	-	-
Office Costs	-	-	-	-	-	-	-
Professional Services	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Depreciation	-	-	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 150,000</b>	<b>\$ 150,000</b>	<b>\$ -</b>	<b>0.0%</b>	<b>\$ 150,000</b>	<b>\$ -</b>	<b>0.0%</b>
<b>Total Direct Expenses</b>	<b>\$ 852,354</b>	<b>\$ 799,600</b>	<b>\$ (52,754)</b>	<b>-6.2%</b>	<b>\$ 782,053</b>	<b>\$ (70,301)</b>	<b>-8.2%</b>
<b>Indirect Expenses</b>	<b>\$ 517,920</b>	<b>\$ 470,400</b>	<b>\$ (47,520)</b>	<b>-9.2%</b>	<b>\$ 447,027</b>	<b>\$ (70,893)</b>	<b>-13.7%</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>
<b>TOTAL BUDGET (B)</b>	<b>\$ 1,370,274</b>	<b>\$ 1,270,000</b>	<b>\$ (100,274)</b>	<b>-7.3%</b>	<b>\$ 1,229,080</b>	<b>\$ (141,194)</b>	<b>-10.3%</b>
<b>CHANGE IN WORKING CAPITAL (=A-B)<sup>1</sup></b>	<b>\$ (129,726)</b>	<b>\$ (29,402)</b>	<b>\$ 100,324</b>	<b>-</b>	<b>\$ (326,978)</b>	<b>\$ (197,252)</b>	<b>-</b>
FTEs	5.50	5.50	-	0.0%	5.50	-	0.0%

<sup>1</sup> Fixed Asset included in Indirect Expenses.

Table 3. Budget Comparison, 2016 to 2017.

## Statutory Assessments

WIRAB's proposed funding assessment of \$901,452 is allocated \$759,556 (84%) to the U.S. portion, \$128,716 to the Canadian portion (14%), and \$13,180 (2%) to the Mexican portion of the Western Interconnection.

## Key Assumptions

The WIRAB 2017 Budget and Business Plan is based on the following assumptions:

- There will be no significant expansion of FERC, NERC, WECC, or Peak Reliability responsibilities as a result of legislation or administrative actions.
- WIRAB will continue to provide advice to Peak Reliability.
- WIRAB will hold two in-person meetings in 2017.
- WIRAB will organize and sponsor webinars and workshops on key reliability issues for WIRAB members, state and provincial representatives, industry, and others.
- WIRAB will attend all WECC and Peak Reliability Boards of Directors and Member Advisory Committee (MAC) meetings.
- WIRAB will attend selected NERC meetings and workshops on relevant topics.
- WIRAB will annually visit with FERC in its offices.
- WIRAB will monitor all FERC business meetings.
- WIRAB will attend FERC technical conferences on reliability issues.

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## **Section A – Statutory Activities**

### 2017 Business Plan and Budget

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## Section A – Statutory Activities

WIRAB's advice to FERC, NERC, WECC, and Peak Reliability can be grouped into four categories that are appropriately funded under Section 215 of the FPA:

1. **Governance and Strategic Planning:** Section 215(j) of the FPA authorizes WIRAB to provide advice to FERC on the governance, strategic direction, budget and fees of WECC. FERC has previously authorized WIRAB to provide advice on the governance, strategic direction, budget and fees of Peak Reliability.
2. **Emerging Trends and System Risks:** WIRAB must maintain awareness of system conditions and emerging trends and system risks in order to provide effective and technically sound advice regarding the strategic direction of FERC and Peak Reliability. WIRAB also uses knowledge of emerging trends and risks to provide advice to WECC on reliability readiness activities and proactive compliance efforts. These activities are appropriately funded under Section 215(j) of the FPA.
3. **Periodic Reliability Assessments:** Section 215(g) of the FPA requires NERC to conduct periodic assessments of the reliability and adequacy of the bulk-power system. WECC assists NERC in performing this statutory activity. WIRAB works closely with WECC to improve reliability assessment in the Western Interconnection.
4. **Reliability Standards and Proactive Enforcement:** Section 215(j) of the FPA authorizes WIRAB to provide advice to FERC on whether reliability standards are just, reasonable, not unduly discriminatory or preferential, and in the public interest. WIRAB works closely with WECC and Peak Reliability to identify emerging problems or conditions that should be considered in the course of drafting and voting on amendments to existing standards or new standards. WIRAB also works closely with WECC to develop reliability readiness activities and to promote proactive compliance efforts.

WIRAB's activities in each of these categories are described in the following subsections.

## Governance and Strategic Planning

WIRAB staff engage in the following on-going activities in order to provide independent expert advice on the governance and strategic direction of WECC and Peak Reliability:

- Attend all WECC Board of Director and Member Advisory Committee meetings and monitor developments related to governance and strategic planning.
- Attend all WECC Joint Guidance Committee meetings and monitor developments related to governance and strategic planning.
- Conduct quarterly webinars with WIRAB Members and WECC Class 5 Members to review and develop advice and guidance on WECC governance and strategic planning matters.
- Provide written advice to WECC management and Board of Directors on:
  - WECC's Three Year Strategic Plan;
  - WECC's annual Budget and Business Plan;
  - WECC's annual Operational Practices Survey.
- Participate on the WECC Operating Committee Task Force to provide guidance and input on the governance and structure of the WECC Operation Committee.
- Participate on the WECC Transmission Expansion Planning Policy Committee Task Force to provide guidance and input on the governance and structure of the WECC Transmission Expansion Planning Policy Committee.
- Attend all Peak Reliability Board of Director and Member Advisory Committee meetings and monitor developments related to governance and strategic planning.
- Conduct quarterly webinars with WIRAB Members and Peak Reliability Class 5 Members to review and develop advice and guidance on WECC governance and strategic planning matters.
- Provide written advice to Peak Reliability management and Board of Directors on:

- Peak Reliability's annual Strategic Plan;
- Peak Reliability's annual Budget and Business Plan;
- Peak Reliability's annual Board Evaluation Questionnaire;
- Peak Reliability's annual Reliability Performance Scorecards (metrics for BAs and TOPs);
- Peak Reliability's annual Reliability Metrics Dashboard (metrics for Peak Reliability)

## **Emerging Trends and System Risks**

WIRAB staff engage in the following on-going activities in order to provide independent expert advice on the emerging reliability trends and system risks:

- Attend all WECC Operating Committee meetings.
- Attend all WECC Transmission Expansion Planning Policy Committee meetings.
- Attend all Peak Reliability Reliability User Group meetings.
- Monitor WECC Planning Coordination Committee meetings.
- Monitor WECC Market Interface Committee meetings.
- Conduct monthly meetings with contractors to identify and discuss emerging reliability issues.
- Provide written advice to WECC management and Board of Directors on:
  - WECC's Three Year Strategic Plan;
  - WECC's annual State of the Interconnection report.
- Monitor WECC Event Analysis and Situation Awareness

## **Periodic Reliability Assessments**

WIRAB staff engage in the following on-going activities in order to provide guidance and independent expert advice on WECC's periodic reliability assessments:

- Attend all WECC TEPPC meetings.



- Submit TEPPC Study Requests
- Provide advice to WECC and Peak Reliability on how to identify, analyze, and recommend actions to address current and emerging reliability challenges.
- Provide advice to WECC and Peak Reliability on how to secure policy input from states and provinces and subject matter experts.
- Provide advice to WECC and Peak Reliability on how to advance best practices to maintain physical and cyber security of the grid.
- Provide advice to WECC and Peak Reliability on how to foster deployment of advanced grid monitoring and control technologies.

## **Reliability Standards and Proactive Enforcement**

WIRAB staff engage in the following on-going activities in order to provide independent expert advice on the development and proactive enforcement of reliability standards:

- Attend all WECC Operating Committee meetings.
- Advice to WECC on Implementation of BAL-001-2
- Advice to WECC on turbine-generator governor dead band issues
- Monitor physical and cyber security standards

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## **Section B – WIRAB Supplemental Financial Information**

### **2017 Business Plan and Budget**

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## Section B – Supplemental Financial Information

### Working Capital Reserve

WIRAB projects it will have a Working Capital Reserve of \$426,978 on December 31, 2016. WIRAB's reserve policy, unchanged from previous years, is to maintain a Work Capital Reserve of \$100,000. The surplus reserve results in a \$326,978 reduction in WIRAB's funding requirement for 2017. Table B.1 shows WIRAB analysis of its Working Capital Reserve.

<b>WIRAB - Working Capital Reserve Analysis 2016-2017</b>	
<b>STATUTORY</b>	
<b>Beginning Working Capital Reserve (Deficit), December 31, 2015</b>	456,330
Plus: 2016 Funding (from LSEs or designees)	1,239,998
Plus: 2016 Other funding sources	650
Minus: 2016 Projected expenses & capital expenditures	<b>(1,270,000)</b>
<b>Projected Working Capital Reserve (Deficit), December 31, 2016</b>	<b>426,978</b>
<b>Desired Working Capital Reserve, December 31, 2017<sup>1</sup></b>	100,000
Minus: Projected Working Capital Reserve, December 31, 2016	<b>(426,978)</b>
<b>Increase(decrease) in funding requirement to achieve Working Capital Reserve</b>	<b>(326,978)</b>
2017 Expenses and Capital Expenditures	1,229,080
Less: Penalty Sanctions <sup>2</sup>	0
Less: Other Funding Sources	<b>(650)</b>
Adjustment: To achieve desired Working Capital Reserve	<b>(326,978)</b>
<b>2017 NERC Assessment</b>	<b>901,452</b>

<sup>1</sup> On June 29, 2009 WIRAB members approved a desired working capital reserve of \$100,000. The reserve consists of the following components: \$100,000 for contingencies.

