UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Transmission Operations Reliability Standards and Interconnection Reliability Operations and Coordination Reliability Standards	)))	Docket No. RM15-16-000

COMMENTS OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION IN RESPONSE TO NOTICE OF PROPOSED RULEMAKING

The North American Electric Reliability Corporation ("NERC") hereby provides comments on the Federal Energy Regulatory Commission's ("FERC" or the "Commission") Notice of Proposed Rulemaking ("NOPR") proposing to approve revisions to the Transmission Operations ("TOP") Reliability Standards and the Interconnection Reliability Operations and Coordination ("IRO") Reliability Standards.[1] The proposed TOP and IRO Reliability Standards establish or revise requirements for operations planning, system monitoring, real-time actions, coordination between applicable entities, and operational reliability data. Among other things, the proposed Reliability Standards help to ensure that Reliability Coordinators and Transmission Operators work together, and with other functional entities, to operate the Bulk Electric System ("BES") within System Operating Limits ("SOLs") and Interconnection Reliability Operating Limits ("IROLs").[2] NERC supports the Commission's proposal to approve the proposed

[1] *Transmission Operations Reliability Standards and Interconnection Reliability Operations and Coordination Reliability Standards*, Notice of Proposed Rulemaking, 151 FERC ¶ 61,236 (2015). NERC requested approval of the following nine TOP and IRO Reliability Standards: TOP-001-3 (Transmission Operations); TOP-002-4 (Operations Planning); TOP-003-3 (Operational Reliability Data); IRO-001-4 (Reliability Coordination – Responsibilities); IRO-002-4 (Reliability Coordination –Monitoring and Analysis); IRO-008-2 (Reliability Coordinator Operational Analyses and Real-time Assessments); IRO-010-2 (Reliability Coordinator Data Specification and Collection); IRO-014-3 (Coordination Among Reliability Coordinators); and IRO-017-1 (Outage Coordination).

[2] Unless otherwise designated, all capitalized terms shall have the meaning set forth in the *Glossary of Terms Used in NERC Reliability Standards* ("NERC Glossary"), *available at* http://www.nerc.com/files/Glossary_of_Terms.pdf.

Reliability Standards and urges the Commission to approve the proposed Reliability Standards without directing modifications.

I. BACKGROUND

On March 18, 2015, NERC filed a petition with the Commission for approval of the proposed TOP and IRO Reliability Standards.[3] As explained in the Petition, the proposed Reliability Standards consolidate many of the currently-effective TOP and IRO Reliability Standards and also replace the TOP and IRO Reliability Standards submitted in Docket Nos. RM13-12-000, RM13-14-000 and RM13-15-000.[4]

On June 18, 2015, the Commission issued the NOPR proposing to approve the proposed Reliability Standards, stating that "the proposed TOP and IRO Reliability Standards improve on the currently-effective standards by providing a more precise set of Reliability Standards addressing operating responsibilities and improving the delineation of responsibilities between applicable entities."[5] The Commission also stated that proposed Reliability Standards "eliminate gaps and ambiguities in the currently-effective TOP requirements and improve efficiency by incorporating the necessary requirements from the eight currently-effective TOP Reliability Standards into three cohesive, comprehensive Reliability Standards."[6] Further, the Commission stated that the proposed Reliability Standards "clarify and improve upon the currently-effective

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[3] *Petition of the North American Electric Reliability Corporation for Approval of Proposed Transmission Operations and Interconnection Reliability Operations and Coordination Reliability Standards*, Docket No. RM15-16-000 (Mar. 18, 2015) ("Petition"). On May 12, 2015, NERC supplemented its Petition with additional explanation for the removal of the Load Serving Entity ("LSE") function, *see* n. 25.

