NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

October 2, 2009

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

Re: NERC Notice of Penalty regarding Commonwealth Edison Company, FERC Docket No. NP10-_-000

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty[1] regarding Commonwealth Edison Company (ComEd), NERC Registry ID: NCR00729,[2] in accordance with the Federal Energy Regulatory Commission's (Commission or FERC) rules, regulations and orders, as well as NERC Rules of Procedure including Appendix 4C of NERC's Compliance Monitoring and Enforcement Program (CMEP).[3]

On July 18, 2008, ComEd self-reported its non-compliance to FAC-003-1 Requirement (R) 2 for its failure to properly maintain vegetation clearance according to the ComEd Transmission Vegetation Management Program (TVMP). This Notice of Penalty is being filed with the Commission because, based on information from Reliability*First* Corporation (RFC), RFC and ComEd have entered into a Settlement Agreement to resolve all outstanding issues arising from a preliminary and non-public assessment resulting in RFC's determination and findings of the enforceable alleged violation of FAC-003-1 R2. According to the Settlement Agreement, ComEd neither admits nor denies the alleged violation of FAC-003-1 R2, but ComEd has agreed to the proposed penalty of two hundred twenty-five thousand dollars ($225,000) to be assessed to ComEd, in addition to other remedies that include mitigation actions and actions to prevent recurrence and ensure future compliance under the terms and conditions of the Settlement Agreement. Accordingly, the alleged violation identified as NERC Violation Tracking

[1] *Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards* (Order No. 672), III FERC Stats. & Regs. ¶ 31,204 (2006); *Notice of New Docket Prefix "NP" for Notices of Penalty Filed by the North American Electric Reliability Corporation*, Docket No. RM05-30-000 (February 7, 2008). *See also* 18 C.F.R. Part 39 (2008). *Mandatory Reliability Standards for the Bulk-Power System*, FERC Stats. & Regs. ¶ 31,242 (2007) (Order No. 693), *reh'g denied*, 120 FERC ¶ 61,053 (2007) (Order No. 693-A).

[2] Reliability*First* Corporation confirmed ComEd was included on the NERC Compliance Registry, on May 30, 2007, as a Transmission Owner (NCR00729), on June 27, 2007, as a Distribution Provider (NCR08013) and on July 10, 2007, as a Load Serving Entity and Purchasing-Selling Entity (NCR08043), and as a Transmission Owner is subject to the requirements of the NERC Reliability Standard FAC-003-1.

[3] *See* 18 C.F.R § 39.7(c)(2).

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Identification Number RFC200800071 is being filed in accordance with the NERC Rules of Procedure and the CMEP.

Statement of Findings Underlying the Violations

This Notice of Penalty incorporates the findings and justifications set forth in the Settlement Agreement executed on June 15, 2009 by and between RFC and ComEd, which is included as Attachment b, and the Supplemental Record Information notice dated June 16, 2009. The details of the findings and basis for the penalty are set forth in the Settlement Agreement and herein. This Notice of Penalty filing contains the basis for approval of the Settlement Agreement by the NERC Board of Trustees Compliance Committee (NERC BOTCC). In accordance with Section 39.7 of the Commission's regulations, 18 C.F.R. § 39.7 (2007), NERC provides the following summary table identifying each alleged violation of a Reliability Standard resolved by the Settlement Agreement, as discussed in greater detail below.

Region	Registered Entity	NOC ID	NERC Violation ID	Reliability Standard	Req. (R)	VRF	Total ($) Penalty
RFC	Commonwealth Edison Company	NOC-215	RFC200800071	FAC-003-1	2	High[4]	225,000

The purpose of Reliability Standard FAC-003-1 is to improve the reliability of the electric transmission systems by preventing outages from vegetation located on transmission rights-of-way (ROW) and minimizing outages from vegetation located adjacent to ROW, maintaining clearances between transmission lines and vegetation on and along the transmission ROW, and reporting vegetation related outages of the transmission systems to the respective Regional Reliability Organizations and NERC.

FAC-003-1 R2 requires a Transmission Owner, such as ComEd, to create and implement an annual plan for vegetation management work to ensure the reliability of the system. The plan shall describe the methods used, such as manual clearing, mechanical clearing, herbicide treatment, or other actions. The plan should be flexible enough to adjust to changing conditions, taking into consideration anticipated growth of vegetation and all other environmental factors that may have an impact on the reliability of the transmission systems. Adjustments to the plan shall be documented as they occur. The plan should take into consideration the time required to obtain permissions or permits from landowners or regulatory authorities. Each Transmission Owner shall have systems and procedures for documenting and tracking the planned vegetation management work and ensuring that the vegetation management work was completed according to work specifications. FAC-003-1 R2 has a "High" Violation Risk Factor (VRF).

On July 18, 2008, ComEd submitted to RFC a Compliance Monitoring and Enforcement Program Violation Self-Reporting Form, dated July 17, 2008, in which ComEd identified non-compliance with FAC-003-1 R2. The self-report was generated as a result of an internal

[4] On May 4, 2007, NERC submitted a petition for approval of Violation Risk Factors for Reliability Standard FAC-003-1. On June 26, 2007, the Commission issued an Order approving the Violation Risk Factors as filed. Therefore, the "High" Violation Risk Factor for FAC-003-1 Requirement R2 has been in effect since June 26, 2007.

investigation into three momentary outages that occurred on July 6, 2008, July 9, 2008 and July 15, 2008. In its self-report, ComEd stated that the outages occurred for 0 minutes. According to ComEd, because they were not "sustained outages," they were not considered by ComEd as Category 1, 2 or 3 outages.

In the report, ComEd stated that "On July 15, 2008, during an inspection relating to a momentary line operation, ComEd discovered that clearance to a 345kV Line 2102 (Kincaid-Latham-Blue Mound) was not properly maintained in accordance with the ComEd Vegetation Management Program."

On August 4, 2008, ComEd submitted to RFC via email a "Vegetation Contact Outage Questionnaire" containing information regarding the July 6, 2008, July 9, 2008 and July 15, 2008 opening and automatic reclosures on the 345 kV Kincaid- Latham-Blue Mound (L2102 ROW) transmission line. The "Vegetation Contact Outage Report" attributed the cause of the outages as a "Tree contact with line" but that "the operation was not a sustained outage as defined by NERC, and therefore was not a category 1, 2 or 3 outage." The momentary operations on L2102 were the result of a vegetation encroachment inside the right-of-way. ComEd states that the vegetation that caused the event "was estimated to be seven years old based on a count of the tree growth rings" and that "the tree that made contact with the L2102 was a cottonwood that was 32 feet high." ComEd's TVMP is developed in compliance with the National Electric Safety Code (NESC). VM-ED-P025-4, Exelon Transmission Clearances, incorporates IEEE Standard 516 Minimum Air Gap Distance (MAID) into the Transmission Vegetation Management Program. Taken together, the NESC and IEEE Standard 516 requirements define Clearances 1 and 2. Specifically, for 345 kV spans greater than 1,000 feet in length, the NESC Minimum Ground Clearance is 24.6'. VM-ED-P025-4 lists the Trigger for Trimming in the Mid-Span Zone as 10'. Therefore, Clearance 1 at mid-span as defined in NERC Reliability Standard FAC-003-1 would be 14.6' (or 24.6'-10'). Clearance 2 as defined in NERC Reliability Standard FAC-003-1 is the IEEE Standard 516 MAID distance of 7.5' for 345 kV lines. On July 16, 2008, crews removed between 50-100 trees from the area in the span between Towers 63 and 64. Three of the trees were identified as tall as 32' and the oldest tree(s) were estimated to be about 7 years old based on tree rings." Three trees in question were in violation of Clearance 2 as defined in NERC Reliability Standard FAC-003-1. Once those trees were identified, as a conservative measure, ComEd removed all vegetation in the span.

On August 18, 2008, RFC submitted a *Request for Information* to ComEd to obtain clarification and additional information regarding the "Vegetation Contact Outage Report" and ComEd responded on September 22, 2008. In the "Root Cause Investigation Report" contained within ComEd's response, ComEd states that, on July 8, 2008, following the initial momentary operations on Line 2102 on July 6, 2008, it sent out a ground inspection crew (the Transmission Overhead group) to inspect Line 2102 from Tower 60 to Tower 88. Immediately following the patrol, the crew reported the patrol as completed, with "nothing found" and did not provide any details about accessibility issues. However, interviews with the crew performed during ComEd's Root Cause Investigation revealed that the crews were forced to "re-route" around Tower 61 to gain access to Towers 63 and 64 due to wetlands and vegetation including that which fell within acceptable TVMP requirements because they "could not get a clear view" of Towers 63 and 64. Subsequently, Line 2102 opened and reclosed automatically again on July 9, 2008.