<sup>2</sup> Penalty sanctions are not applicable to WIRAB

**Table B-1. Working Capital Reserve Analysis 2016 – 2017.**

## Budget Projections for 2018-2019

WIRAB - Statement of Activities and Change in Working Capital 2017 Budget & 2018 and 2019 Projections							
STATUTORY							
	2017 Budget	2018 Projection	Variance 2018 Projection v 2017 Budget		2019 Projection	Variance 2019 v 2018 Projections	
			Over(Under)	% Change		Over(Under)	% Change
<b>Funding</b>							
<b>WIRAB Funding</b>							
Assessments	\$ 901,452	\$ 1,269,288	\$ 367,836	40.8%	\$ 1,321,639	\$ 52,351	4.1%
Penalty Sanctions	-	-	-	-	-	-	-
<b>Total WIRAB Funding</b>	<b>\$ 901,452</b>	<b>\$ 1,269,288</b>	<b>\$ 367,836</b>	<b>40.8%</b>	<b>\$ 1,321,639</b>	<b>\$ 52,351</b>	<b>4.1%</b>
Membership Dues	-	-	-	-	-	-	-
Testing Fees	-	-	-	-	-	-	-
Services & Software	-	-	-	-	-	-	-
Workshops	-	-	-	-	-	-	-
Interest	650	650	\$ -	0.0%	750	\$ 100	15.4%
Miscellaneous	-	-	-	-	-	-	-
<b>Total Funding (A)</b>	<b>\$ 902,102</b>	<b>\$ 1,269,938</b>	<b>\$ 367,836</b>	<b>40.8%</b>	<b>\$ 1,322,389</b>	<b>\$ 52,451</b>	<b>4.1%</b>
<b>Expenses</b>							
<b>Personnel Expenses</b>							
Salaries	465,653	484,279	18,626	4.0%	508,493	\$ 24,214	5.0%
Payroll Taxes	-	-	-	-	-	-	-
Benefits	-	-	-	-	-	-	-
Retirement Costs	-	-	-	-	-	-	-
<b>Total Personnel Expenses</b>	<b>\$ 465,653</b>	<b>\$ 484,279</b>	<b>\$ 18,626</b>	<b>4.0%</b>	<b>\$ 508,493</b>	<b>\$ 24,214</b>	<b>5.0%</b>
<b>Meeting Expenses</b>							
WIRAB Meetings	\$ 60,900	\$ 60,900	\$ -	0.0%	\$ 62,727	\$ 1,827	3.0%
Travel	99,500	101,430	\$ 1,930	1.9%	104,473	\$ 3,043	3.0%
Conference Calls	6,000	6,000	\$ -	0.0%	6,000	\$ -	0.0%
<b>Total Meeting Expenses</b>	<b>\$ 166,400</b>	<b>\$ 168,330</b>	<b>\$ 1,930</b>	<b>1.2%</b>	<b>\$ 173,200</b>	<b>\$ 4,870</b>	<b>2.9%</b>
<b>Operating Expenses</b>							
Consultants & Contracts	\$ 150,000	\$ 150,000	\$ -	0.0%	\$ 150,000	\$ -	0.0%
Office Rent	-	-	-	-	-	-	-
Office Costs	-	-	-	-	-	-	-
Professional Services	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Depreciation	-	-	-	-	-	-	-
<b>Total Operating Expenses</b>	<b>\$ 150,000</b>	<b>\$ 150,000</b>	<b>\$ -</b>	<b>0.0%</b>	<b>\$ 150,000</b>	<b>\$ -</b>	<b>0.0%</b>
<b>Total Direct Expenses</b>	<b>\$ 782,053</b>	<b>\$ 802,609</b>	<b>\$ 20,556</b>	<b>2.6%</b>	<b>\$ 831,693</b>	<b>\$ 29,084</b>	<b>3.6%</b>
<b>Indirect Expenses</b>	<b>\$ 447,027</b>	<b>\$ 467,329</b>	<b>\$ 20,302</b>	<b>4.5%</b>	<b>\$ 490,696</b>	<b>\$ 23,367</b>	<b>5.0%</b>
<b>Other Non-Operating Expenses</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>
<b>TOTAL BUDGET (B)</b>	<b>\$ 1,229,080</b>	<b>\$ 1,269,938</b>	<b>\$ 40,858</b>	<b>3.3%</b>	<b>\$ 1,322,389</b>	<b>\$ 52,451</b>	<b>4.1%</b>
<b>CHANGE IN WORKING CAPITAL (=A-B)<sup>1</sup></b>	<b>\$ (326,978)</b>	<b>\$ -</b>	<b>\$ 326,978</b>	<b>-</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>
<b>FTEs</b>	<b>5.50</b>	<b>5.50</b>	<b>-</b>	<b>0.0%</b>	<b>5.50</b>	<b>-</b>	<b>0.0%</b>

<sup>1</sup> Fixed Asset included in Indirect Expenses.

Table B-2. Budget 2016 Compared with 2017-2018 Projections.

WIRAB projects a 3.3% increase to its annual budget in 2018 and a 4.1% increase in 2019. These increases reflect expected cost-of-living adjustments to personnel expenses for employees working in Denver, Colorado.

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## **Section C – Non-Statutory Activities**

### 2017 Business Plan and Budget

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## **Section C – Non-Statutory Activities**

WIRAB does not engage in non-statutory activities.

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## **Section D – Additional Consolidated Financial Statements**

### 2017 Business Plan and Budget

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## Section D – Additional Consolidated Financial Statements

### Statement of Financial Position

Table D-1 provides WIRAB's Statement of Financial Position as of these dates:

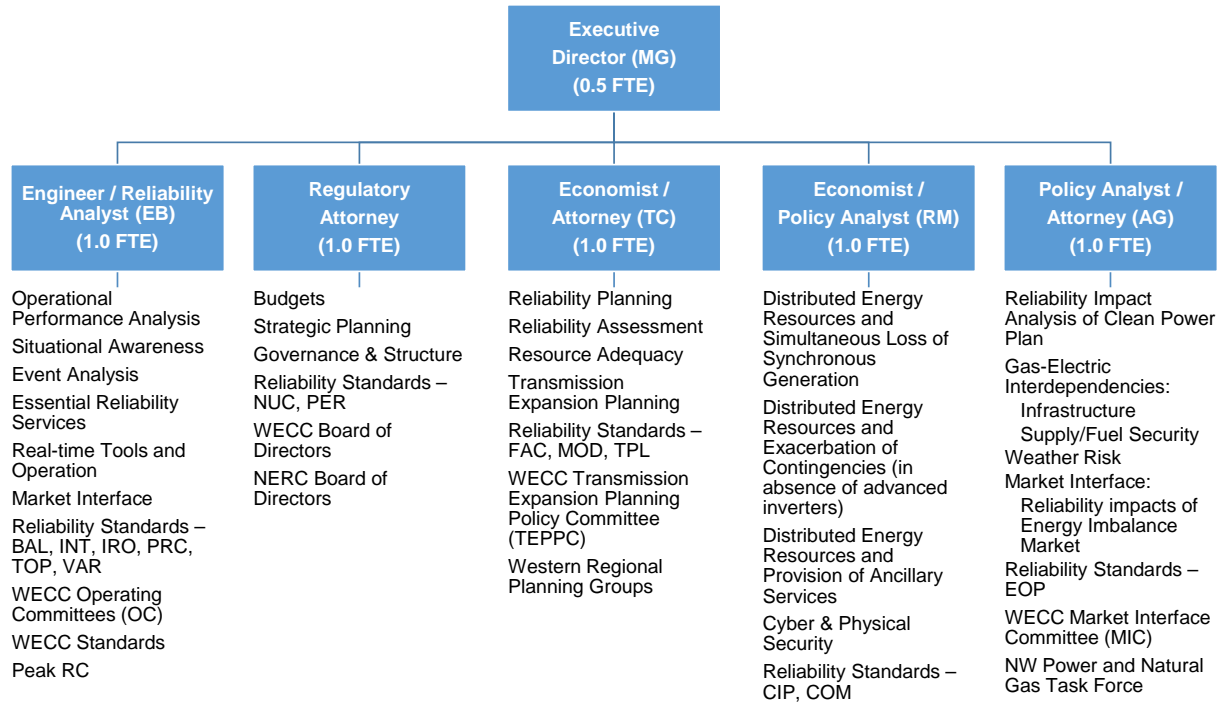
- As of December 31, 2015, per audit
- As of December 31, 2016, projected
- As of December 31, 2017, as budgeted

<b>WIRAB - Statement of Financial Position</b>				
<b>STATUTORY</b>				
	<b>As of December 31, 2015 (Audit)</b>	<b>As of December 31, 2016 (Projected)</b>	<b>As of December 31, 2017 (Budgeted)</b>	
<b>Assets</b>				
Cash and Investments	\$ 456,330	\$ 240,000	\$ 100,000	
<b>Total Assets</b>	<b>\$ 456,330</b>	<b>\$ 240,000</b>	<b>\$ 100,000</b>	

**Table D-1. Statement of Financial Position, Three-Year Comparison**

## Appendix A Organization Chart

The WIRAB Organization Chart is shown below.



**DOCKET NO. RR16-\_\_-000**

**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**2017 BUSINESS PLAN AND BUDGET FILING**

**ATTACHMENT 12**

**DISCUSSION OF COMMENTS RECEIVED**

**DURING DEVELOPMENT OF NERC'S**

**2017 BUSINESS PLAN AND BUDGET**

## **ATTACHMENT 12**

### **DISCUSSION OF COMMENTS RECEIVED DURING DEVELOPMENT OF NERC'S 2017 BUSINESS PLAN AND BUDGET**

During the preparation of its 2017 Business Plan and Budget, NERC posted several drafts on its website for stakeholder review and comment. Formal comments were solicited on the first and second drafts. The final draft was posted as part of the agenda for the open Finance and Audit Committee meeting of August 10, 2016, during which an opportunity for comments from stakeholders was provided.

Comments on Draft #1 of the NERC Business Plan and Budget were received from the Canadian Electricity Association (“CEA”), the Ontario Independent Electricity System Operator (IESO), and the Member Executive Committee of the Electricity Subsector Coordinating Council (MEC-ESCC). Copies of these comments were posted on NERC’s website.<sup>1</sup> There were no written comments received on Draft #2 or the final draft of the NERC Business Plan and Budget. During the August 10, 2016 NERC Finance and Audit Committee meeting for presentation of the NERC, Regional Entity and WIRAB 2017 business plans and budgets and associated assessments, for a recommendation of approval, additional comments were received from stakeholders which NERC regarded as generally supportive.

During the February 2016 meetings of the NERC Member Representatives Committee and Board of Trustees, management indicated (as it had in the two preceding years) that it would be developing and posting an Accountability Matrix to track stakeholder recommendations and policy input, as well as management’s actions and response to this input. NERC tracks all policy input and related responses in detail and posts a summarized version of the Accountability Matrix on NERC’s Website. The current version of the detailed Accountability Matrix associated with the Business Plan and Budget is included as an attachment to this petition. Policy input, management responses, and the accountability matrix and posted summary are updated on a quarterly basis. The remainder of this Attachment 12 is comprised of: (1) the NERC Management Response to Comments Received from CEA, IESO, and the MEC-ESCC, and (2) the most recently-updated version of the Accountability Matrix, updated as of August 10, 2016. These documents show NERC’s responses and action items to the stakeholder comments received on Draft #1 of the 2017 Business Plan and Budget, as well as NERC’s responses and action items to policy input received from stakeholders.