[4] Concurrent with the Petition, NERC submitted a motion to withdraw the Reliability Standards pending Commission approval in Docket Nos. RM13-12-000, RM13-14-000 and RM13-15-000. *Notice of Withdrawal of the North American Electric Reliability Corporation*, Docket Nos. RM13-12-000, RM13-14-000, and RM13-15-000 (Mar. 18, 2015). As noted by the Commission in the NOPR (at n. 3), as no protests to the motion were filed, the petition was withdrawn pursuant to 18 CFR § 385.216(b).

[5] NOPR at P 1.

[6] *Id*.

TOP and IRO Reliability Standards by designating requirements in the proposed standards that apply to transmission operators for the TOP standards and reliability coordinators for the IRO standards," consistent with the Commission's policy "to promote increased efficiencies in Reliability Standards and reducing requirements that are either redundant with other currently-effective requirements or have little reliability benefit."[7]

As discussed further below, while proposing to approve the proposed Reliability Standards, the Commission also sought comments on the following issues: (1) possible inconsistencies in identifying IROLs; (2) monitoring of non-BES facilities; (3) removal of the Load Serving Entity ("LSE") as an applicable entity for proposed Reliability Standard TOP-001-3; and (4) data exchange capabilities.

II. COMMENTS

NERC supports the Commission's proposal to approve the proposed Reliability Standards. As the Commission recognizes in the NOPR, the proposed Reliability Standards significantly improve upon the currently-effective TOP and IRO Reliability Standards and will bolster NERC's and the industry's ongoing efforts to provide for a reliable Bulk-Power System. As discussed in the Petition, the proposed Reliability Standards include improvements over the currently effective TOP and IRO Reliability Standards in key areas, including: (1) operating within SOLs and IROLs; (2) outage coordination; (3) situational awareness; (4) improved clarity and content in foundational definitions; and (5) requirements for operational reliability data.

NERC provides the following comments on the four issues discussed in the NOPR:

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[7] *Id*. The Commission also stated that the proposed Reliability Standards adequately addressed the concerns raised by the Commission in the Notice of Proposed Rulemaking issued in November 2013 regarding the earlier version of proposed TOP and IRO Standards submitted in Docket Nos. RM13-12-000, RM13-14-000 and RM13-15-000. *Monitoring System Conditions - Transmission Operations Reliability Standard, Transmission Operations Reliability Standards, Interconnection Reliability Operations and Coordination Reliability Standards*, Notice of Proposed Rulemaking, 145 FERC ¶ 61,158 (2013) ("Remand NOPR").

a. Regional Inconsistencies in Identifying IROLs

i. NOPR

In the NOPR, the Commission proposed to find that the proposed TOP and IRO Reliability Standards address the Commission's concern in the Remand NOPR with respect to the treatment of SOLs and IROLs by requiring Reliability Coordinators and Transmission Operators to plan and operate within all SOLs, and to monitor and assess SOL and IROL conditions within and outside their areas.[8] Noting that clarity and consistency are important for establishing and implementing operating plans to mitigate SOL and IROL exceedances, the Commission also stated that it "seeks comment on: (1) identification of regional differences or variances in the formulation of IROLs; (2) the potential reliability impacts of such differences or variations; and (3) the value of providing a uniform approach or methodology to defining and identifying IROLs."[9]

ii. Comments

As discussed in the Petition, SOLs and IROLs are vital concepts in NERC's Reliability Standards as they establish acceptable performance criteria both pre- and post-contingency to maintain reliable BES operations. NERC agrees with the Commission that it is important to evaluate differences or variances in the identification of IROLs, including whether such differences or variances could have any adverse reliability impact and whether there is any reliability benefit in providing a uniform approach to identifying IROLs.

NERC respectfully requests, however, that the Commission refrain from addressing these issues in this proceeding. As discussed in the Petition, the proposed TOP and IRO Reliability Standards promote reliability by, among other things, clearly specifying requirements for

[8] NOPR at PP 44-50.

[9] NOPR at P 51.