Following the July 9, 2008 momentary line operation, the Transmission Overhead group patrolled, by foot, on July 10, 2008 and identified a flashed insulator assembly, with evidence of arcing and minor conductor damage. Those items were presumed to be the cause of the momentary operations on both July 6, 2008 and July 9, 2008 and repair work was scheduled for the next Functional Equipment Group outage in early December 2008. When Line 2102 opened and reclosed automatically for a third time on July 15, 2008, the Transmission Overhead group arranged for an aerial patrol of Line 2102, which led to the identification of the tree contacts.

The "Root Cause Investigation Report" contained within ComEd's September 22, 2008 response to RFC also states that "the vegetation growing between Towers 63 and 64 under the wires of Line 2102 was not identified during the annual survey required by ComEd's Vegetation Management Program.[5] Maintenance scheduled to occur on the 99.5-mile long Line 2102 ROW was not completed for a 5-10 mile section of the line that included the area between Towers 63 and 64.[6] A contractor performed a Quality Assurance Survey of Line 2102 in March of 2008 and did not identify any issues on this section of the line." Specifically, there were 50-100 trees in this area, including the three 32' cottonwood trees that were involved in the outages.

In the "Root Cause Investigation Report," ComEd concluded that the current survey program, maintenance work plan program, and quality assurance program required "more rigorous oversight and documentation to ensure that maintenance activities are completed in accordance with ComEd program requirements." In addition, the "Root Cause Investigation Report" provided details regarding the specific root causes (discussed in detail in ComEd's October 17, 2008 submittal) of the alleged violation that occurred within the survey program, the maintenance work plan program and the quality assurance program. These are also discussed in the attached Mitigation Plan.

RFC concluded that ComEd has an annual vegetation management plan, *VM-ED-P025-4, Vegetation Management Distribution and Transmission Clearance Guidelines*, which is its parent company, Exelon's, procedure that is applicable to the ComEd transmission system and

[5] According to the Root Cause Investigation Report, annual surveys of the entire 2102 right-of-way were conducted for several years prior to the tree contract event in 2008. The Root Cause Investigation (RCI) team evaluated survey documentation for 2006 and 2007, based on estimated annual growth rates the team estimates the tallest trees were approximately 20' in height at the time of the 2006 survey. The estimates were done by simulating Cottonwood tree growth in flood plains and using the Lignum Modeling Method. Records of the survey performed in January 2006 included reference to five identified reliability enhancement program (REP) locations on Line 2102. However, these REP locations did not include the section between Towers 63 and 64 where the tree contact occurred. Towers 63 and 64 are located in a flood plain on the south side of the Sangamon River. Records of the survey performed in March 2007 also included reference to five REP locations on Line 2102. However, these were different locations than those identified as part of the 2006 survey. Again, the area of the flood plain between Towers 63 and 64 was not included in the documented REP locations identified on Line 2102.

[6] According to the Root Cause Investigation Report, the contractor had a documented work plan for the northern portion of Line 2102 (TSS 80 Pontiac to interstate 72 (Tower 90)). However, the contractor assigned responsibility for the development of the work plan for the southern portion of Line 2102 (Kincaid to interstate 72 (Tower 90)) to the contractor's surveyor/screener. The plan developed by the surveyor/screener did not include an area from Buckhart Rd (Tower 59) north, which included Towers 63 and 64. As a result, the personnel executing the work did not receive instruction or direction for completing work on that section of the line and there was no record of "un-finished work" established for this section of the line. The contractor failed to develop a complete 2007 work plan for maintenance on line 2102 and maintenance was not completed under Towers 63 and 64.

states that Exelon's TVMP is developed in compliance with the National Electric Safety Code. Moreover, RFC determined that ComEd has implemented its annual vegetation management plan. The method utilized by ComEd is a visual inspection by a trained and qualified individual, as outlined in VM-ED-P030. Ground based inspections are completed utilizing 4x4 vehicles including ATV's to review 100% of the line. The criteria utilized for the inspections are defined in VM-ED-P030.

According to the Settlement Agreement and as a result of the documentation provided to RFC by ComEd, RFC alleged that ComEd failed to effectively implement its TVMP with sufficient procedural rigor to fully identify and track the anticipated vegetation growth of a stand of trees located inside the ROW, allowing three trees to grow to 32 feet in height over a period of seven years based on the tree rings, thus resulting in momentary operations on Line 2102 and resulting in a violation of Clearance 2 distances and momentary operations on a transmission line. Specifically, ComEd failed to ensure that the vegetation management work was completed according to work specifications. There was no sustained line outage, system wide disturbance nor interruption in service to any customers, although the momentary contact outages and the conditions found on the ground indicate Clearance 2 distances, as specified in the ComEd TVMP, were not maintained.

According to the Settlement Agreement, RFC found noteworthy and commendable certain aspects of ComEd's compliance program including that ComEd has sufficient resources for the operation of its internal compliance program, and implementation objectives are evaluated regularly to determine the necessary budget for implementation resources. Executive and senior management are key participants in the corporate level and individual business unit oversight of the compliance program. A Senior Officer provides oversight and has independent access to the CEO. This Senior Officer presides over the NERC Steering Committee, which is comprised of executive/senior management representatives from each NERC registered business unit as well as representatives from the following Exelon departments; Legal, Ethics and Corporate Governance, Governmental Affairs, and Information Technology. ComEd has trained all personnel who are directly affected by the requirements, and all of ComEd's personnel completed corporate-wide NERC training, in 2008. In addition, a subset of employees has been identified to receive additional NERC CIP training in Q4 2008. Compliance adherence brochures, posters, and articles in company publications have been distributed within the ComEd community. The governing Exelon NERC Reliability Compliance Policy addresses the expectation that all employees shall meet the requirements specified in the Exelon Corporation Code of Business Conduct. The Code requires employees to report violations and provides that they may be disciplined for not reporting what they have reason to know is a violation, for not cooperating with an investigation of a potential violation, or for retaliating against a whistle-blower. The Code also provides that employees may be disciplined for wrongdoing in connection with a violation, but that management will take self-reporting into account in such cases. Based upon the information provided above, RFC has determined that the internal compliance program at ComEd is excellent in strength and in quality.

According to RFC's Supplemental Record of Information, RFC considered the following factors, in addition to the reasons stated above, to determine the penalty amount: (1) RFC determined that the FAC-003-1 R2 alleged violation occurred because the TVMP was not executed in a

satisfactory manner; (2) ComEd's alleged violation was not intentional and was not concealed; and (3) ComEd Staff was cooperative and exhibited a positive culture of compliance.

For the purposes of penalty determination, the exact date when ComEd became non-compliant can only be estimated based on the growth rate of the three offending cottonwood trees, although taking into account the clearance level and the height of the trees the trees encroached the clearance level prior to July 6, 2008. With the occurrence of the first momentary outage, RFC considered the duration from July 6, 2008, the date the first tree violated its TVMP, until July 16, 2008, when the tree span was removed.[7] In this case, RFC considered the facts and circumstances of the violation and determined that a penalty of two hundred and twenty-five dollars ($225,000) was appropriate.

Status of Mitigation Plans

ComEd submitted an interim Mitigation Plan to RFC on August 20, 2008 to address the alleged violation of FAC-003-1 R2. After completing its Root Cause Investigation, ComEd revised its Mitigation Plan and resubmitted it to RFC on October 17, 2008 along with a letter from ComEd's senior management outlining the immediate actions taken by ComEd to mitigate vegetation management issues. The plan was accepted by RFC on October 20, 2008 and approved by NERC on November 4, 2008.[8] The Mitigation Plan for this alleged violation is designated as MIT-08-1081 and was submitted as non-public information to FERC on November 4, 2008 in accordance with FERC orders.

In order to mitigate the instant violation, ComEd stated that it had one-time costs of $1,636,889 and ComEd's Mitigation Plan stated that it completed the following:

1. Removal of between 50-100 trees from the area in the span between Towers 63 and 64 on July 16, 2008. Three of the trees were identified as tall as 32' and the oldest trees were estimated to be about 7 years old based on tree rings. The three trees in question were in violation of Clearance 2 as defined by Reliability Standard FAC-003-1. Once those trees were identified, as a preventative measure, ComEd removed all vegetation in the span.
2. Completion of a root cause investigation, which was provided to RFC on September 22, 2008. The root cause investigation identified 5 345 kV lines that did not have completed "work packages" on file for the 2007 TVMP (L2101, L2102, L8001, L10805 and L10806). From July 16, 2008 to July 20, 2008, ComEd's contractor completed a ground inspection and survey of the five lines, in order to identify and mitigate any vegetation issues that may have been missed during the ComEd 2007 Transmission Vegetation

[7] On July 16, 2008, following the discovery of non-compliant vegetation in one span of L2102, ComEd's contractor removed the vegetation within the identified section of the 345 kV line (which RFC verified and describes in the Summary and Review of MP Completion document). RFC deemed that the violation ended when the vegetation was removed on July 16, 2008. Although twelve additional milestone activities in the Mitigation Plan were completed after July 16, 2008 and before December 5, 2008, these activities were considered preventive in nature. All Mitigation Plan milestones were completed in a timely fashion. According to RFC, the remaining dates described in the Settlement Agreement past December 5, 2008 were all "above and beyond" actions that ComEd committed to as part of the Settlement Agreement and as such they did not factor into the duration determination.
[8] The Settlement Agreement incorrectly states that NERC approval occurred on November 5, 2008.