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<sup>1</sup> Copies of the comments received on the posted Draft #1 of the 2017 Business Plan and Budget are available at: <http://www.nerc.com/gov/bot/FINANCE/Pages/2017-NERC-Business-Plan-and-Budget.aspx>. The policy input received from stakeholders for the February 10-11, 2016 meeting of the NERC Board of Trustees is available at: [http://www.nerc.com/gov/bot/Agenda%20highlights%20and%20Mintues%202013/Policy\\_Input\\_Package\\_February\\_2016\\_PUBLIC\\_POSTING.pdf](http://www.nerc.com/gov/bot/Agenda%20highlights%20and%20Mintues%202013/Policy_Input_Package_February_2016_PUBLIC_POSTING.pdf).

## **NERC Business Plan & Budget – Draft 1 Management Response to Comments Received**

### **Action**

Review

### **Background**

The deadline for comments on the first draft of NERC's 2017 Business Plan and Budget ended on June 30. Comments were submitted by the Canadian Electricity Association (CEA), the Ontario Independent Electricity System Operator (IESO) and the Electricity Sector Coordinating Council Member Executive Committee (MEC).

CEA supports NERC's assessment stabilization efforts and would like to have some additional understanding of the effect on Canadian entities. CEA also requests that NERC ensure that its assessment allocation policy is closely aligned with the reliability frameworks across Canada and avoids assessment of costs related to U.S. only programs or initiatives. Similar to the IESO, CEA also is concerned with the pattern of annual budget increases and suggests that given NERC's maturity the increases (if any) should be lower and flatter. CEA would also like to see a clearer link between budgeted expenditures and the priorities and risks identified in the Strategic Plan and more information regarding the interrelationship between NERC's strategic planning process and budgeting processes. CEA also noted that it would be helpful if NERC provided some degree of prioritization to budget expenditures so it can better understand the risk of reductions in budgets or budget increases. CEA invites NERC to proactively engage the sector in the redesign of the Strategic Planning Framework to ensure clear linkage between priorities, risks and program spending. The IESO's comments primarily focused on the percentage increase in the 2017 budget and projected increases for 2018 and 2019. MEC's comments support the company's proposed investment in the E-ISAC portal. This proposed investment, together with additional supporting information, is included in NERC's second draft of its 2017 business plan and budget.

### **Response to CEA and IESO Comments**

#### *1. Assessment Stabilization Initiative and Allocation Policy*

The strategy to align assessments and budget increases in the U.S. will take several years as NERC manages the use of its Assessment Stabilization Reserve to address the historic effect of the application of U.S. penalty funding to reduce U.S. assessments. This reserve is currently funded entirely by U.S. penalties and NERC management has recommended periodic release of these reserves to manage this alignment strategy. The actual annual contributions and releases from the Assessment Stabilization Reserve are reviewed and

approved each year in connection with the approval of NERC's annual business plan and budget. NERC management does not currently anticipate the use of U.S. penalty funding, either through or outside of the Assessment Stabilization Reserve, to reduce Canadian assessments. Should surplus funding become available due to unanticipated budget underruns in a given year, a determination will be made whether those funds should be contributed to the Assessment Stabilization Reserve for release in a future period or applied to reduce assessments in the following budget year. In either case, under current policies, these surplus funds would be allocated to reduce assessments for all load serving entities, including those in Canada.

In recognition of reliability frameworks existing in Canada, during each budget cycle, the evaluation of Canadian credits and assessment allocations takes place under the general guidance of the NERC Board's Expanded Policy on Allocation of Certain Compliance and Enforcement Costs to recognize compliance and enforcement programs which are conducted within the various Canadian Provinces. NERC also excludes from Canadian assessments the cost of certain situation software tools (e.g. SAFNR) which are only utilized by the U.S. The company will continue to monitor and evaluate assessment and cost allocation methodologies to ensure ongoing alignment with the reliability framework throughout North America, including Canada.

## 2. *Alignment with Strategic Plan, Risk Priorities*

As recently discussed at the July 13, 2016 MRC Informational Session, NERC has initiatives underway, including additional opportunities for stakeholder input, to further align the strategic plan, metrics and business plan and budget development processes. This will be a topic of further discussion during the August MRC and Board meetings.<sup>1</sup>

NERC's business plan and budget and accompanying presentation materials include documentation regarding the alignment of resources, resource allocation and supporting activities with the Strategic Plan and RISC priorities, including the priorities and supporting activities which the company and each department will focus on during 2017. These activities reflect coordination with and input from the member managed NERC standing committee's including the planning, operating, RISC, compliance and certification, standards, critical infrastructure protection and personal certification governance committees. Management also plans to present additional material as part of the presentation of the consolidated ERO Enterprise budget presentation regarding the alignment of both NERC and Regional Entity resources to the both the Strategic Plan and RISC priorities.

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<sup>1</sup> During the [May 2016 Member Representatives Committee \(MRC\) meeting](#), NERC presented a framework to further improve ERO Enterprise strategic planning. As part of its August 2016 policy input letter, NERC is also requesting policy input from the MRC regarding this framework and the ERO Enterprise Strategic Plan.

### *3. Budget Increases*

NERC management acknowledges and understands the cost pressures on not only Canadian entities, but all stakeholders. However, it is also essential that NERC maintain adequate funding to provide the necessary resources to fulfill its statutory responsibilities and to support the goals and objectives set forth in the Strategic Plan, standing committee work plans and related activities to ensure Bulk Electric System reliability. A significant portion of NERC's budget and funding requirements is driven by personnel costs. Hiring, training, and retaining a highly skilled workforce, even in a steady state of operations, creates upward pressure on personnel costs and NERC's budget. NERC is very focused on efficient and effective resource management, carefully evaluating the backfilling of vacancies and resource allocation and other costs to ease this upward budget pressure. In order to support operational and efficiency objectives, NERC also needs to make necessary investments in ERO Enterprise software applications and tools, as further described in the Information Technology section of NERC's 2017 business plan and budget.

Policy Input Area	Date	Source	Comment Summary	NERC Response/Notes
2017 Business Plan and Budget	February 2016	NPCC	NPCC recommends a modification of the NERC Cost Allocation Policy to incorporate a U.S.-only funding methodology for efforts and costs related to the Clean Power Plan assessments or other country or interconnection specific activities.	NERC does not believe that modification to its cost allocation methods are appropriate at this time. Any proposed changes in the future to account for sub-regional interconnection specific studies will be reviewed based on the specific facts presented at that time.
2017 Business Plan and Budget	February 2016	ISO/RTO	In the risk-based CMEP implementation area, encourage NERC to work with the Compliance and Certification Committee (CCC) to identify impediments to the self-logging process and identify improvements that can be implemented in 2016. NERC should also develop metrics to monitor the progress of entities entering the self-logging program.	NERC has worked with the CCC on metrics for self-logging and is using those metrics. NERC is also doing a qualitative review of the program this year in conjunction with FERC staff.
2017 Business Plan and Budget	February 2016	MRO	As the ERO develops the 2017 BP&Bs, the MRO Board encourages establishing a NERC Field Operations Group to coordinate, collaborate and oversee the business of executing these delegated functions.	NERC does not envision structural changes at this time. NERC will continue developing its leadership through coaching and training to ensure leaders are able to support, coach and provide direction to the Regions. NERC will work collaboratively with the Regions in furthering controls around oversight of areas of greatest importance, providing more definition on what success looks like and how it will be monitored and measured.



Policy Input Area	Date	Source	Comment Summary	NERC Response/Notes
2017 Business Plan and Budget	February 2016	CEA	Compliance Assurance ranks as one of the top-funded line items in NERC's BP&B. CEA therefore encourages NERC to demonstrate in its 2017 BP&B how resources will continue to bolster activities intended to support registered entity compliance - especially in view of past experience with and imminent implementation deadlines for challenging, complex standards (i.e., CIP V5).	NERC and the Regional Entities are committed to providing necessary support to registered entities in these areas. Their business plans and budgets will further describe the key activities which will be undertaken to provide necessary training, outreach and support.
2017 Business Plan and Budget	February 2016	SM-TDUs/APPA/TAPS/LPPC	Recommend that NERC combine the "Changing Resource Mix" and "Risks in Resource Planning" projects into a single strategic initiative focused on the impact of statutory and regulatory requirements that affect resource planning and reliable operations.	Will be considered in connection with the development of the 2017-2020 Strategic Plan.
2017 Business Plan and Budget	February 2016	CEA	The 2017 BP&B should clearly identify the lasting efficiencies and savings which will be accrued under transformation to risk-based programs and "steady-state."	NERC continues to further identify efficiencies and savings in each BP&B. In the 2017 budget document, additional language was included to address these issues and NERC anticipates that this language will be continually enhanced in future budget documents.
2017 Business Plan and Budget	February 2016	EEI	Development of the 2017 business plan and budget should include careful consideration to ensure sustainable efforts in standards development, and compliance and enforcement, recognizing these two program areas have matured and stabilized.	The 2017 BP&B includes language that discussed the maturation of these areas and as they continue to stabilize and mature in future years, NERC will continue to provide updates to these areas in the BP&B.
2017 Business Plan and Budget	February 2016	CEA	CEA appreciated inclusion of the pie chart analysis and expense breakdown by program area in the 2016 BP&B materials presented to the Board Finance and Audit Committee in August 2015. CEA encourages a similar approach in the 2017 BP&B itself, illustrating programs and activities across the ERO.	Similar, and in some cases improved, analysis was included in the 2017 BP&B.