Reliability Coordinators and Transmission Operators to monitor and operate the BES within SOLs and IROLs, and to resolve violations of operating limits within specified timeframes. The proposed TOP and IRO Reliability Standards, however, do not address the methods for the development and identification of SOLs and IROLs. Requirements governing the development and identification of SOLs and IROLs are included in the Facilities Design, Connections and Maintenance ("FAC") Reliability Standards.[10] As explained in the Petition, SOLs and IROLs include Ratings and limits necessary to ensure reliable operation within acceptable reliability criteria, as determined pursuant to the FAC Reliability Standards.

Further, based upon a periodic review conducted pursuant to Section 13 of the Standard Processes Manual ("SPM"),[11] NERC recently initiated a standards development project – Project 2015-09 Establish and Communicate System Operating Limits ("Project 2015-09") – to evaluate and modify the FAC Reliability Standards that address the development and identification of SOLs and IROLs. Under the current FAC Reliability Standards, Reliability Coordinators have flexibility in the manner in which they identify IROLs.[12] As provided in the Standard Authorization Request ("SAR") for Project 2015-09, approved by the NERC Standards Committee on August 19, 2015,

[10] Specifically, Reliability Standard FAC-010 addresses the methods for the development and identification of SOLs and IROLs used in the planning horizon; Reliability Standard FAC-011 addresses the methods for the development and identification of SOLs and IROLs used in the operations horizon; and Reliability Standard FAC-014 addresses the establishment and communication of SOLs and IROLs by and between various functional entities.

[11] Section 13 of the NERC Standard Processes Manual obligates NERC to conduct reviews of all its Reliability Standards at least once every 10 years from the effective date of the Reliability Standard or the date of the latest NERC Board of Trustee adoption to a revision of the Reliability Standard, whichever is later. In January 2015, NERC initiated Project 2015-03 Periodic Review of System Operating Limit Standards ("Project 2015-03") to comprehensively review and recommend revisions to Reliability Standards FAC-010-3, FAC-011-3, and FAC-014-2, which, as noted above, collectively address the methods for determining and communicating SOLs and IROLs.

[12] Specifically, pursuant to FAC-011, Requirement R1, each Reliability Coordinator must have a documented methodology that describes, among other things, how it identifies the subset of SOLs that qualify as IROLs. Further, under Requirement R3, the Reliability Coordinator's methodology for determining SOLs must include criteria for determining when violating a SOL qualifies as an IROL and criteria for developing any associated IROL Tv. Reliability Standard FAC-011 does not provide a list of criteria that Reliability Coordinators must use for determining IROLs, leaving it up to each Reliability Coordinator to develop the criteria based on its judgment.

the Project 2015-09 standard drafting team will address, among other things, the clarity and consistency of the requirements for establishing both SOLs and IROLs.[13] Specifically, the SAR provides that the scope of the standards development project includes the development of new or revised requirements and/or NERC Glossary definitions to provide additional clarity and consistency for establishing SOLs and IROLs and to address potential reliability issues resulting from application of the current NERC Glossary definition for IROL.[14] During the standards development process, NERC and its stakeholders will have an opportunity to evaluate the reliability benefits to or adverse impacts of providing entities flexibility in identifying IROLs and develop modifications to the FAC Reliability Standards and/or NERC Glossary definitions to provide for the appropriate level of flexibility.

Therefore, NERC respectfully submits that it would be premature for NERC or the Commission to address issues regarding the identification of IROLs in this proceeding without the benefit of the complete analysis of the Project 2015-09 standard drafting team. The standards development process provides an important mechanisms to account for the diverse needs and interests of stakeholders in developing effective Reliability Standards. Therefore, the Commission should not address the issue of regional inconsistencies in the identification of IROLs in this proceeding but allow for the issues to be addressed through standards development Project 2015-

[13] The SAR for Project 2015-09 is available at http://www.nerc.com/pa/Stand/Pages/Project-2015-09-Establish-and-Communicate-System-Operating-Limits.aspx. Among the issues discussed by the periodic review team, which sponsored and submitted the SAR, was the manner in which Reliability Coordinators identified IROLs and whether there is any reliability need to modify the NERC Glossary definition of IROL or requirements in the Reliability Standards to clarify what qualifies as an IROL. The periodic review team discussed the benefits of greater clarity in the identification of IROLs to provide for more consistency across the BES but also discussed the need to provide Reliability Coordinators flexibility to determine IROLs based on the unique characteristics of the systems in its Reliability Coordinator Area.