Management maintenance cycle. No NERC Reliability Standard FAC-003-1 Clearance 2 violations or threats to reliability were identified during these inspections.

3. Inspection of its entire transmission system above 200 kV (345 kV and 765 kV lines). ComEd inspected its entire 765 kV and 345 kV transmission system ROWs, approximately 1,623 linear miles, and did not identify any additional violations of FAC-003-1 requirements or threats to reliability.

4. Conduct aerial inspections of its transmission system. These were aerial inspections by helicopter conducted by ComEd and an independent vegetation aerial specialist with over five years of experience. The inspector used specialized software to identify, GPS mark and track for ground follow-up on any locations where the aerial inspection could not verify compliance with clearance requirements that were more conservative than FAC-003-1 requirements (30 feet or less clearance for ground validation). At the end of each flight day, the locations identified were uploaded to the software Web site for assignment to the ground validation crews. ***The cost of these aerial inspections was $53,550, plus $12,187 for the independent expert.***

    a. Ground Evaluations - The follow-up ground validation process involved the independent evaluation of locations observed in the aerial inspection. This independent validation included a site visit to each of the locations identified from the air with results loaded into the software. This gave a comprehensive and conservative view of span-by-span vegetation conditions on the 765 kV and 345 kV systems, and the ground crews then prioritized follow-up maintenance work as appropriate under their conservative criteria. ***The cost of the ground validations was $36,554***.

    b. Tree Trimming - Locations identified for maintenance by the ground validation crews were dispatched to tree crews. These work crews then undertook extensive efforts to perform maintenance work at multiple locations on the system, although under ComEd's TVMP, that work would not have been performed until later years. This increased system reliability by ensuring that all of the 345 kV and 765 kV system ROWs were trimmed back to ComEd's Clearance 1 distance at the same time. ***The cost of this additional maintenance work was $1,500,144.***

    c. Work Confirmation - QA inspectors confirmed that the work was completed to ComEd specifications. ***The cost of the QA/QC inspection was $34,454.***

After completing its Root Cause Investigation, ComEd revised its Mitigation Plan and included the following actions with costs for a two-year period of $1,363,572. ComEd committed to keep these process improvements in place for two years, after which time it will evaluate implementing them on a permanent basis.

1. ComEd shall develop a formal approach for thoroughly and electronically documenting 100% of the annual survey results on a span by span (tower by tower) basis that details areas surveyed with GPS verification, identifies whether issues were or were not found and formally requires the use of criteria to categorize (1, 2, or 3) all issues identified. ***This incremental action is estimated to cost $340,452 per year***. ComEd shall ensure the

contractor implements (through revision to contract if necessary or other means) the improvements to the process developed by ComEd.

2. ComEd shall incorporate into program documents the requirement for the vegetation contractor to submit a detailed electronic work plan to ComEd for scheduled maintenance activity for each line. This requirement shall include a submission and approval process for routine maintenance activity. ComEd Vegetation Management personnel will determine appropriate timing requirements and details of work plan to be included. ***This action is estimated to cost $207,900 per year***. ComEd shall ensure the contractor implements (through revision to contract if necessary or other means) the process developed by ComEd.
3. ComEd shall develop a formal approach for thoroughly and electronically documenting 100% of the QA survey results on a span by span (tower by tower) basis that details areas surveyed with GPS verification, whether issues were or were not found, process for follow-up of identified issues, and formally requires the use of criteria to categorize (1, 2, or 3) issues identified. ***This action is estimated to cost $133,434 per year***. ComEd shall ensure the contractor implements (through revision to contract if necessary or other means), the process developed by ComEd.
4. ComEd shall develop and implement a review program to ensure contractor Annual Survey results/deliverables are thorough and complete.

During the Settlement Agreement discussions, ComEd agreed to the following actions. These actions were included in the Settlement Agreement, with costs for a two-year period of $1,690,725. The actions were not added to ComEd's revised Mitigation Plan.

1. Work Planning Software/equipment will be enhanced to create a Reliability Enhancement Program that includes a span-by-span data collection, allowing for real time data sharing among personnel and increased data retention and tracking. ***The estimated cost of this action is $24,000 per year***.
2. ComEd will utilize the same rigor and techniques to annually inspect and ensure the reliability of the 138 kV transmission system. ***This action is estimated to incrementally cost $246,834 per year***.
3. ComEd will add three additional program manager and support positions, and a new Key Manager will assume responsibility for the Vegetation Management Department. Contractor resources will also be increased to ensure the program requirements are met. ***The estimated cost of this action is $405,000 per year***.
4. Use Amphibious Vehicles and ATVs for improved ROW access. ComEd recently purchased two all terrain vehicles and rents two amphibious vehicles. ***The total cost for purchase of the new ATVs was $25,457, while the annual rental fees for the amphibious vehicles total $28,800 per year***.
5. The Transmission Overhead Group will develop formal procedures (posted to the Management Model) that define the expectations, criteria and required documentation for a patrol of a transmission line or transmission ROW after an automatic operation. ***The estimated incremental cost of this item is $90,000 per year***.

6. ComEd's Transmission and Substation Real Time Analysis Group provides around the clock (24 hours, 7 days a week) operational analysis support to the company and helps to improve ComEd's transmission system reliability by quickly identifying areas to be patrolled and probable fault types. ***The estimated cost of these tasks is $38,000 per year***.

ComEd certified completion of the Mitigation Plan on January 6, 2009 and submitted the below evidence in support of its certification of completion.

1. RFC-1-5c-2102 2008 Photographs – Submitted in Response to August 18, 2008 RFC Data Request
2. Additional Photos Submitted to RFC on February 12, 2009 as an Addendum to Item 1
3. Crew Timesheets
4. Invoice Data for Work Associated With 2102
5. RFC-1-5c-2102 Walkdown Notes
6. Root Cause Investigation Report On Tree Contact on 345 kV Line 2102 (Kincaid-Latham-Blue Mound): Report by Lead Investigator; Approved by Vice President. – September 22, 2008
7. Letter from ComEd Vice President, Engineering and Project Management to RFC Vice President and Director-Compliance and RFC Manager of Compliance Enforcement – October 17, 2008 w/ attachment:
    a. Deficiency Identification and Closure Forms for Five Lines with Incomplete Work Packages (Results from Aerial Survey)
8. Letter from ComEd Vice President Transmission Operations & Planning to RFC Manager of Compliance Enforcement – January 6, 2009
9. ComEd Completed Work Packages (Vegetation Management Deficiency Form) from Walk-Down
10. RFC-1-11b-2102 Work Plan Completion Report (VM Transmission QA Summary Form 26394) – Submitted in Response to August 18, 2008 RFC Data Request
11. RFC-1-8d – General Inspection Report – Submitted in Response to August 18, 2008 RFC Data Request
12. Air Update 2-04-2009
13. Letter from ComEd Vice President Transmission Operations & Planning to RFC Compliance Enforcement Specialist – February 12, 2009 w/ attachments:
    a. VM-ED-PO41 Transmission Maintenance Work Plans, Rev 1a, 12/19/2008
    b. VM-ED-PO40 Transmission Work Scope Validation/Verification, Rev 01a, 12/18/2008
    c. VM-ED-1001 Transmission Inspection Procedure, Rev 1a, 12/19/2008

According to the Settlement Agreement, the total estimated costs to implement the agreed to actions are $4,748,786. RFC will audit and inspect ComEd's financial records to validate actual expenditures with these estimates.

RFC performed a review of the evidence ComEd submitted and on February 27, 2009 verified that the Mitigation Plan was completed in accordance with its terms bringing ComEd in compliance with NERC Reliability Standard FAC-003-1.

Statement Describing the Proposed Penalty, Sanction or Enforcement Action Imposed

Basis for Determination

Taking into consideration the Commission's directions in Order No. 693, the NERC Sanction Guidelines, and the Commission's July 3, 2008 Guidance Order,[9] the NERC BOTCC reviewed the Settlement Agreement and supporting documentation on August 3, 2009. The NERC BOTCC approved the Settlement Agreement, including RFC's imposition of a financial penalty of two hundred twenty-five thousand dollars ($225,000) against ComEd and other actions to promote prospective compliance required under the terms and conditions of the Settlement Agreement.[10] In approving the Settlement Agreement, the NERC BOTCC reviewed the applicable requirements of the Commission-approved Reliability Standards and the underlying facts and circumstances of the alleged violation at issue.