Policy Input Area	Date	Source	Comment Summary	NERC Response/Notes
2017 Business Plan and Budget	February 2016	CEA	CEA wishes to reiterate its prior request that NERC first seek efficiencies within the existing NERC budget as a means to fulfill incremental E-ISAC resource needs (if any).	NERC is committed to operating in the most efficient and cost effective manner. Efficiencies are always sought before and while considering additional needs in any department.
2017 Business Plan and Budget	February 2016	CEA	CEA recommends that NERC improve disclosure of investments made and committed in support of the ERO Enterprise IT strategy, as well as reporting of benefits realized (both qualitative and quantitative), relative to the original business case.	Additional text was included in the IT section of the 2017 BP&B to further discuss projects and efficiencies gained. This is an ongoing process and NERC will continue provide additional information on this topic in the future as it becomes available
2017 Business Plan and Budget	February 2016	CEA	CEA recommends greater visibility in linking the core priorities articulated in the Strategic Plan with the allocation of resources for specific activities in the BP&B.	Significant additional language was added to the 2017 BP&B to show linkages between the strategic plan and NERC activities.
2017 Business Plan and Budget	February 2016	Merchant Electricity Generators and Electricity Marketers	G&M's were unable to distinguish what NERC specifically plans to keep working on in 2016, initiate in 2016, or formulate in 2016 to initiate in 2017. Both the Strategic Plan and the Business Plan & Budget list items that are sometimes the same but described differently. The two documents do not seem to sleeve together seamlessly. Importantly, it is difficult to see the specific tasks associated with a priority initiative and understand the timeline for that initiative's objectives.	The 2017 BP&B was completed under the framework of the 2016-2019 Strategic Plan document. For future periods, NERC is working to better coordinate the two processes (the strategic plan and the budget) so that both are completed in a more seamless manner. This was discussed at the last Board meeting in August 2016 and efforts are underway to achieve this coordination.

Policy Input Area	Date	Source	Comment Summary	NERC Response/Notes
<b>2017 Business Plan and Budget</b>	February 2016	SM-TDUs/APPA/TAPS/LPPC	SM-TDUs request that the NERC Board and Management give clear assurances that the ERO Enterprise will afford compliance discretion to Transmission Owners (TOs) with respect to application of CIP Version 5 Medium or High Impact requirements if such registered entities in good faith self-identify TO control centers as Low Impact. NERC should make cybersecurity a high priority and have adequate resources to develop guidance and outreach for these new entrants into the CIP compliance realm. This guidance must be delivered timely to be of use to compliance managers.	<p>The ERO Enterprise worked with individual TO registered entities to determine the appropriate risk-based compliance monitoring for their entity. This approach was discussed with broader industry at the February 2016 BOTCC meeting.</p> <p>Cybersecurity is a priority which will be discussed in the 2017 BP&amp;B.</p>
<b>2017 Business Plan and Budget</b>	February 2016	NAGF	ERO should concentrate the priorities and activities in its 2017 Business Plan and Budget (BP&B) Development on ERO Strategic Goal 3, to Identify the most significant risks to reliability, and Strategic Goal 4, to identify, evaluate, and independently assesses emerging risks to reliability. Specifically, the NAGF believes the priorities and activities should focus on the analysis of system performance, the evaluation of Essential Reliability Services and the evaluation of physical and cyber security controls. In addition, discussions should continue to develop options for responding to extreme physical and weather events.	As demonstrated in the updated graphs on the linkage between strategic goals and NERC resources, Goals 3 and 4 are the areas that have the greatest resource need, and both of these areas provide significant input into all other areas of the NERC programs. Detailed work plans for these strategic goals are set by the RISC, the Board, and through various working groups involving NERC and industry stakeholders.
<b>2017 Business Plan and Budget</b>	February 2016	SM-TDUs/APPA/TAPS/LPPC	Recommend an increased focus on the impact of environmental regulations, greater transparency on the methods NERC uses for BES risk assessment and continued focus on implementation of ongoing initiatives such as risk-based compliance, the BES exception process, risk-based registration and the transition of standards to an “enhanced maintenance” mode.	Additional language was included in the 2017 BP&B to discuss the numerous analytic projects and programs at NERC, as well as discussions on the maturation of risk-based compliance and standards.

Policy Input Area	Date	Source	Comment Summary	NERC Response/Notes
2017 Business Plan and Budget	February 2016	MRO	<p>Recommends that NERC and the Regional Entities consider instituting a “zero-based budget process,” which requires every cost be justified on its own merit, rather than simply justifying incremental cost changes from year to year.</p>	<p>NERC and the Regional Entities continue to enhance the process by which they formulate and communicate the recommended budget. At NERC, budgeted costs are reviewed in great detail to ascertain where reallocations and efficiencies can be obtain, and all costs are reviewed for necessity. While most presentations to stakeholders and the Board reference incremental movements from prior year, the internal process to justify NERC’s budget is much more comprehensive.</p>
2017 Business Plan and Budget	February 2016	ISO/RTO	<p>For standards stabilization, before any drafting activity begins, the Periodic Review Team should specifically identify what, if any, changes need to be made. The recommendations should go to ballot to let the industry decide whether the standard is acceptable as-is and if the standard is opened for changes, which specific changes should be made. Establishing a set of criteria to help determine if a standard needs to be revised would also be beneficial.</p>	<p>Whether the standard is acceptable as-is or specific changes should be made would be addressed through the enhanced periodic review process. The Periodic Review Team recommends changes to the standard before any drafting activity begins. That recommendation is subject to direct industry comment when a Standard Authorization Request is posted, and again when proposed standard changes are posted for comment and ballot by the drafting team charged with implementing the periodic review recommendation. This process is informed by an established set of criteria embodied in the Enhanced Periodic Review template the periodic review team is required to use.</p>

Policy Input Area	Date	Source	Comment Summary	NERC Response/Notes
2017 Business Plan and Budget	February 2016	ISO/RTO	For standard stabilization, recommend that the RISC develop a repeatable framework that could be used to evaluate a suggested new standard and determines the most effective tool(s) to address the issue.	RISC triages and provides front-end, high-level leadership for issues of strategic importance to bulk power system (BPS) reliability and offers high-level stakeholder leadership engagement and input on issues that impact BPS reliability. They establish a common understanding of the scope, priority, and goals for the development of solutions to address these issues, including the use of solutions other than the development of new or revised reliability standards. In doing so, the RISC provides a framework for steering, developing, formalizing, and organizing recommendations to help NERC and the industry effectively focus their resources on the critical issues needed to best improve the reliability of the BPS.
2017 Business Plan and Budget	February 2016	SM-TDUs/APPA/TAPS/LPPC	With respect to the BES exception process, we recommend that the Board direct NERC staff to explore ways to make more information publicly available so that stakeholders can both judge the effectiveness of the program and assess whether a particular exception request is likely to be granted.	Information is shared in accordance with the NERC Rules of Procedure. NERC has enhanced its Case Notes to include more detail on recently decided Exception Requests that have been posted publicly. NERC has also developed a Risk Assessment Considerations During NERC Review of Exception Requests document posted publicly in February 2016, that explains how NERC looks at risk and aggregate impacts.

Policy Input Area	Date	Source	Comment Summary	NERC Response/Notes
<b>2017 Business Plan and Budget</b>	February 2016	SM-TDUs/APPA/TAPS/LPPC	For RBR, the selection of Regional Entity participants for the NERC-led panel should be transparent, with publication of how the members are selected and their expertise.	NERC and the Regional Entities each identified core NERC-led panel members who will draw from other Regional subject matter experts as needed per the submittal.
<b>2017 Business Plan and Budget</b>	February 2016	EEI	While the CPP work absorbed considerable resources over the past year, EEI recommends that NERC in its proposed 2017 budget seek to identify with as much confidence as possible the nature and scope of work in order to ensure maintenance of effort based on identified long-term reliability risks.	Work related to assessments is discussed at length in the 2017 BP&B, including areas where additional resources may be needed. While NERC intends to provide as much predictability as possible for assessment work (including CPP and other regulatory efforts), some of that work is requested or prioritized outside and potentially after the BP&B process.
<b>2017 Business Plan and Budget</b>	February 2016	SM-TDUs/APPA/TAPS/LPPC	For RBR, NERC should develop a clear and repeatable process for evaluating case-by-case requests, in accordance with the NERC Rules of Procedures.	A guide on how to make decisions has been posted on the NERC website on the Organization Registration web page (RBR implementation guidance).
<b>2017 Business Plan and Budget</b>	February 2016	NPCC	NPCC recommends that NERC's 2017 business plan and budget incorporate plans to enhance the effectiveness of the E-ISAC and to provide direct reliability benefits including information sharing and analytical support for all registered entities and Regional Entities.	The discussion about the E-ISAC was enhanced for the 2017 BP&B, including additional text about the new portal and other data exchange efforts underway to ensure information sharing and analytics are provided to industry.
<b>2017 Business Plan and Budget</b>	February 2016	ISO/RTO	For prioritizing resilience activities towards those that address multiple risks, recommend NERC consider creating a web page for each risk that highlights the issue, what has been done to address the risk, what is still being done, and include resources the industry can use. FEMA's natural disaster website appears to be a good model.	NERC, in conjunction with the RISC, will consider this recommendation as they evaluate resilience activities.

Policy Input Area	Date	Source	Comment Summary	NERC Response/Notes
2017 Business Plan and Budget	February 2016	SM-TDUs/APPA/TAPS/LPPC	For RBR, NERC staff should develop metrics to show the program's success and progress.	The ERO Enterprise will report progress to the NERC Board/BOTCC as appropriate. Additionally, industry will have ongoing visibility to the status of the program, as all decisions will be posted on the website.
2017 Business Plan and Budget	February 2016	EI	In the reliability assessment program area, NERC needs to ensure that it has resources sufficient to effectively plan and manage a sustainable effort, and to ensure that published work rests on thorough analysis.	This is an ongoing effort and the process by which NERC completes and publishes assessments is steadily improving. Significant discussion has taken place in recent Board meetings about the process. And during the May Board meeting, NERC discussed the assumptions and analytics in great detail leading toward the most recent assessments being published.
2017 Business Plan and Budget	February 2016	NPCC	NPCC recommends that the ERO Enterprise focus its assessments of emerging risks to bulk electric system reliability, through the re-allocation of personnel and resources from the standards and compliance program areas to the reliability assessment and performance analysis (RAPA) program area.	Both the Standards and Compliance areas have seen more stabilization in recent years, and resources have been allocated to analytical areas in response to RISC, Board, and stakeholder priorities. This is evidenced in the 2017 and prior BP&Bs.
2017 Business Plan and Budget	February 2016	SM-TDUs/APPA/TAPS/LPPC	The term "steady state" is at best a misnomer and should be discarded to call things as they are: NERC is well under way to conducting what might be best described as "enhanced maintenance" of a fundamentally sound body of standards that still have a number of quality and clarity concerns to be addressed.	NERC is considering refining the terminology to better reflect the current state of standards.