[14] As provided in the Periodic Review Recommendation for Reliability Standard FAC-011-3, the periodic review team is recommending that the standard drafting team for Project 2015-09 consider modifications to the definition of IROL or modifications to FAC-011 to provide for greater consistency in the identification of IROLs across the BES. The Project 2015-03 Periodic Review Recommendations are available at: http://www.nerc.com/pa/Stand/Pages/Project-2015-03-Periodic-Review-of-System-Operating-Limit-Standards.aspx.

09. NERC will work with stakeholders and Commission staff during the Project 2015-09 standards development process to address the issues raised in the NOPR. The Commission will also have an opportunity to assess the issue, with the benefit of a complete development record, when NERC petitions the Commission for approval of any new or modified FAC Reliability Standards at the conclusion of the Project 2015-09 standards development process.[15]

b. Monitoring of Non-BES Facilities

i. NOPR

The Commission proposes to find that the proposed Reliability Standards adequately address the 2011 Southwest Outage Blackout Report recommendation regarding monitoring sub-100 kV facilities, primarily because of the responsibility of the Reliability Coordinator under proposed Reliability Standard IRO-002-4, Requirement R3 to monitor non-BES facilities to the extent necessary.[16] The Commission notes, however, that "the transmission operator may have a more granular perspective than the reliability coordinator of its necessary non-bulk electric system facilities to monitor," and it is not clear whether or how the Transmission Operator would provide information to the Reliability Coordinator regarding which non-BES facilities should be monitored.[17] The Commission seeks comment on how NERC will ensure that the Reliability Coordinator will receive such information.

The Commission states that including such non-Bulk Electric System facilities in the definition of BES through the Rules of Procedure exception process could be an option to address any potential gaps for monitoring facilities but notes that "there may be potential efficiencies

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[15] Importantly, because the proposed TOP and IRO Reliability Standards address the monitoring of and operation within SOLs and IROLs, not the development or identification of SOLs and IROLs, changes to the FAC Reliability Standards would not require changes to the TOP and IRO Reliability Standards.

[16] NOPR at P 57.

[17] NOPR at P 58.

gained by using a more expedited method to include non-bulk electric system facilities that requires monitoring."[18] FERC seeks comment on whether the BES exception process should be used exclusively in all cases.[19] Alternatively, the Commission seeks comment on whether this concern can be addressed through a review process of the Transmission Operators' systems to determine if there are important non-BES facilities that require monitoring.[20]

ii. Comments

NERC respectfully submits that the proposed data specification and collection Reliability Standards IRO-010-2 and TOP-003-3, in addition to the BES definition exception process in Appendix 5C NERC's Rules of Procedure, will help ensure that the Reliability Coordinator can work with Transmission Operators, and other functional entities, to obtain sufficient information to identify the necessary non-BES facilities to monitor. No additional mechanisms are necessary at this time. As explained in the Petition, proposed Reliability Standard IRO-010-2 provides a mechanism for the Reliability Coordinator to obtain the information and data it needs for reliable operations and to help prevent instability, uncontrolled separation, or Cascading outages. Among other things, proposed Reliability Standard IRO-010-2 allows Reliability Coordinators to obtain data and information on non-BES facilities necessary for the Reliability Coordinator to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments. A Reliability Coordinator may use proposed IRO-010-2 to request such data from other Reliability Coordinators, Balancing Authorities, Generator Owners, Generator Operators, Load-Serving Entities, Transmission Operators, Transmission Owners, and Distribution Providers. NERC

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[18] *Id*.

[19] *Id*.