In reaching this determination, the NERC BOTCC considered the following factors:

1. ComEd had no prior violation of FAC-003-1 R2 or any other Reliability Standards;
2. ComEd had a TVMP, but it was not effectively implementing its TVMP;
3. The outages were momentary with no interruption in service to any customers;
4. ComEd self-reported the violation and acted to mitigate the instant violation by eliminating the encroaching vegetation overgrowth;
5. ComEd took action to determine if there were other areas of overgrowth;
6. ComEd conducted a root cause analysis for its non-compliance and took the corrective actions discussed herein to prevent future encroachments and non-compliance;
7. ComEd fully cooperated with RFC and provided additional information regarding the alleged violation in a timely manner;
8. ComEd has a developed compliance program; and
9. There were no aggravating factors identified by RFC.

For the foregoing reasons, the NERC BOTCC approves the Settlement Agreement and finds that the proposed two hundred twenty-five thousand dollars ($225,000) financial penalty is appropriate for the violation and circumstances in question, and is consistent with NERC's goal to promote and ensure reliability of the bulk power system.

[9] *North American Electric Reliability Corporation*, "Guidance Order on Reliability Notices of Penalty," 124 FERC ¶ 61,015 (2008).
[10] The NERC BOTCC notes that the registered entity does not receive direct credit for money spent above and beyond actions to mitigate the violation or for any additional money spent what is required to mitigate the violation.

Pursuant to Order No. 693, the penalty will be effective upon expiration of the 30 day period following the filing of this Notice of Penalty with FERC, or, if FERC decides to review the penalty, upon final determination by FERC.

Attachments to be Included as Part of the Notice of Penalty

The attachments to be included as part of this Notice of Penalty are the following documents and material:

a) ComEd's Self Report dated July 17, 2008, Outage Report dated July 25, 2008, included as Attachment a;

b) Settlement Agreement by and between ComEd and RFC, executed June 15, 2009, included as Attachment b;

c) ComEd's Mitigation Plan designated as MIT-08-1081, submitted October 17, 2008, included as Attachment c;

d) ComEd's Certification of Completion of the Mitigation Plan, dated January 6, 2009, included as Attachment d; and

e) RFC's Verification of Completion of the Mitigation Plan, dated February 27, 2009, included as Attachment e.

A Form of Notice Suitable for Publication[11]

A copy of a notice suitable for publication is included in Attachment f.

[11] *See* 18 C.F.R § 39.7(d)(6).

Notices and Communications

Notices and communications with respect to this filing may be addressed to the following:

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*Persons to be included on the Commission's service list are indicated with an asterisk. NERC requests waiver of the Commission's rules and regulations to permit the inclusion of more than two people on the service list.

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Conclusion

NERC respectfully requests that the Commission accept this Notice of Penalty as compliant with its rules, regulations and orders.

Respectfully submitted,

/s/ Rebecca J. Michael

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cc: Commonwealth Edison Company
RFC Corporation

Attachments

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Attachment a

ComEd's Self Report, dated July 17, 2008, Outage Report, dated July 25, 2008, and Responses to Outage Questionnaire, dated August 4, 2008

RFC200800071
Reported to NERC 7/22/2008

COMPLIANCE MONITORING AND ENFORCEMENT PROGRAM
VIOLATION SELF-REPORTING FORM

This Violation Self-Reporting Form can be used for submittals via e-mail or fax for violations of the Reliability Standards identified by a self- assessment.

1. **Reliability Standard (XXX-###-# or XXX-###-RFC-##)** FAC-003-1

2. **Violation(s):** Check the appropriate box(s) to identify violation(s) of any of the applicable requirement(s) referenced in the standard.

   For violations of requirements with Levels of Non-Compliance or Violation Severity Levels (VSL) specified in the standard:

   ☐ Entity is Level 1 Non-Compliance or has Lower VSL for the following: requirement(s): _____ for function(s): _____

   ☐ Entity is Level 2 Non-Compliance or has Moderate VSL for the following: requirement(s): _____ for function(s): _____

   ☒ Entity is Level 3 Non-Compliance or has High VSL for the following: requirement(s): R.2 for function(s): TO

   ☐ Entity is Level 4 Non-Compliance or has Severe VSL for the following: requirement(s): _____ for function(s): _____

   For violations of requirements with no Levels of Non-Compliance or Violation Severity Levels specified in the standard:

   ☐ Entity is in violation of requirement(s) not referenced in the Levels of Non-Compliance or Violation Severity Levels section of the standard:

   requirement(s): _____ for function(s): _____

3. **Description of the violation:** On July 15, 2008, during an inspection relating to a momentary line operation, ComEd discovered that clearance to a 345kV line 2102 (Kincaid-Latham- Blue Mound) was not properly maintained in accordance with the ComEd Vegetation Management Program. .

4. **Additional information:** Immediate action was taken to remediate the issue and bring the line into compliance. On July 16, 2008, ComEd removed the vegetation within the identified section of the 345kV line, patrolled the remainder of the line and verified that the line is in compliance with the ComEd Vegetation Management program standards. In addition, ComEd immediately initiated its formal NERC Compliance Internal Investigation Procedure to identify causal factors, implement any other necessary immediate remediation, define a formal mitigation plan and assign appropriate corrective actions to assure full compliance.

5. **Mitigation Plan attached:** ☐ Yes ☒ No

6. **Officer Verification:** I understand that this information is being provided as required by the Reliability*First* Compliance Monitoring and Enforcement Program. Any review of this violation will require all information certified on this form be supported by appropriate documentation.

Enter NERC Registry ID# 00729

Officer's Name: Susan O. Ivey

Officer's Title: Vice President, Transmission Operations & Planning

Officer's e-mail address: susan.ivey@exeloncorp.com Phone: (215) 841-4706

Registered Company Name: Commonwealth Edison CDMS User ID: N/A

RFC200800071
Reported to NERC 7/22/2008

Primary Compliance Contact (PCC)/Alternate: John J. Blazekovich / Christopher J. Scanlon

Email: john.blazekovich@exeloncorp.com Phone:(630) 691-4777 Date: July 17, 2008

E-mail Submittals to: compliance@rfirst.org or Fax#: 330- 456-5408 – Attention Compliance Dept.
For any questions regarding compliance submittals, please e-mail: compliance@rfirst.org.

Vegetation Contact Outage Questionnaire – [FAC-003]

ComEd Comment : The incident described in this report was an open automatically/reclose automatically (OA/RA) operation. It was not a sustained outage as defined in the NERC Glossary (February 12, 2008) and therefore would not generally be reported in an Outage Questionnaire. However, ComEd is providing this completed questionnaire in response to a request by RFC Compliance Staff to assist with their assessment of issues associated with the July 18, 2008 Self-Report of a FAC-003 incident.

Individual Vegetation Related Transmission Line Outage

For EACH outage experienced, complete the following table.

Outage # 1 ***Date of Report: 7/25/08***

Name of Transmission Owner (TO):	Commonwealth Edison
Name of Transmission Line Involved in Outage: *(No circuit number please)*	Kincaid-Latham-Blue Mound
Voltage of Transmission Line: *(Please mark one)*	☐ 230 kV class x 345 kV class ☐ 500 kV class ☐ 765 kV class ☐ Reliability*First* Designated Critical Lines <200 kV
Time and date of outage:	July 6, 2008 1424
Duration of outage:	0 minutes
Line-loading (% of normal rating) of the involved line at the time of line trip: **NOTE:** This information should be provided whenever vegetation grew up from within or outside of the ROW and contacted the line, or if the line sagged into the vegetation.	12%
Description of cause of outage:	Tree contact with line
Caused by Category 1, Category 2, or Category 3 vegetation: **NOTE:** Please check whether or not a Category 1 outage occurred as a result of a tree from inside or outside the right-	☐ **Category 1 — Grow-ins:** Outages caused by vegetation growing into lines from vegetation inside and/or outside of the right-of-way. ☐Inside the right-of-way ☐Outside the right-of-way ☐ **Category 2 — Fall-ins:** Outages caused by vegetation falling into lines from inside the right-of-way. ☐ **Category 3 — Fall-ins:** Outages caused by vegetation falling into lines from outside the right-

of-way.	of-way. **ComEd Comment:** The operation was not a sustained outage as defined by NERC, and therefore was not a category 1,2 or 3 outage. The OA/RA was the result of a vegetation "grow in" inside the right-of-way.
Counter measures or corrective steps taken by TO including timeframe to prevent future outages:	The cause of the outage was not identified, and as a result no action was taken at that time. As described in more detail below, after further OA/RAs occurred on the line, the cause was identified as vegetation contact and action was taken at that time (see Outage Report #3).
Additional comments:	

Vegetation Contact Outage Questionnaire – [FAC-003]

ComEd Comment: The incident described in this report was an open automatically/reclose automatically (OA/RA) operation. It was not a sustained outage as defined in the NERC Glossary (February 12, 2008) and therefore would not generally be reported in an Outage Questionnaire. However, ComEd is providing this completed questionnaire in response to a request by RFC Compliance Staff to assist with their assessment of issues associated with the July 18, 2008 Self-Report of a FAC-003 incident.