Policy Input Area	Date	Source	Comment Summary	NERC Response/Notes
<b>2017 Business Plan and Budget</b>	February 2016	Merchant Electricity Generators and Electricity Marketers	A clearer description connecting initiatives and Reliability Issues Steering Committee (RISC) priorities to tasks would be an improvement.	The 2017 BP&B includes significant additional language that links the strategic goals to NERC's various programs and resources. This is an ongoing priority and NERC will continually enhance these linkages in future budgets.
<b>2017 Business Plan and Budget</b>	February 2016	SM-TDUs/APPA/TAPS/LPPC	For risk-based CMEP, our one "ask" of NERC and the regions is to enhance the transparency and consistency of the risk assessment methods used to assess inherent and entity-specific risks to the BES.	The IRA and ICE guides are posted on the NERC website for transparency. Assessments are based on facts and circumstances for each entity.
<b>2017 Business Plan and Budget</b>	February 2016	CEA	CEA recommends that the BP&B include improved analytics, such as multi-year retrospective and prospective program trending and comparative analysis of program budgets.	NERC includes various analytical presentations in the budget document, the associated FERC filing, presentations to the Board and stakeholders, and in the year-end budget variance filing to FERC. NERC will continually improve this area with the goal of providing the most meaningful information to analyze the NERC budget.



**DOCKET NO. RR16-\_\_-000**

**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**2017 BUSINESS PLAN AND BUDGET FILING**

**ATTACHMENT 13**

**CALCULATION OF ADJUSTMENTS  
THE AESO 2017 NERC ASSESSMENT,  
THE IESO 2017 NERC ASSESSMENT,  
THE NEW BRUNSWICK 2017 NERC ASSESSMENT,  
AND THE QUEBEC 2017 NERC ASSESSMENT**

## Credit for NERC Compliance Costs

	AESO NEL Share		2017 Compliance FTEs			Costs Paid by	
	NERC Budget	(2015) 1.387%	Total	Credit	% Credit	AESO Credit	AESO
<b>NERC Compliance Program Budget</b>							
Compliance Assurance	\$ 7,858,599	\$ 108,999	15.51	14.30	92.2%	\$ 100,495	\$ 8,503
Analysis and Certification	3,646,289	50,574	7.52	6.70	89.1%	45,059	5,515
Enforcement	5,800,647	80,455	13.16	13.16	100.0%	80,455	-
<b>Total Compliance Costs, including Fixed Assets</b>	<b>\$ 17,305,535</b>	<b>\$ 240,028</b>	<b>36.19</b>	<b>34.16</b>		<b>\$ 226,010</b>	<b>\$ 14,018</b>
<b>Additional Compliance Costs (Not Budgeted in Compliance)</b>							
2017 CMEP Database Support	161,000	2,233			100.0%	2,233	-
True-up 2015 Actual						35,127	
<b>Additional Non-Compliance Costs</b>							
Event Analysis	5,446,206	75,539	11.28	4.51	40.0%	30,216	45,323
SAFNR	505,700	7,014			100.0%	7,014	
<b>Total Compliance, Event Analysis and SAFNR</b>	<b>\$ 23,418,441</b>	<b>\$ 324,814</b>	<b>47.47</b>	<b>38.67</b>		<b>\$ 300,599</b>	<b>\$ 59,341</b>
<b>2017 Assessment</b>							
2017 NERC Assessment	\$ 544,658						
2017 RE Assessment	990,964						
<b>Total 2017 Assessment</b>	<b>\$ 1,535,622</b>						
<b>2016 Assessment</b>							
2016 NERC Assessment	\$ 514,324						
2016 RE Assessment	1,103,418						
<b>Total 2016 Assessment</b>	<b>\$ 1,617,742</b>						
<b>Change in Total Assessment</b>	<b>\$ (82,120)</b>						
	<b>-5.1%</b>						

**2017 IESO Assessment Adjustment**  
**Credit for NERC Compliance Costs**

	NERC Budget		IESO NEL Share (2015) 3.035%	2017 Compliance FTEs			Costs Paid by	
				Total	Credit	% Credit	IESO Credit	IESO
<b>NERC Compliance Program Budget</b>								
Compliance Assurance	\$	7,858,599	\$ 238,508	15.51	12.90	83.2%	\$ 198,373	\$ 40,136
Analysis and Certification		3,646,289	110,665	7.52	6.70	89.1%	98,598	12,067
Enforcement		5,800,647	176,050	13.16	13.16	100.0%	176,050	-
<b>Total Compliance Costs, including Fixed Assets</b>	<b>\$</b>	<b>17,305,535</b>	<b>\$ 525,223</b>	<b>36.19</b>	<b>32.76</b>		<b>\$ 473,020</b>	<b>\$ 52,203</b>
<b>Additional Compliance Costs (Not Budgeted in Compliance)</b>								
2017 CMEP Database Support		161,000	4,886			100.0%	4,886	-
True-up 2015 Actual							77,673	
<b>Additional Non-Compliance Costs</b>								
Event Analysis		5,446,206	\$ 165,292	11.28	4.51	40.0%	\$ 66,117	\$ 99,175
SAFNR		505,700	15,348			100.0%	15,348	-
<b>Total Compliance, Event Analysis and SAFNR</b>	<b>\$</b>	<b>23,418,441</b>	<b>\$ 710,750</b>	<b>47.47</b>	<b>37.27</b>		<b>\$ 637,044</b>	<b>\$ 151,378</b>
<b>2016</b>	<b>\$</b>	<b>25,128,371</b>	<b>\$ 774,456</b>	<b>52.78</b>	<b>44.58</b>		<b>\$ 629,417</b>	<b>\$ 145,039</b>
<b>Change from 2016</b>	<b>\$</b>	<b>(1,709,930)</b>	<b>\$ (63,707)</b>				<b>\$ 7,627</b>	<b>\$ 6,339</b>
<b>2017 Assessment</b>								
2017 NERC Assessment	\$	1,212,884						
2017 RE Assessment		2,011,235						
<b>Total 2017 Assessment</b>	<b>\$</b>	<b>3,224,118</b>						
<b>2016 Assessment</b>								
2016 NERC Assessment	\$	1,173,912						
2016 RE Assessment		2,012,733						
<b>Total 2016 Assessment</b>	<b>\$</b>	<b>3,186,645</b>						
<b>Change in Total Assessment</b>	<b>\$</b>	<b>37,473</b>						
		1.2%						

**2017 New Brunswick Assessment Adjustment  
Credit for NERC Compliance Costs**

	<u>NERC Budget</u>	<b>NB NEL Share (2015) 0.315%</b>	<u>2017 Compliance FTEs</u>			<u>NB Credit</u>	<u>Costs Paid by</u>	
			<u>Total</u>	<u>Credit</u>	<u>% Credit</u>		<u>NB</u>	
<b>NERC Compliance Program Budget</b>								
Compliance Assurance	\$ 7,858,599	\$ 24,716	15.51	12.90	83.2%	\$ 20,557	\$ 4,159	
Analysis and Certification	3,646,289	11,468	7.52	6.70	89.1%	10,217	1,250	
Enforcement	5,800,647	18,244	13.16	13.16	100.0%	18,244	-	
<b>Total Compliance Costs, including Fixed Assets</b>	<b>\$ 17,305,535</b>	<b>\$ 54,428</b>	<b>36.19</b>	<b>32.76</b>		<b>\$ 49,018</b>	<b>\$ 5,410</b>	

**Additional Compliance Costs (Not Budgeted in Compliance)**

2017 CMEP Database Support	161,000	506			100.0%	506	-
True-up 2015 Actual						8,163	

**Additional Non-Compliance Costs**

Event Analysis	\$ 5,446,206	17,129	11.28	4.51	40.0%	\$ 6,852	\$ 10,277
SAFNR	505,700	1,590			100.0%	1,590	
<b>Total Compliance, Event Analysis and SAFNR</b>	<b>\$ 23,418,441</b>	<b>\$ 73,653</b>	<b>47.47</b>	<b>37.27</b>		<b>\$ 66,129</b>	<b>\$ 15,687</b>

**2017 Assessment**

2017 NERC Assessment	\$ 125,585
2017 RE Assessment	290,905
<b>Total 2017 Assessment</b>	<b>\$ 416,490</b>

**2016 Assessment**

2016 NERC Assessment	\$ 117,079
2016 RE Assessment	296,844
<b>Total 2016 Assessment</b>	<b>\$ 413,923</b>

**Change in Total Assessment**

\$ 2,567
0.6%

**2017 Quebec Assessment Adjustment  
Credit for NERC Compliance Costs**

	NERC Budget	Quebec NEL	2017 Compliance FTEs			Quebec	Costs Paid by	Payment Allocation	
		Share (2015)	Total	Credit	% Credit	Credit	Quebec	Regie	Hydro Quebec
<b>NERC Compliance Program Budget</b>		<b>4.090%</b>							
Compliance Assurance	\$ 7,858,599	\$ 321,383	15.51	5.58	36.0%	\$ 115,698	\$ 205,685		\$ 205,685
Analysis and Certification	3,646,289	149,117	7.52	6.70	89.1%	132,857	16,260	\$ 16,260	
Enforcement	5,800,647	237,221	13.16	13.16	100.0%	237,221	-		
<b>Total Compliance Costs, including Fixed Assets</b>	<b>\$ 17,305,535</b>	<b>\$ 707,722</b>	<b>36.19</b>	<b>25.44</b>		<b>\$ 485,777</b>	<b>\$ 221,945</b>	<b>\$ 16,260</b>	<b>\$ 205,685</b>
<b>Additional Compliance Costs (Not Budgeted in Compliance)</b>									
2017 CMEP Database Support	161,000	6,584			100.0%	6,584			
True-up 2015 Actual						87,429			
<b>Additional Non-Compliance Costs</b>									
Event Analysis	\$ 5,446,206	222,726	11.28	4.51	40.0%	\$ 89,091	\$ 133,636		\$ 133,636
SAFNR	505,700	20,681			100.0%	20,681			
<b>Total Compliance, Event Analysis and SAFNR</b>	<b>\$ 23,418,441</b>	<b>\$ 957,713</b>	<b>47.47</b>	<b>29.96</b>		<b>\$ 689,561</b>	<b>\$ 355,581</b>	<b>\$ 16,260</b>	<b>\$ 339,321</b>
<b>2017 Assessment</b>									
2017 NERC Assessment	\$ 1,803,289						\$ 16,260	\$ 1,787,029	
2017 RE Assessment	2,820,434						1,027,171	1,793,263	
<b>Total 2017 Assessment</b>	<b>\$ 4,623,723</b>						<b>\$ 1,043,431</b>	<b>\$ 3,580,292</b>	
<b>2016 Assessment</b>									
2016 NERC Assessment	\$ 1,765,517						\$ 261,103	\$ 1,504,414	
2016 RE Assessment	2,835,085						1,132,825	1,702,260	
<b>Total 2016 Assessment</b>	<b>\$ 4,600,602</b>						<b>\$ 1,393,928</b>	<b>\$ 3,206,674</b>	
<b>Change in Total Assessment</b>	<b>\$ 23,121</b>						<b>\$ (350,497)</b>	<b>\$ 373,618</b>	
	<b>0.5%</b>						<b>-25.1%</b>	<b>11.7%</b>	