[20] NOPR at 59. For example, the Commission proposes that "Commission staff could work with NERC, Regional Entities and applicable entities to review their system modeling and perform an analysis to identify non-bulk electric system facilities that need monitoring."

expects that Reliability Coordinators will use the authority provided in proposed Reliability Standard IRO-010-2 to obtain the data and information it needs to determine which non-BES facilities to monitor.

Similarly, proposed Reliability Standard TOP-003-3 allows Transmission Operators to obtain data on non-BES facilities, among other things, necessary to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments from Balancing Authorities, Generator Owners, Generator Operators, Load-Serving Entities, other Transmission Operators, Transmission Owners, and Distribution Providers. Any data that the Transmission Operator obtains regarding non-BES facilities pursuant to proposed Reliability Standard TOP-003-3 can be passed on to the Reliability Coordinator pursuant to a request under proposed Reliability Standard IRO-010-2.

In addition to these data specification and collection standards, the BES definition exception process provides the means for Transmission Operators and Reliability Coordinators to include facilities as part of the BES that are necessary for the reliable operation of the interconnected transmission system but were not identified in the BES definition. As the Commission stated in approving the exceptions process:

> We believe that entities, having knowledge of their systems and the concomitant planning assessments and system impact studies, will identify an element that is necessary for reliable operation of the integrated transmission network while conducting their day-to-day operations and planning and performing studies. If the element does not fall within the definition, we expect that the entity will submit the element for inclusion through the exception process. Use of this process should ensure that all sub-100 kV elements, as well as other facilities, necessary for the operation of the interconnected transmission network are included in an 'appropriate and consistent' manner. [21]

[21] *Revisions to Electric Reliability Organization Definition of Bulk Electric System and Rules of Procedure*, Order No. 773, 141 FERC ¶ 61,236 at P 269 (2012), *order on reh'g*, Order No. 773-A, 143 FERC ¶ 61,053 (2013), *order on reh'g and clarification*, 144 FERC ¶ 61,174 (2013).

As the Commission acknowledged in the NOPR, including non-BES facilities in the definition of BES through the Rules of Procedure exception process will help ensure that the appropriate facilities are incorporated into planning and operations studies and actively monitored.

Given the proposed data specification Reliability Standards and the BES exception process, there is no need for an alternative process for identifying non-BES facilities that should be monitored. The BES exception process is a new, Commission-approved process that, in time, may prove to be an efficient mechanism for identifying such facilities and including them in the BES definition. It would be premature to develop an alternative process before the data specification and BES exception process are allowed to work. If, in the future, Reliability Coordinators indicate that they are not obtaining the necessary information, NERC and industry stakeholders can reevaluate the need for an additional, alternative process.

c. Removal of LSEs from TOP-001-3

i. NOPR

The Commission also seeks comments on NERC's proposal to remove the LSE function from proposed Reliability Standard TOP-001-3 as a recipient of an Operating Instruction from a Transmission Operator or Balancing Authority. The Commission states that if LSEs are not applicable functional entities under proposed Reliability Standard TOP-001-3, it is not clear what entity would respond to a Transmission Owner's or Balancing Authority's operating instruction to carry-out interruptible load curtailments.[22] The Commission also notes that the time horizons provided for Requirements R3 through R6 which relate to the issuance of Operating Instructions are "Same-Day Operations" and "Real-Time Operations."[23] The Commission stated that the

[22] NOPR at P 65.

[23] NOPR at P 64.