Individual Vegetation Related Transmission Line Outage

For EACH outage experienced, complete the following table.

Outage # 2 ***Date of Report: 7/25/08***

Name of Transmission Owner (TO):	Commonwealth Edison
Name of Transmission Line Involved in Outage: *(No circuit number please)*	Kincaid-Latham-Blue Mound
Voltage of Transmission Line: *(Please mark one)*	☐ 230 kV class x 345 kV class ☐ 500 kV class ☐ 765 kV class ☐ Reliability*First* Designated Critical Lines <200 kV
Time and date of outage:	July 9, 2008 1309
Duration of outage:	0 minutes
Line-loading (% of normal rating) of the involved line at the time of line trip: **NOTE:** This information should be provided whenever vegetation grew up from within or outside of the ROW and contacted the line, or if the line sagged into the vegetation.	35%
Description of cause of outage:	Tree contact with line
Caused by Category 1, Category 2, or Category 3 vegetation:	☐ **Category 1 — Grow-ins:** Outages caused by vegetation growing into lines from vegetation inside and/or outside of the right-of-way. ☐ Inside the right-of-way ☐ Outside the right-of-way ☐ **Category 2 — Fall-ins:** Outages caused by vegetation falling into lines from inside the right-of-way.

NOTE: Please check whether or not a Category 1 outage occurred as a result of a tree from inside or outside the right-of-way.	☐ **Category 3 — Fall-ins:** Outages caused by vegetation falling into lines from outside the right-of-way. **ComEd Comment:** The operation was not a sustained outage as defined by NERC, and therefore was not a category 1,2 or 3 outage. The OA/RA was the result of a vegetation "grow in" inside the right-of-way.
Counter measures or corrective steps taken by TO including timeframe to prevent future outages:	The actual cause of the outage was not identified. However, the patrol found a flashed insulator assembly as well as broken conductor strands. These were assumed to be the cause of the first and second OA/RAs and are scheduled for repair during the next planned line maintenance outage which is currently planned to occur in December 2008. As described in more detail below, after a third OA/RA occurred on the line, the actual cause was identified as vegetation contact and action was taken at that time (see Outage Report #3).
Additional comments:	

Vegetation Contact Outage Questionnaire – [FAC-003]

ComEd Comment: The incident described in this report was an open automatically/reclose automatically (OA/RA) operation. It was not a sustained outage as defined in the NERC Glossary (February 12, 2008) and therefore would not generally be reported in an Outage Questionnaire. However, ComEd is providing this completed questionnaire in response to a request by RFC Compliance Staff to assist with their assessment of issues associated with the July 18, 2008 Self-Report of a FAC-003 incident.

Individual Vegetation Related Transmission Line Outage

For EACH outage experienced, complete the following table.

Outage # 3 ***Date of Report: 7/25/08***

Name of Transmission Owner (TO):	Commonwealth Edison
Name of Transmission Line Involved in Outage: *(No circuit number please)*	Kincaid-Latham-Blue Mound
Voltage of Transmission Line: *(Please mark one)*	☐ 230 kV class x 345 kV class ☐ 500 kV class ☐ 765 kV class ☐ Reliability*First* Designated Critical Lines <200 kV
Time and date of outage:	July 15, 2008 1427
Duration of outage:	0 minutes
Line-loading (% of normal rating) of the involved line at the time of line trip: **NOTE:** This information should be provided whenever vegetation grew up from within or outside of the ROW and contacted the line, or if the line sagged into the vegetation.	45%
Description of cause of outage:	Tree contact with line
Caused by Category 1, Category 2, or Category 3 vegetation: **NOTE:** Please check whether or not a Category 1 outage	☐ **Category 1 — Grow-ins:** Outages caused by vegetation growing into lines from vegetation inside and/or outside of the right-of-way. ☐ Inside the right-of-way ☐ Outside the right-of-way ☐ **Category 2 — Fall-ins:** Outages caused by vegetation falling into lines from inside the right-of-way. ☐ **Category 3 — Fall-ins:** Outages caused

occurred as a result of a tree from inside or outside the right-of-way.	by vegetation falling into lines from outside the right-of-way. **ComEd Comment:** The operation was not a sustained outage as defined by NERC, and therefore was not a category 1,2 or 3 outage. The OA/RA was the result of a vegetation "grow in" inside the right-of-way.
Counter measures or corrective steps taken by TO including timeframe to prevent future outages:	Helicopter patrol of the entire line was ordered following the third OA/RA on July 15, 2008. The vegetation was found between towers 63 and 64. The trees were immediately removed from the site on July 16, 2008. A complete ground patrol of the line was also ordered. The additional patrol was completed on July 16, 2008 and no further vegetation issues that would impact reliability were found. An internal investigation was initiated on July 16, 2008 in order to determine causal factors as well as define short and long-term mitigation actions.
Additional comments:	

Identify the individual in your organization who will be the Entity Contact regarding this Vegetation Outage.

Name: John Blazekovich

Title: Compliance Manager; Transmission Strategy & Compliance

Email: john.blazekovich@exeloncorp.com

Phone: 630-691-4777

Authorized Individual Signature Susan O. Ivey

Name (Print): Susan O. Ivey

Title: Vice President, Transmission Operations & Planning

Date: July 25, 2008

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Attachment b

Settlement Agreement by and between ComEd and RFC, executed June 15, 2009

In re	**)**	
	)	
COMMONWEALTH EDISON COMPANY	**)**	**DOCKET NUMBER**
	)	
	)	**RFC200800071**
NERC Registry ID # NCR00729	**)**	

SETTLEMENT AGREEMENT OF RELIABILITY*FIRST* CORPORATION AND COMMONWEALTH EDISON COMPANY

I. INTRODUCTION

1. Reliability*First* and Commonwealth Edison Company ("ComEd") enter into this Settlement Agreement ("Agreement") to resolve all outstanding issues arising from a preliminary and non-public assessment resulting in Reliability*First*'s determination and findings, pursuant to the North American Electric Reliability Corporation ("NERC") Rules of Procedure, of a violation by ComEd of the NERC Reliability Standard FAC-003-1, Requirement 2.

II. STIPULATION OF FACTS

2. The facts stipulated herein are stipulated solely for the purpose of resolving between ComEd and Reliability*First* the matters discussed herein and do not constitute stipulations or admissions for any other purpose, including in any administrative proceeding. ComEd and Reliability*First* hereby stipulate and agree to the following:

A. BACKGROUND

3. ComEd is engaged in the transmission of electricity throughout Northern Illinois and in Northwest Indiana. Its principal offices are located in Chicago, Illinois.

4. ComEd is a subsidiary of Exelon Corporation (NYSE: EXC). Exelon Corporation was incorporated in Pennsylvania in February 1999 and has its headquarters in Chicago. Exelon Corporation has a customer base of 5.4 million in Northern Illinois and Pennsylvania.

5. Exelon Corporation is a member of the NERC Transmission Owners and Operators Forum on behalf of ComEd and Exelon subsidiary PECO Energy. As noted on the Forum's website, "The Transmission Owners and Operators Forum's members include investor-owned, state-authorized, municipal, cooperative, U.S. federal, and Canadian provincial utilities. The forum promotes the highest levels of reliability in the operation of tee electric transmission systems." ComEd participates in the Forum's Vegetation Management practice area which was formed in 2008. Through discussions, web conferences, and in-person meetings, the Forum members share best and superior practices for Vegetation Management with the goal of reducing vegetation contact incidents and thereby improving transmission system reliability.

6. Reliability*First* staff confirmed that ComEd is registered on the NERC Compliance Registry as a Transmission Owner ("TO") in the Reliability*First* region with the NERC Registry Identification Number of NCR00729, and is, therefore, subject to compliance with FAC-003-1, Requirement 2.

B. ALLEGED VIOLATION OF FAC-003-1 REQUIREMENT 2 – RFC200800071

7. NERC Reliability Standard FAC-003-1 *"Transmission Vegetation Management Program"*, Requirement 2, states in part, "The Transmission Owner shall create and implement an annual plan for vegetation management work to ensure the reliability of the system. ….The plan should be flexible enough to adjust to changing conditions, taking into consideration anticipated growth of vegetation and all other environmental factors that may have an impact on the reliability of the transmission systems. …. The plan should take into consideration the time required to obtain permissions or permits from landowners or regulatory authorities. Each Transmission Owner shall have systems and procedures for documenting and tracking the planned vegetation management work and ensuring that the vegetation management work was completed according to work specifications."