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**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**2017 BUSINESS PLAN AND BUDGET FILING**

**ATTACHMENT 14**

**METRICS COMPARING  
REGIONAL ENTITY OPERATIONS  
BASED ON  
THE 2017 BUDGETS**

**2017 Metrics for Budget Submissions**

<b>Budget Metrics</b>		<b>FRCC</b>	<b>MRO</b>	<b>NPCC<sup>5</sup></b>	<b>RF</b>	<b>SERC</b>	<b>SPP RE</b>	<b>Texas RE</b>	<b>WECC</b>
1	Number of registered entities	47	94	212	227	192	115	197	353
2	Number of registered functions	171	314	426	481	503	310	364	888
3	Total NEL (GWh)	234,606	283,136	635,349	892,167	1,025,560	225,657	348,275	869,883
4	NEL (GWh) per registered entity	4,992	3,012	2,997	3,930	5,341	1,962	1,768	2,464
5	Total ERO Funding <sup>1</sup>	\$ 6,258,896	\$ 10,660,595	\$ 14,255,060	\$ 20,219,881	\$ 15,901,023	\$ 9,462,303	\$ 9,645,256	\$ 26,341,500
6	ERO Funding per registered entity	\$ 133,168	\$ 113,411	\$ 67,241	\$ 89,074	\$ 82,818	\$ 82,281	\$ 48,961	\$ 74,622
7	ERO Funding per registered function	\$ 36,602	\$ 33,951	\$ 33,463	\$ 42,037	\$ 31,612	\$ 30,524	\$ 26,498	\$ 29,664
8	Total Budget <sup>2</sup>	\$ 7,177,854	\$ 11,226,670	\$ 15,147,054	\$ 19,908,939	\$ 17,482,403	\$ 10,865,511	\$ 12,167,256	\$ 26,796,928
9	Total Budget per registered entity	\$ 152,720	\$ 119,433	\$ 71,448	\$ 87,705	\$ 91,054	\$ 94,483	\$ 61,763	\$ 75,912
10	Total Budget per registered function	\$ 41,976	\$ 35,754	\$ 35,556	\$ 41,391	\$ 34,756	\$ 35,050	\$ 33,427	\$ 30,177
11	Total Statutory FTE <sup>3</sup>	29.99	43.00	36.86	72.30	75.00	33.25	60.00	140.00
12	Registered entity per Statutory FTE	1.567	2.186	5.751	3.140	2.560	3.459	3.283	2.521
13	Registered function per Statutory FTE	5.702	7.302	11.557	6.653	6.707	9.323	6.067	6.343
14	Total Compliance Budget <sup>4</sup>	\$ 5,335,423	\$ 7,313,627	\$ 8,726,049	\$ 15,421,797	\$ 11,816,885	\$ 8,126,399	\$ 9,171,887	\$ 13,963,714
15	Compliance budget per registered entity	\$ 113,520	\$ 77,805	\$ 41,161	\$ 67,937	\$ 61,546	\$ 70,664	\$ 46,558	\$ 39,557
16	Compliance budget per registered function	\$ 31,201	\$ 23,292	\$ 20,484	\$ 32,062	\$ 23,493	\$ 26,214	\$ 25,197	\$ 15,725
17	Total Compliance FTE <sup>3</sup>	19.59	21.11	17.00	44.75	34.31	21.75	36.25	55.00
18	Registered entity per Compliance FTE	2.4	4.5	12.5	5.1	5.6	5.3	5.4	6.4
19	Registered function per Compliance FTE	8.7	14.9	25.1	10.7	14.7	14.3	10.0	16.1

<sup>1</sup> ERO Funding is a sum of Assessments and Penalty Sanctions

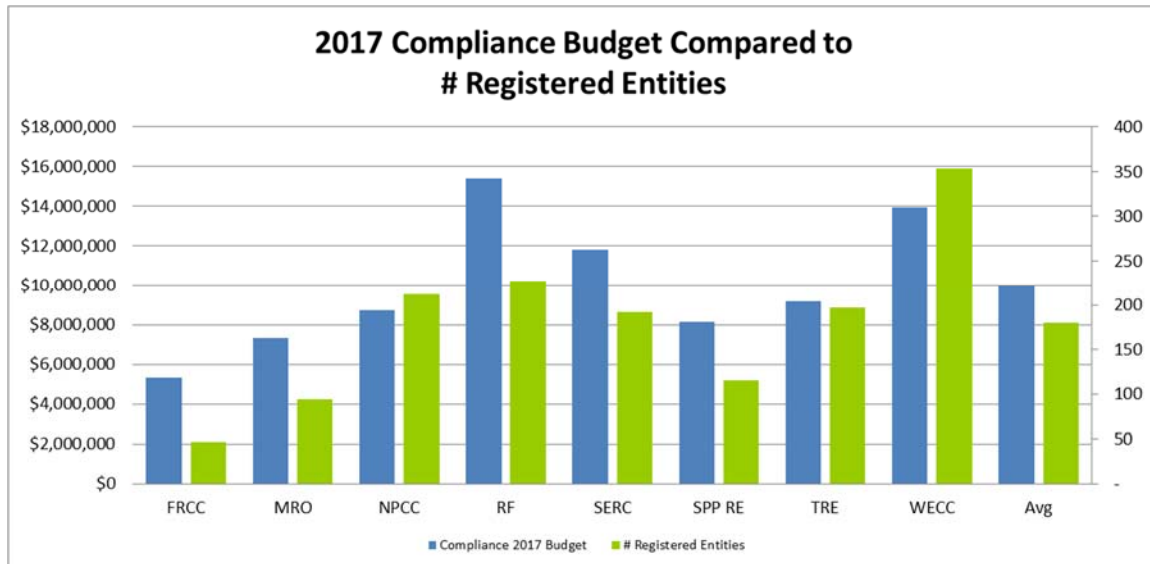
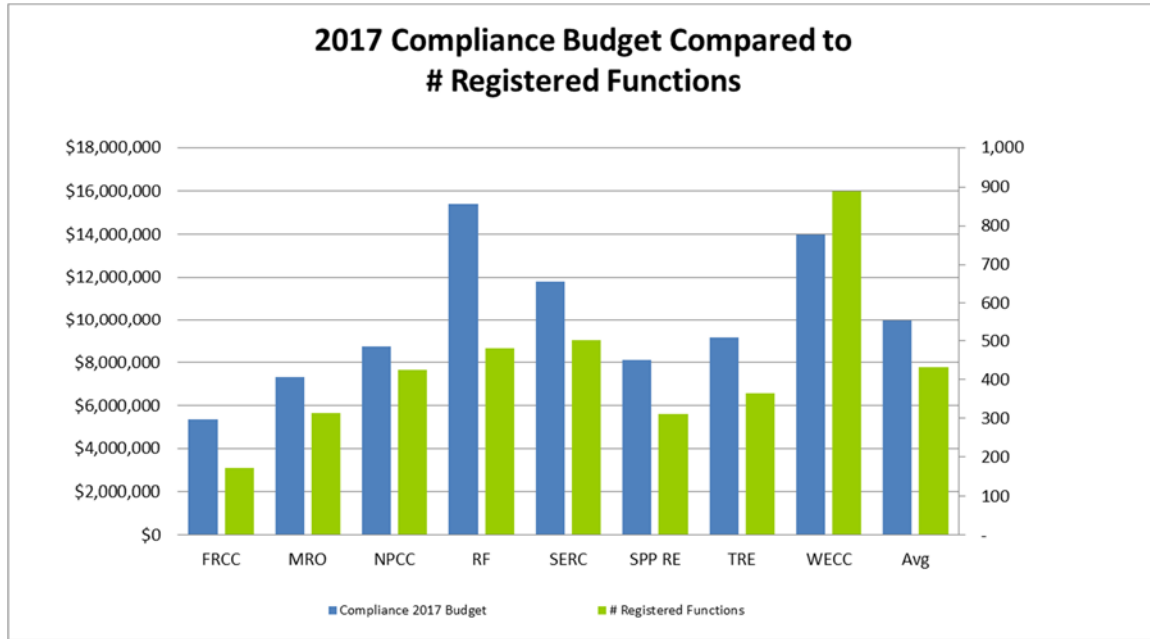
<sup>2</sup> Total Budget is a sum of Total Expenses and Capital Expenditures

<sup>3</sup> Each FTE that works 2,080 hours per year is counted as one FTE. An FTE working less than the 2,080 hours per year is counted as a fractional FTE.