Commission's decision in Docket No. RR15-4-000 related to NERC's Risk-Based Registration ("RBR") initiative would guide its action in this proceeding.[24]

ii. Comments

As provided in the NOPR, the Commission's sole concern with removing LSEs from proposed Reliability Standard TOP-001-3 is that "it is not clear what entity would respond" to a Transmission Owner's or Balancing Authority's operating instruction "to carry-out interruptible load curtailments" if the LSE is removed from proposed TOP-001-3. The Commission's concern is misplaced. As explained in NERC's Supplemental Filing in this proceeding[25] and its July 17, 2015 RBR Compliance Filing in Docket No. RR15-4-001,[26] removing LSEs from proposed Reliability Standard TOP-001-3 will not create a reliability gap. While LSEs play a role in facilitating interruptible (or voluntary) load curtailments, that role is to simply communicate requests for voluntary load curtailments and does not necessitate requiring LSEs to comply with a Transmission Operator's or Balancing Authority's Operating Instructions issued pursuant to proposed Reliability Standard TOP-001-3. It is the Distribution Provider that controls the equipment facilities necessary to implement any load curtailments. Transmission Operators and Balancing Authorities are able to meet the reliability objectives of proposed TOP-001-3 and maintain the reliability of their Transmission Operator Areas or Balancing Authority Areas, respectively, regardless of whether proposed Reliability Standard TOP-001-3 includes LSEs as applicable entities. Specifically, Transmission Operators and Balancing Authorities continue to

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[24] NOPR at P 66.

[25] *Supplemental Information to Petition of the North American Electric Reliability Corporation for Approval of Proposed Transmission Operations and Interconnection Reliability Operations and Coordination Reliability Standards*, Docket No. RM15-16-000 (May 12, 2015) ("Supplemental Filing").

[26] *Compliance Filing of the North American Electric Reliability Corporation and Petition for Approval of Rules of Procedure Revisions*, Docket No. RR15-4-001 (Jul. 17, 2015) ("RBR Compliance Filing").

have the ability to operate the system – via their own actions or through the issuance of an Operating Instruction to other Transmission Operators and Balancing Authorities, Distribution Providers and Generator Operators – to resolve any operational issues. In short, the LSE's role in carrying out interruptible load curtailment is not the type of activity that rises to the level of requiring an Operating Instruction.

As explained in the Petition and the Supplemental Filing, the purpose of Requirements R1 and R2 is to establish an affirmative obligation for each Transmission Operator and Balancing Authority to act to maintain the reliability of its respective areas via its own actions or, when its actions alone would be insufficient, by compelling other functional entities to take action. Requirements R3 through R6 provides a mechanism by which Transmission Operators and Balancing Authorities may compel others to take action to maintain reliability. The standard drafting team recognized, however, that such authority should focus only on those actions of others that could have a significant and direct impact on the BES and are necessary for maintaining reliability during Real-time operations.

To that end, the standard drafting team replaced the undefined term "reliability directive" in currently-effective Reliability Standards TOP-001-1a with the defined term "Operating Instruction." As defined in the NERC Glossary, an Operating Instruction is:

> A command by operating personnel responsible for the Real-time operation of the interconnected Bulk Electric System to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System. (A discussion of general information and of potential options or alternatives to resolve Bulk Electric System operating concerns is not a command and is not considered an Operating Instruction.)

By focusing on "commands…to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System," the proposed Reliability Standard helps ensure that the authority of Transmission Operators and Balancing Authorities to

compel the actions of others is directed at those functional entities that have the authority and ability to take actions that could directly impact reliable operations in Real-time.

As explained in the Supplemental Filing, after evaluating the functional obligations of LSEs, including its role in communicating requests for voluntary load curtailments, NERC and the standard drafting team did not identify any circumstances under which a Transmission Operator or Balancing Authority would need to issue an Operating Instruction to an LSE to meet its affirmative obligation to maintain reliability in its area. As provided in the NERC Functional Model, an LSE is "the functional entity that secures energy and transmission service (and reliability-related services) to serve the electrical demand and energy requirements of its end-use customers."[27] An LSE does not own or operate BES Elements, Facilities or equipment, or the facilities or equipment used to serve end-use customers. As such, an LSE cannot take any action to directly "change or preserve the state, status, output, or input of" a BES Element.