8. On July 18, 2008, ComEd submitted to Reliability*First* a Compliance Monitoring and Enforcement Program Violation Self-Reporting Form, dated July 17, 2008, in which ComEd identified Non-Compliance to Requirement 2 of Reliability Standard FAC-003-1. Specifically, in the Self-Reporting Form, ComEd stated that "On July 15, 2008, during an inspection relating to a momentary line operation, ComEd discovered that clearance to a 345kV Line 2102 (Kincaid-Latham-Blue Mound) was not properly maintained in accordance with the ComEd Vegetation Management Program." Line 2102 is 99.5 miles long. Additionally, ComEd stated that "Immediate action was taken to remediate

the issue and bring the line into compliance. On July 16, 2008, ComEd removed the vegetation within the identified section of the 345kV line, patrolled the remainder of the line and verified that the line is in compliance with the ComEd Vegetation Management program standards. In addition, ComEd immediately initiated its formal NERC Compliance Internal Investigation Procedure to identify causal factors, implement any other necessary immediate remediation, define a formal mitigation plan and assign appropriate corrective actions to assure full compliance."

On July 25, 2008, ComEd supplied Reliability*First* with answers to the Reliability*First* "Vegetation Contact Outage Questionnaire", where ComEd stated that "the incident described in this report was an open automatically/reclose automatically operation." ComEd provided information regarding the three momentary operations that occurred on the Kincaid-Latham-Blue Mound 345kV Transmission Line. The first momentary operation occurred on July 6, 2008, and the line- loading at the time of the event was 12% of normal rating. The second momentary operation occurred on July 9, 2008 and the line-loading at the time of the event was 35% of normal rating. The third momentary operation occurred on July 15, 2008 and the line-loading at the time of the event was 45% of normal rating.

On August 4, 2008, ComEd submitted to Reliability*First* via email a "Vegetation Contact Outage Report" containing information concerning the 345kV Kincaid-Latham-Blue Mound (L2102 ROW) transmission line which opened and reclosed automatically on July 6, July 9, and July 15, 2008, with zero minutes of outage. The "Vegetation Contact Outage Report", submitted by ComEd, further states the cause of the outage as a "Tree contact with line" but that "the operation was not a sustained outage as defined by NERC, and therefore was not a category 1, 2 or 3 outage". The momentary operations on L2102 were the result of a vegetation "grow in" inside the right-of-way. ComEd states that the vegetation that caused the event "was estimated to be seven years old based on a count of the tree growth rings" and that "the tree that made contact with the L2102 was a cottonwood that was 32 feet high".

9. On August 18, 2008, Reliability*First* submitted a Request for Information to ComEd that requested clarification and additional information regarding the "Vegetation Contact Outage Report". On September 22, 2008, ComEd submitted a response to the August 18, 2008 Request for Information. In the "Root Cause Investigation Report" contained within ComEd's September 22, 2008 response, ComEd states that following the initial momentary operations on Line 2102 on July 6, 2008, it sent out a ground inspection crew on July 8, 2008. The ground inspection crew was assigned to inspect Line 2102 from Tower 60 to Tower 88. However, interviews with the crew performed during ComEd's Root Cause Investigation revealed that the crews were forced to "re-route" around Tower 61 due to vegetation growth around the base of the tower and that they "could not get a clear view" of Towers 63 and 64. Immediately following the patrol, the crew reported the patrol as completed, with "nothing found" and did not provide any details about accessibility issues. Subsequently, Line 2102 opened and reclosed automatically again on July 9, 2008.

10. Following the July 9, 2008 momentary line operation, the Transmission Overhead group patrolled on July 10, 2008 and identified an insulator with evidence of arcing and minor conductor damage. Those items were presumed to be the cause of the momentary operations on both July 6 and July 9 and repair work was scheduled. When Line 2102 opened and reclosed automatically for a third time on July 15, 2008, Transmission Overhead arranged for an aerial patrol of Line 2102, which led to the identification of the tree contacts.

11. Exelon's procedure, which is applicable to the ComEd transmission system, VM-ED-P025, Vegetation Management Distribution and Transmission Clearance Guidelines, states that Exelon's Vegetation Management Program is developed in compliance with the National Electric Safety Code. VM-ED-P025-4, Exelon Transmission Clearances, incorporates IEEE Standard 516 Minimum Air Gap Distance (MAID) into the Transmission Vegetation Management Program. Taken together, the NESC and IEEE Standard 516 requirements define Clearances 1 and 2. Specifically, for 345kV spans greater than 1000 feet in length, the NESC Minimum Ground Clearance is 24.6'. VM-ED-P025-4 lists the Trigger for Trimming in the Mid-Span Zone as 10'. Therefore, Clearance 1 at mid-span as defined in NERC Reliability Standard FAC-003-1 would be 14.6' (or 24.6'-10'). Clearance 2 as defined in NERC Reliability Standard FAC-003-1 is the IEEE Standard 516 MAID distance of 7.5' for 345kV lines. In the Reliability*First* August 18, 2008 Request for Information, Reliability*First* requested clarification regarding the criteria, method, equipment and process used in the field in determining the distances that are used to comply with Clearance 1 and Clearance 2 as specified and required in FAC-003-1, Requirement 1.2.1 and R1.2.2. In ComEd's September 22, 2008 response, ComEd states that, "The method utilized is a visual inspection by a trained and qualified individual, as outlined in VM-ED-P030…Ground based inspections are completed utilizing 4x4 vehicles including ATV's to review 100% of the line. The criteria utilized for the inspections are defined in VM-ED-P030, which sets clearance requirements in excess of the FAC-003 obligations." Note, that following ComEd's Root Cause Investigation, this work practice was updated to require a measurement utilizing a laser range finder measurement in lieu of the visual inspection. ComEd attached a copy of VM-ED-P030, "Vegetation Management Program Transmission System Reliability Enhancement Process" to their Response. VM-ED-P030 defines Category 1 REP (Significant Reliability Location), Category 2 REP (Reliability Location) and Category 3 REP (Future Reliability Location). Category 1 REP is defined as "A location requiring emergency attention with the potential to impact the transmission system immediately. Location where vegetation is closer to conductor than amount of expected sag at the maximum conductor temperature or sway at design maximum wind speed of the line. That is if the line was loaded to the maximum rating on a hot and still day the line would sag low enough to contact the vegetation." Category 2 REP is defined as "A location that has the potential to impact the transmission system due to tree growth or increased loading. Location

where Vegetation is closer than the minimum required clearance to expected conductor position at the maximum conductor temperature or maximum wind speed of the line."

12. ComEd states further in the "Root Cause Investigation Report" contained within the September 22, 2008 Response, that "On July 6, 9, and 15, 2008, Line 2102 opened and reclosed automatically. On July 15, 2008, a ComEd aerial patrol identified several trees (some as high as the conductor) on the 345kV Line 2102 Right of Way (ROW) between Structures 63 and 64. A subsequent ground patrol determined that three trees had come into contact with the Line 2102 conductor. On July 16, 2008, crews removed between 50-100 trees from the area in the span between Towers 63 and 64. Three of the trees were identified as tall as 32' and the oldest tree(s) were estimated to be about 7 years old based on tree rings." Note that the three trees in question were in violation of Clearance 2 as defined in NERC Reliability Standard FAC-003-1. Once those trees were identified, as a conservative measure ComEd removed all vegetation in the span. The Root Cause Investigation Report also states that "The vegetation growing between Towers 63 and 64 under the wires of Line 2102 was not identified during the annual survey. Maintenance scheduled to occur on the Line 2102 ROW was not completed for a 5-10 mile section of the line that included the area between Towers 63 and 64. A contractor performed a Quality Assurance Survey of Line 2102 in March of 2008 and did not identify any issues on this section of the line." In the "Root Cause Investigation Report", ComEd concludes that the current survey program, maintenance work plan program, and quality assurance program require "more rigorous oversight and documentation to ensure that maintenance activities are completed in accordance with ComEd program requirements." In addition, the "Root Cause Investigation Report" provides details regarding the specific root causes of the alleged violation that occurred within the survey program, the maintenance work plan program and the quality assurance program.

13. Reliability*First* alleges that ComEd failed to effectively implement a vegetation management plan with sufficient procedural rigor to fully identify and track the anticipated vegetation growth of a stand of trees located inside the right-of-way, thus resulting in momentary operations on a transmission line. Specifically, ComEd failed to ensure that the vegetation management work was completed according to work specifications. There was no sustained line outage, system-wide disturbance or interruption in service to any customers, although the momentary contact outages and the conditions found on the ground (see Paragraph 12 above) indicate Clearance 2 distances as specified in the ComEd TVMP were not maintained.