<sup>4</sup> Total Compliance Budget is a sum of Direct Expenses, Indirect Expenses and Capital Expenditures

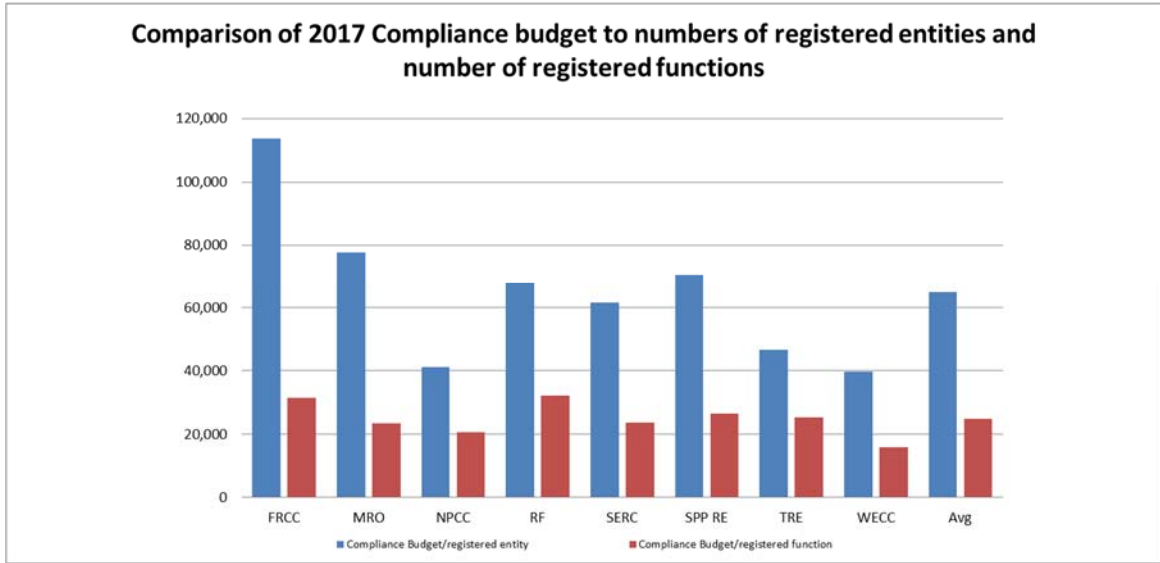
<sup>5</sup> Due to the specifics of the compliance program included in the individual provincial MOUs for cross-border regional entities, some of these metrics are not directly comparable.

	FRCC	MRO	NPCC	RF	SERC	SPP RE	TRE	WECC	Avg
Compliance 2017 Budget	5,335,423	7,313,627	8,726,049	15,421,797	11,816,885	8,126,399	9,171,887	13,963,714	9,984,473
# Registered Entities	47	94	212	227	192	115	197	353	180
# Registered Functions	171	314	426	481	503	310	364	888	432



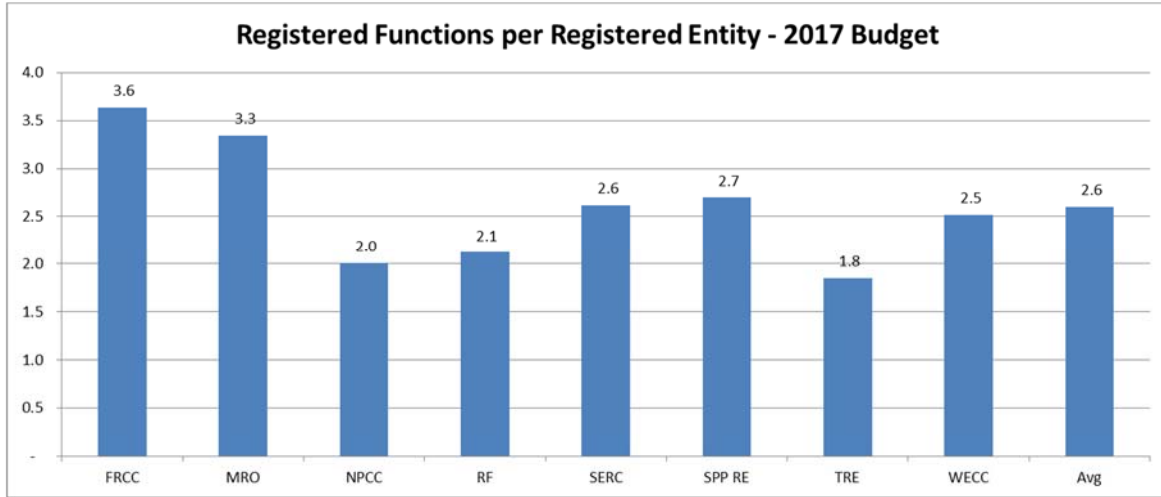


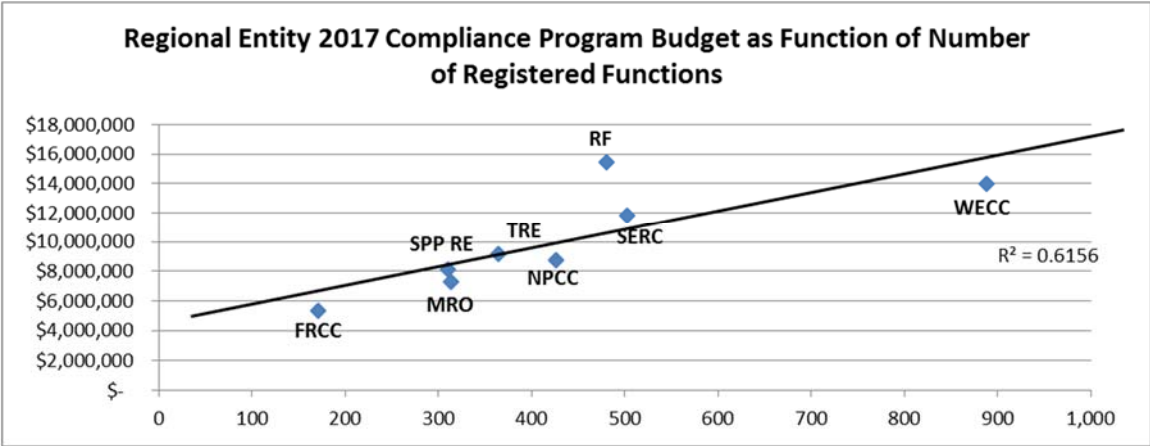
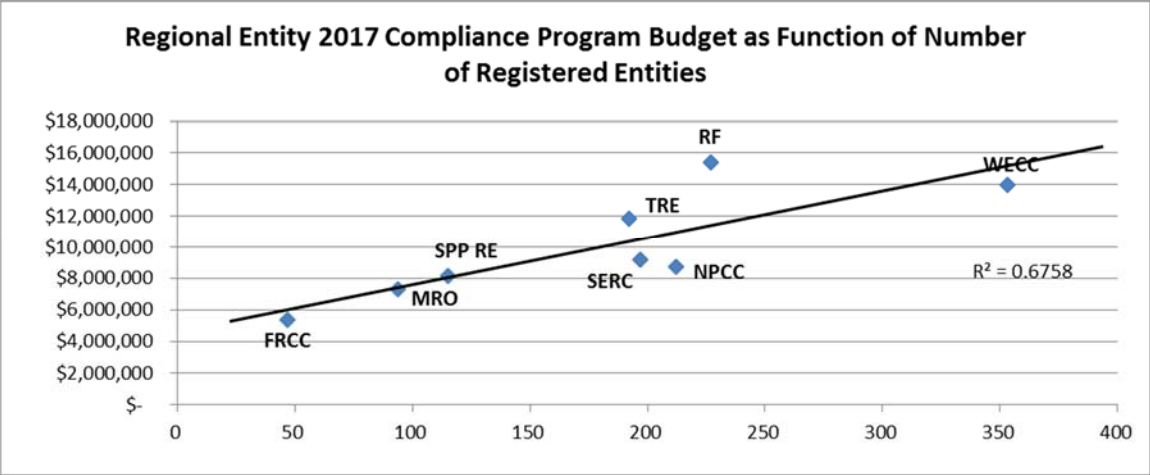
	FRCC	MRO	NPCC	RF	SERC	SPP RE	TRE	WECC	Avg
Compliance Budget/registered entity	113,520	77,805	41,161	67,937	61,546	70,664	46,558	39,557	64,843
Compliance Budget/registered function	31,201	23,292	20,484	32,062	23,493	26,214	25,197	15,725	24,709



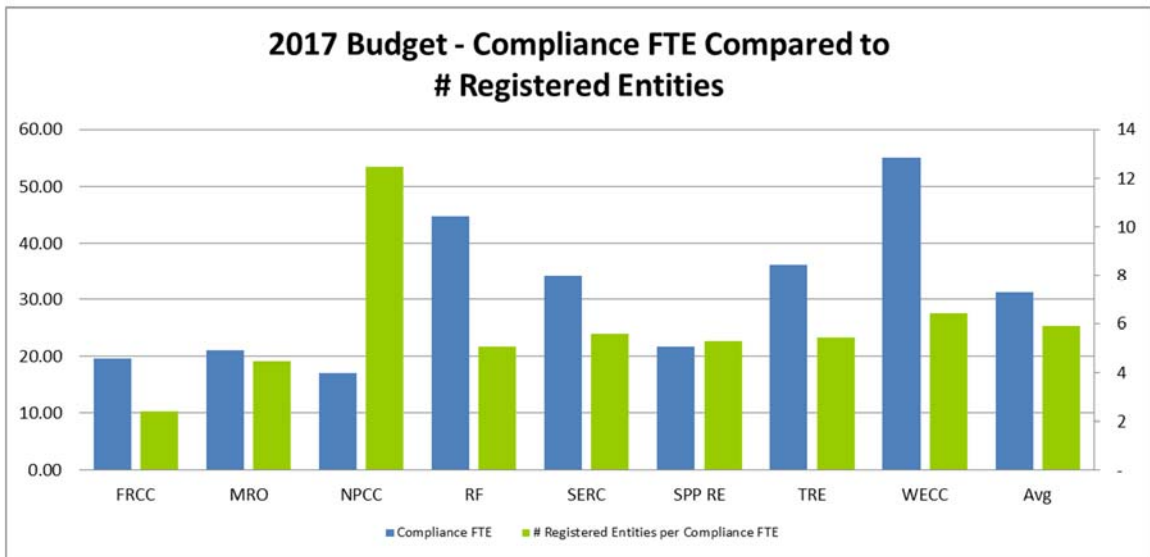
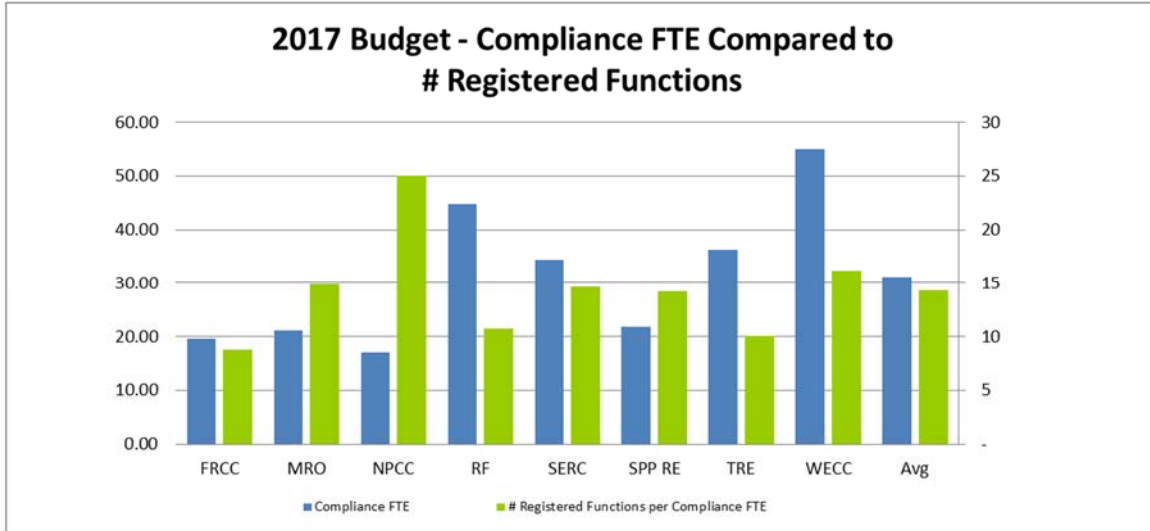
Registered Functions per Registered Entity  
2017 Budget