The LSE's role with respect to voluntary load curtailment is not essential for maintaining reliable operations nor does it involve the LSE taking any action to "change or preserve the state, status, output, or input of" a BES Element or Facility. As background, in exchange for lower rates, end-use customers may voluntarily agree to accept interruptible service from its LSE. LSEs typically enter into these interruptible load contracts for the purpose of providing market price relief or assistance to the Balancing Authority in tight capacity/energy situations. The LSE often notifies the Balancing Authorities and Distribution Providers, among others, of the agreements ahead of time so that voluntary load curtailment may be requested under specified conditions. If those conditions exist and Balancing Authorities or Distribution Providers request voluntary load

[27] NERC Functional Model at 55 *available at* http://www.nerc.com/pa/Stand/Functional%20Model%20Archive%201/Functional_Model_V5_Final_2009Dec1.pdf .

curtailment, the LSE's role, as described in the NERC Functional Model, is to: (1) receive requests from the Balancing Authority and Distribution Provider for voluntary load curtailment; and (2) communicates requests for voluntary load curtailment to end-use customers as directed by the Balancing Authority and Distribution Provider.[28] LSEs do not have any control over facilities or equipment used to physically implement any curtailments. It is the Distribution Provider that controls the equipment facilities necessary to implement any load curtailments.

An LSE's communication of requests for voluntary load curtailment is not necessary for the Transmission Operator or Balancing Authority to maintain reliability in its area. As explained in the Supplemental Filing and the RBR Compliance Filing, even if Transmission Operators and Balancing Authorities cannot compel an LSE to communicate requests for voluntary load curtailments pursuant to an Operating Instruction, Transmission Operators and Balancing Authorities continue to have the ability to operate the system – via their own actions or through the issuance of an Operating Instruction to other Transmission Operators and Balancing Authorities, Distribution Providers and Generator Operators – to resolve any operational issues.

Specifically, if conditions arise that necessitate the need to reduce or shed load to maintain reliability during Real-time operations (e.g., to address exceedances of an Interconnection Reliability Operating Limit or System Operating Limit, or a voltage problem), the Balancing Authority or Transmission Operator, working with their Reliability Coordinator, may issue Operating Instructions directly to the Distribution Provider for physical implementation of load shedding (except when this can be accomplished directly by the Transmission Operator). Because the LSE does not own or operate equipment, LSEs cannot shed load or perform other corrective

[28] NERC Functional Model at 55 (emphasis added).

actions in such circumstances. LSEs have no control that they could exercise for purposes of load shedding even if a Transmission Operator or Balancing Authority directed an LSE to take action.

Removing LSEs from Requirements R3 through R6, however, does not mean that Transmission Operators and Balancing Authorities cannot and would not continue to direct LSEs to communicate requests for voluntary load curtailment to end-use customers. In fact, under Reliability Standard EOP-001-2.1b, Requirement R4, each Transmission Operator and Balancing Authority must have an emergency plan that includes, among other things, public appeals for voluntary load reductions and energy conservation. Similarly, under proposed Reliability Standard EOP-011-1, Requirement R2, Balancing Authorities must have an Operating Plan to mitigate Capacity Emergencies and Energy Emergencies that includes, among other things, public appeals for voluntary load reductions. Removing LSEs from proposed Reliability Standard TOP-001-3 does not change the requirement for Transmission Operators and Balancing Authorities to appeal for voluntary load reduction from an LSE or others.

Further, the removal of LSEs from Requirements R3 through R6 would not change an LSE's contractual obligation to participate in voluntary load curtailment programs. As discussed in the RBR Compliance Filing, the majority of LSE-only entities operate within independent system operator ("ISO") and regional transmission organization ("RTO") markets that require LSEs to participate in voluntary load curtailment processes.[29] In non-ISO/RTO markets, LSEs may also be under contractual arrangements to participate. An LSE's contractual obligations, not a mandatory Reliability Standard, should dictate the manner in which an LSE participates in voluntary load curtailment programs.[30]

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[29] *See* RBR Compliance Filing at 14-16, Appendix E.