III. PARTIES' SEPARATE REPRESENTATIONS

STATEMENT OF RELIABILITY*FIRST* AND SUMMARY OF FINDINGS

14. Reliability*First* considers this Agreement as the resolution of all issues with regard to the above captioned docket number and to bind ComEd in the commitment to perform actions hereafter enumerated and listed as conditions for this Agreement.

15. FAC-003-1, Requirement 2 has a Violation Risk Factor (VRF) of High, as evidenced by the Violation Risk Factor Matrix from the NERC December 17, 2007 Compliance Filing.

16. Reliability*First* found noteworthy and commendable certain aspects of ComEd's compliance program including that ComEd has sufficient resources for the operation of its internal compliance program, and implementation objectives are evaluated regularly to determine the necessary budget for implementation resources. Executive and senior management are key participants in the corporate level and individual business unit oversight of the compliance program. A Senior Officer provides oversight and has independent access to the CEO. This Senior Officer presides over the NERC Steering Committee, which is comprised of executive/senior management representatives from each NERC registered business unit as well as representatives from the following Exelon departments; Legal, Ethics and Corporate Governance, Governmental Affairs, and Information Technology. ComEd has trained all personnel who are directly affected by the requirements, and all ComEd personnel completed corporate-wide NERC training, in 2008. In addition, a subset of employees has been targeted to receive additional NERC CIP training in Q4 2008. Compliance adherence brochures, posters, and articles in company publications have been distributed within the ComEd community. The governing Exelon NERC Reliability Compliance Policy addresses the expectation that all employees shall meet the requirements specified in the Exelon Corporation Code of Business Conduct. The Code requires employees to report violations and provides that they may be disciplined for not reporting what they have reason to know is a violation, for not cooperating with an investigation of a potential violation, or for retaliating against a whistle-blower. The Code also provides that employees may be disciplined for wrongdoing in connection with a violation, but that management will take self-reporting into account in such cases. Based upon the information provided above, Reliability*First* has determined that the internal compliance program at ComEd is excellent in strength and in quality.

17. Reliability*First* agrees that this settlement agreement is in the best interest of the parties, Reliability*First* and ComEd, and in the best interest of bulk power system reliability.

STATEMENT OF COMMONWEALTH EDISON COMPANY

18. ComEd neither admits nor denies that the facts set forth and agreed to by the parties for purposes of this Agreement constitute violations of NERC Reliability Standard FAC-003-1, R.2.

19. ComEd agrees to enter into this Settlement Agreement with Reliability*First* to avoid extended litigation with respect to the matters described or referred to herein, to avoid uncertainty, and to effectuate a complete and final resolution of the issues set forth herein. ComEd agrees that this agreement is in the best interest of the parties and in the best interest of maintaining a reliable electric infrastructure.

IV. MITIGATING ACTIONS, REMEDIES AND SANCTIONS

20. On August 20, 2008, ComEd submitted to Reliability*First* an Interim Mitigation Plan to address the Alleged Violation set forth in this notice. On October 17, 2008, ComEd submitted a Revised Mitigation Plan to Reliability*First*, as well as a letter from ComEd Vice President Michael McMahan outlining the immediate actions taken by ComEd to mitigate vegetation management issues following the July 2008 momentary operations on 345kV L2102. On October 20, 2008, Reliability*First* accepted the Revised Mitigation Plan. On October 20, Reliability*First* submitted the Revised Mitigation Plan and the October 17, 2008 letter from Michael McMahan to NERC. NERC approved the Revised Mitigation Plan on November 5, 2008. ComEd certified completion of the Revised Mitigation Plan on January 6, 2009. Reliability*First* performed an audit-like review of the evidence ComEd submitted in support of its Certification of Mitigation Plan Completion, in order to verify that all actions specified in the Mitigation Plan were successfully completed. On February 27, 2009, Reliability*First* verified that the Revised Mitigation Plan was completed in accordance with its terms.

21. As stated in the October 17, 2008 letter from ComEd Vice President Michael McMahan, ComEd took immediate action to mitigate vegetation management issues following the July 2008 L2102 momentary operations. Specifically, on July 16, 2008, ComEd's contractor removed all vegetation within the identified section of the 345kV line in order to restore the system to compliance.

22. Also on July 16, 2008, ComEd initiated a Root Cause Investigation and began an investigation of the incident using its NERC Compliance Internal Investigation Procedure, which resulted in an initial determination that a self-report to Reliability*First* was required. The Root Cause Investigation was completed on September 15, 2008 and the team's report was provided to Reliability*First* on September 22, 2008.

23. During the Root Cause Investigation, the team identified five 345kV lines that did not have completed "work packages" on file for the 2007 vegetation management program. (L2101, L2102, L8001, L10805, L10806). From July 16,

2008 to July 20, 2008, ComEd's contractor completed a ground inspection and survey of the five lines, in order to identify and mitigate any vegetation issues that may have been missed during the ComEd 2007 Transmission Vegetation Management maintenance cycle. No NERC Reliability Standard FAC-003-1 Clearance 2 violations or threats to reliability were identified during these inspections.

24. ComEd then undertook an inspection of its entire transmission system facilities rated above 200kV in two phases. On July 30, 2008, ComEd initiated a project to review all critical 345kV and all 765kV line rights-of-way (approximately 1623 linear miles) for conditions related to vegetation encroachment on transmission rights-of-way. For this purpose, 345kV lines were defined as critical if they (a) are a source of nuclear off-site power supply, (b) are a tie line to a neighboring transmission system, or (c) are lines that historically have resulted in post-contingency loading issues following their outage. On August 15, 2008, ComEd determined to inspect the remaining 345kV lines in its transmission system (approximately 844 linear miles); this phase of the inspection was completed on September 11, 2008. These inspections identified no FAC-003-1 Clearance 2 violations or threats to reliability. In sum, following the discovery of the tree contacts in a single span of Line 2102 and the removal of vegetation from that span, ComEd inspected its entire 765kV and 345kV transmission system ROWs and identified no additional violations of FAC-003-1 requirements or threats to reliability.

25. These were aerial inspections by helicopter conducted by ComEd and an independent vegetation aerial specialist with over five years of experience. The aerial inspection objective was to identify any vegetation that did not appear to meet clearance requirements provided for purposes of the survey that were more conservative than FAC-003-1 requirements. The inspector used the specialized software to identify, GPS mark and track for ground follow-up any locations where the aerial inspection could not verify compliance with these more conservative standards. The aerial inspector was instructed to GPS mark any locations that appeared to have 30 feet or less clearance for ground validation. At the end of each flight day the locations identified were uploaded to the software website for assignment to the ground validation crews. All observations from the aerial inspection were documented in the software with a unique identification number and a GPS location. This improved system reliability by providing a comprehensive analysis of the extent of the vegetation conditions on every span of every line of the transmission system and marking for follow-up all locations where vegetation exceeded a clearance substantially more conservative than FAC-003-1 Clearance 2. The cost of these aerial inspections was $53,550, plus $12,187 for the independent expert.

26. The follow-up ground validation process involved the independent evaluation of locations observed in the aerial inspection. This independent validation included a site visit to each of the locations identified from the air. The ground teams

measured the distances between the vegetation and the conductor with laser range finders and they prepared work packages for tree crews where clearances were less than the more conservative than required inspection standard. Each day the ground inspectors downloaded new locations identified by the aerial inspection team and uploaded the results of the field inspections they completed. All locations were tracked in the specialized software with paper documentation for each site and were also uploaded to the website. Each location was placed into one of four categories: FIN (fix it now), CAT 1 (schedule maintenance within 30 days), Spring 2009 (complete maintenance prior to spring 2009) and Never (site does not require work). This process increased system reliability by incorporating independent third parties to check on the ground locations identified by the aerial inspection team over ComEd's entire 765kV and 345kV systems. This gave a comprehensive and conservative view of span-by-span vegetation conditions on the 765kV and 345kV systems, and the ground crews then prioritized follow-up maintenance work as appropriate under their conservative criteria. The cost of the ground validations was $36,554.

27. Locations identified for maintenance by the ground validation crews were dispatched to tree crews. These work crews then undertook extensive efforts to perform maintenance work at multiple locations on the system, although under ComEd's vegetation management program, that work would not have been performed until later years. This increased system reliability by ensuring that the all of the 765kV and 345kV system ROWs were trimmed back to ComEd's Clearance 1 distance at the same time. This was an additional full-system trim, including work that would otherwise have been completed in subsequent years as part of ComEd's annual inspection and maintenance program. The cost of this additional maintenance work was $1,500,144.