FRCC	MRO	NPCC	RF	SERC	SPP RE	TRE	WECC	Avg
3.6	3.3	2.0	2.1	2.6	2.7	1.8	2.5	2.6

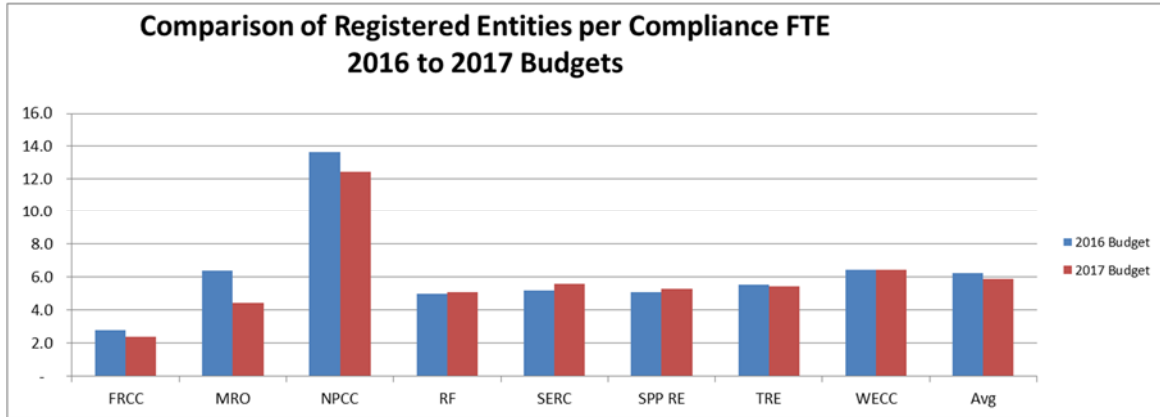




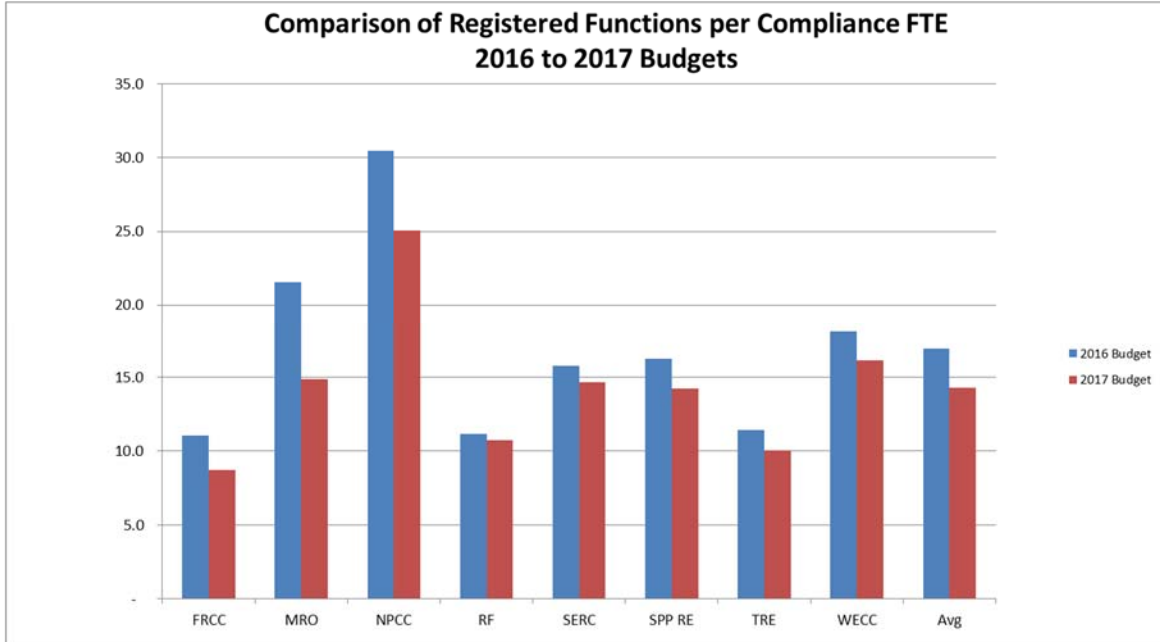
	FRCC	MRO	NPCC	RF	SERC	SPP RE	TRE	WECC	Avg
Compliance FTE	19.59	21.11	17.00	44.75	34.31	21.75	36.25	55.00	31.22
# Registered Entities per Compliance FTE	2.4	4.5	12.5	5.1	5.6	5.3	5.4	6.4	5.9
# Registered Functions per Compliance FTE	8.7	14.9	25.1	10.7	14.7	14.3	10.0	16.1	14.3



	FRCC	MRO	NPCC	RF	SERC	SPP RE	TRE	WECC	Avg
2016 Budget	2.8	6.4	13.6	5.0	5.2	5.1	5.5	6.4	6.2
2017 Budget	2.4	4.5	12.5	5.1	5.6	5.3	5.4	6.4	5.9



	FRCC	MRO	NPCC	RF	SERC	SPP RE	TRE	WECC	Avg
2016 Budget	11.0	21.5	30.4	11.1	15.8	16.3	11.4	18.1	17.0
2017 Budget	8.7	14.9	25.1	10.7	14.7	14.3	10.0	16.1	14.3



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**NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION**

**2017 BUSINESS PLAN AND BUDGET FILING**

**ATTACHMENT 15**

**METRICS ON NERC AND REGIONAL ENTITY**

**ADMINISTRATIVE (INDIRECT) COSTS**

**BASED ON**

**THE 2016 AND 2017 BUDGETS**

**Analysis of Indirect (Administrative Services) Costs  
2017 Budget versus 2016 Budget**

2016 BUDGET					2017 BUDGET					
Total Statutory Budget	Total Statutory Direct Budget	Total Statutory Indirect Budget	% Statutory Indirect Budget to Total Statutory	Ratio of Statutory Direct Budget to Indirect Budget		Total Statutory Budget	Total Statutory Direct Budget	Total Statutory Indirect Budget	% Statutory Indirect Budget to Total Statutory	Ratio of Statutory Direct Budget to Indirect Budget
\$ 67,186,665	\$ 36,744,230	\$ 30,442,435	45.3%	1.21	<b>NERC</b>	\$ 69,602,175	\$ 38,187,340	\$ 31,414,835	45.1%	1.22
7,261,527	6,388,331	873,196	12.0%	7.32	<b>FRCC</b>	7,177,854	6,311,736	866,118	12.1%	7.29
11,354,641	6,825,231	4,529,410	39.9%	1.51	<b>MRO</b>	11,226,668	6,786,617	4,440,051	39.5%	1.53
15,072,998	9,620,222	5,452,776	36.2%	1.76	<b>NPCC</b>	15,147,054	9,700,335	5,446,719	36.0%	1.78
19,367,210	13,835,158	5,532,052	28.6%	2.50	<b>RF</b>	19,908,939	14,170,620	5,738,319	28.8%	2.47
16,350,325	9,163,091	7,187,234	44.0%	1.27	<b>SERC</b>	17,482,403	9,305,229	8,177,174	46.8%	1.14
10,095,819	5,464,121	4,631,698	45.9%	1.18	<b>SPP RE</b>	10,865,511	5,799,846	5,065,665	46.6%	1.14
11,782,215	7,557,810	4,224,405	35.9%	1.79	<b>Texas RE</b>	12,167,256	7,491,452	4,675,804	38.4%	1.60
28,083,548	17,761,805	10,321,743	36.8%	1.72	<b>WECC</b>	26,796,927	17,029,829	9,767,098	36.4%	1.74
			36.0%	2.25	<b>AVERAGE</b>				36.6%	2.21

2016 BUDGETED FTEs					2017 BUDGETED FTEs					
Total Statutory FTEs	Total Statutory Direct FTEs	Total Statutory Indirect FTEs	Indirect FTE as % of Total FTE	# Direct to Indirect Statutory FTEs		Total Statutory FTEs	Total Statutory Direct FTEs	Total Statutory Indirect FTEs	Indirect FTE as % of Total FTE	# Direct to Indirect Statutory FTEs
192.48	121.25	71.23	37.0%	1.70	<b>NERC</b>	189.88	120.56	69.33	36.5%	1.74
30.59	26.12	4.47	14.6%	5.84	<b>FRCC</b>	29.99	25.80	4.19	14.0%	6.16
43.00	32.51	10.49	24.4%	3.10	<b>MRO</b>	42.94	31.27	11.67	27.2%	2.68
36.86	27.86	9.00	24.4%	3.10	<b>NPCC</b>	36.86	28.86	8.00	21.7%	3.61
72.20	57.60	14.60	20.2%	3.95	<b>RF</b>	72.30	57.60	14.70	20.3%	3.92
78.12	51.13	26.99	34.5%	1.89	<b>SERC</b>	75.00	49.70	25.30	33.7%	1.96
32.25	27.75	4.50	14.0%	6.17	<b>SPP RE</b>	33.25	28.75	4.50	13.5%	6.39
60.00	46.25	13.75	22.9%	3.36	<b>Texas RE</b>	60.00	46.25	13.75	22.9%	3.36
140.50	94.10	46.40	33.0%	2.03	<b>WECC</b>	140.00	97.00	43.00	30.7%	2.26
			25.0%	3.46	<b>AVERAGE</b>				24.5%	3.56