[30] NERC's Reliability Standards should not dictate when an LSE must exercise its contractual rights to curtail load, particularly where there are other mechanisms to maintain reliable operations.

d. Date Exchange Capabilities

i. NOPR

The Commission states that while proposed Reliability Standards IRO-002-4, Requirement R1 and TOP-001-3, Requirements R19 and R20 require Reliability Coordinators, Transmission Operators, and Balancing Authorities to have "some form" of data exchange capabilities to carry out their responsibilities, the Commission seeks "additional explanation from NERC regarding how it addresses data exchange capabilities in the TOP and IRO Standards in the following areas: (a) redundancy and diverse routing; and (b) testing of the alternate or less frequently used data exchange capability."[31]

ii. Comments

As the Commission states in the NOPR, with the exception of requiring Reliability Coordinators to "have monitoring systems that provide information…over redundant infrastructure," the proposed TOP and IRO Reliability Standards do not explicitly mandate that a Reliability Coordinator, Balancing Authority, or Transmission Operator have data exchange capabilities that include redundancy and diverse routing. Instead, the requirements in the proposed TOP and IRO Reliability Standards covering data exchange are results-based, articulating a performance objective that applicable entities must meet without dictating the manner in which entities must meet that objective. Specifically, the proposed TOP and IRO Reliability Standards require:

- Reliability Coordinators to have data exchange capabilities with its Balancing Authorities and Transmission Operators, and with other entities it deems necessary, for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments (IRO-002-4, Requirement R1); and

[31] NOPR at P 68.

- Balancing Authorities and Transmission Operators to have data exchange capabilities with the entities that it has identified that it needs data from in order to maintain reliability in its area (TOP-001-3, Requirements R19 and R20).

As such, under proposed IRO-002-4, Requirement R1 and TOP-001-3, Requirements R19 and R20, Reliability Coordinators, Balancing Authorities, and Transmission Operators must demonstrate that they have data exchange capabilities that are sufficient to meet their affirmative obligations under the proposed Reliability Standards. In their compliance monitoring activities, NERC and the Regional Entities will review whether applicable entities have met that objective. As part of that review, NERC and the Regional Entities will consider, among other things, whether the applicable entity have redundancy and diverse routing, and whether they test these capabilities.

The proposed TOP and IRO Reliability Standards support entities' data-related obligations through comprehensive and robust data specification requirements. Proposed Reliability Standard IRO-010-2 and proposed Reliability Standard TOP-003-3, as discussed above, provide a mechanism for the Reliability Coordinator, Transmission Operator, and Balancing Authority to obtain the information and data needed for reliable operations. Among other things, these Reliability Standards require entities to specify the data needed to support their Real-time monitoring and Real-time Assessment obligations in a data specification, and require entities receiving such a data specification to provide data according to established periodicities, security protocols, and formats. Collectively, the requirements in IRO-002-4, TOP-001-3, IRO-010-2, and TOP-003-3 provide a comprehensive framework for ensuring data exchange capabilities support reliable operations.

Additionally, under Reliability Standard EOP-008-1, Reliability Coordinators, Balancing Authorities, and Transmission Operators are already required to have some redundancy in place for their data exchange capabilities. Specifically, EOP-008-1, Requirement R1 mandates that each of these entities have "a current Operating Plan describing the manner in which it continues to

meet its functional obligations with regard to the reliable operations of the BES in the event that its primary control center functionality is lost." Among other things, this Operating Plan for backup functionality shall include, among other things, provisions for data and voice communications. Further, EOP-008-1, Requirement R7 mandates that these entities conduct annual tests of their Operating Plan that demonstrates, among other things, backup functionality.

III. CONCLUSION

NERC respectfully requests that the Commission consider these comments and approve the proposed TOP and IRO Reliability Standards without modification.

Respectfully submitted,

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Date: August 24, 2015

CERTIFICATE OF SERVICE

I hereby certify that I have served a copy of the foregoing document upon all parties listed on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. this 24th day of August, 2015.

/s/ Shamai Elstein

Shamai Elstein

Counsel for the North American Electric Reliability Corporation