28. Once the location completion form was submitted QA inspectors confirmed that the work was completed to ComEd specifications. After the QA inspections were complete, the inspector filed a QA inspection completion form to close out each unique location and provide the supporting documentation. This improved system reliability by confirming that all work completed met ComEd clearance guidelines. The cost of the QA/QC inspection was $34,454.

29. In addition to the summary of immediate actions taken by ComEd contained in the October 17, 2008 letter from ComEd Vice President Michael McMahan, the ComEd Revised Mitigation Plan also provided a summary of the immediate actions taken by ComEd to mitigate the July 2008 momentary operations. In addition, the Revised Mitigation Plan listed seven additional Key Milestone Activities scheduled to be completed by ComEd. ComEd has since then committed to keep these process improvements in place for two years, at which time it will evaluate implementing them on a permanent basis. ComEd has certified to Reliability*First* on January 6, 2009 that these activities were completed by the target dates shown below, and on February 27, 2009,

ReliabilityFirst verified that the Revised Mitigation Plan was completed in accordance with its terms.

A-1: ComEd shall develop a formal approach for thoroughly and electronically documenting 100% if the Annual Survey Results on a Span by Span (Tower by Tower) basis that details areas surveyed by GPS verification, identifies whether issues were or were not found and formally requires the use of criteria to categorize all issues identified. (By October 31, 2008).

This action will enhance ComEd's annual inspection process to ensure that all spans of the transmission system have positively been inspected and none have been missed. The new process includes positive GPS verification that every span has been visited and its vegetation condition evaluated by an inspector. This will be documented in ComEd's vegetation management work planning software. ComEd's new process also requires the measurement and recording of vegetation closest to the conductors with a laser range finder. Once the inspections are complete on a given line, the field data from the vegetation management work planning software will be uploaded to the website and overlaid on a system map to verify that all spans have been evaluated in the Validation/Verification process. This process improvement will enhance system reliability by facilitating annual verification, on a span-by-span basis, of vegetation conditions on each transmission line, including a measurement of the current clearance conditions. This process will also allow ComEd to provide detailed evidence of compliance to ReliabilityFirst and NERC. This incremental action is estimated to cost $340,452 per year.

B-1: ComEd shall incorporate into program documents the requirement for the Vegetation Contractor to submit a detailed electronic work plan to ComEd for scheduled maintenance activity for each line. This requirement shall include a submissions and approval process for routine maintenance activity. ComEd Vegetation Management Personnel will determine appropriate timing requirements and details of work plan to be included. (By October 31, 2008).

This new process was designed to ensure the accurate evaluation and recording of the site conditions requiring maintenance. The tasks needed to complete all scheduled maintenance work will be documented electronically in the vegetation work planning software. This will allow better planning, scheduling and tracking of work progress. The scope of work will be available on the web, where its progress can be monitored. Performance metrics generated from this data will be presented to management monthly. This process improvement will enhance the reliability of the transmission system by allowing electronic

documentation of the work as it progresses through closure and quality assurance acceptance. This will increase senior management involvement in the progress of the work and will facilitate tracking and escalation of any issues as they are encountered. This action is estimated to cost $207,900 per year.

C-1: ComEd shall develop a formal approach for thoroughly and electronically documenting 100% of the QA Survey results on a span by span (tower by tower) basis that details areas surveyed with GPS verification, whether issues were or were not found, process for follow-up of identified issues, and formally requires the use of criteria to categorize issues identified. (By October 31, 2008).

This action will improve the quality assurance program for transmission maintenance work to include the same techniques that are used for the annual inspection process (described under A-1 above). The quality inspection now includes a positive GPS verification that a quality inspector, regardless of any work scope being completed, has visited every span. The quality inspector will document the inspection results for every span inspected in the vegetation work planning software. Spans identified with a specific work type will be evaluated for compliance with ComEd's maintenance guidelines and each work package will be evaluated and approved by the QA inspector. ComEd's new process also requires the measurement and recording of the vegetation closest to the conductors with a laser range finder. This process improvement will enhance system reliability by providing more rigorous verification that all spans that are part of the specific maintenance programs are evaluated and documented to ensure that the work completed by the tree contractor complies with ComEd clearance specifications. This action is estimated to cost $133,434 per year.

A-2: ComEd shall ensure the Contractor implements (through revision to contract if necessary or other means) the improvements to the process developed by ComEd in Corrective action A-1. (By November 7, 2008).

In order to improve system reliability by achieving the benefits of the process improvement detailed above under item A-1, ComEd is ensuring that its Vegetation Management Contractor understands and implements the new process. Some specifics are provided under items D-1 and F-2 below. Accordingly, ComEd and its Vegetation Management Contractor executed an Amendment dated November 1, 2008 to the contract for services that incorporates the new requirements and enhanced vegetation management practices.

B-2: ComEd shall ensure the Contractor implements (through revision to contract if necessary or other means) the process developed by ComEd in Corrective Action B-1. (By November 20, 2008).

In order to improve system reliability by achieving the benefits of the process improvement detailed above under item B-1, ComEd is ensuring that the Vegetation Management Contractor understands and implements the new process. Some specifics are provided under items D-2 and F-2 below. Accordingly, ComEd and its Vegetation Management Contractor executed an Amendment dated November 1, 2008 to the contract for services that incorporates the new requirements and enhanced vegetation management practices.

C-2: ComEd shall ensure the Contractor implements (through revision to contract if necessary or other means), the process developed by ComEd in Corrective Action C-1. (By November 7, 2008).

In order to improve system reliability by achieving the benefits of the process improvement detailed above under item C-1, ComEd is ensuring that the Quality Assurance Contractor understands and implements the new process. Some specifics are provided under items D-1 and F-2 below. Accordingly, ComEd and its QA/QC Contractor executed an Amendment dated November 1, 2008 to the contract for services that incorporates the new requirements and enhanced vegetation management practices.

A-3: ComEd shall develop and implement a review program to ensure Contractor Annual Survey results/deliverables are thorough and complete. (By December 5, 2008).

In order to improve ComEd's oversight of the work performed by the Vegetation Management and QA/QC contractors and thus ensure that no spans are missed in the annual surveys, ComEd's vegetation management software was updated to include the ability to enter GPS verified span-by-span data points for all spans. In ComEd's vegetation management software, the base map layer was updated to include up-to-date transmission line and tower information. Then the updates to ComEd's vegetation management software were field tested to ensure that the system would perform as designed. Additionally, the ComEd Vegetation Management staff trained the contractor inspectors on the new process and on the utilization of the updated software. The contractor inspectors were then tested to ensure that they could utilize the new software as designed. The incremental costs for these activities are already accounted for in the costs for item F-2 as detailed above.

30. In addition to the actions taken by ComEd as detailed in the Revised Mitigation Plan, ComEd has proposed, for purposes of entering into this settlement

agreement, the following additional actions to improve the reliability of the transmission system.

D-1: Work Planning Software/equipment. The vegetation management work planning software has been enhanced to create a Reliability Enhancement Program that includes span-by-span data collection. The data collected includes GPS coordinates of found work or observation point, tie and date stamp, and data collector's initials. ComEd has added ten field computers with the work planning software. Using the specialized software system will allow for real time data sharing among department personnel, and the tracking and closing of identified work. The vegetation management work planning software also allows ComEd'sVegetation Management Department to retain and maintain important mitigation area documentation. These areas can be monitored, queried, edited or altered as conditions or situations change. ComEd will be able to confirm all additional work required, as well as track refusals by landowners or other exceptions. The software will be reviewed annually for updates and new technology.

To ensure usage and compliance by field personnel, ComEd has initiated training and scheduled quarterly refreshers. All personnel who will be using software to inspect and input data will be required to pass Work Planning Software certification, which includes a detailed evaluation and test of proficiency in the use of the software. The first of these classes and proficiency tests was held in October 2008 on the vegetation management work planning software and in January 2009 for the specialized software and further training on the vegetation management work planning software.

ComEd's enhanced use of the vegetation management work planning software and specialized software planning system to identify, track and report on transmission vegetation work will improve the reliability of the system by allowing ComEd to track and communicate data electronically and remotely. This will facilitate work management processes and will provide more rigorous verification that all work has been performed in accordance with ComEd specifications. The estimated cost of this action is $24,000 per year.

O: Annual Inspections Of 138kV. ComEd will utilize the same rigor and techniques to inspect and ensure the reliability of the 138kV transmission system. The annual inspection of those facilities has been enhanced to include positive GPS verification that every span has been visited and its vegetation condition evaluated by an inspector. This will be documented in ComEd's vegetation management work planning software. ComEd's new process also requires the measurement and recording of vegetation closest to the conductors with a laser range finder. Once the inspections

are complete on a given line, the field data from the vegetation management work planning software will be uploaded to the website and overlaid on a system map to verify that all spans have been evaluated in the Validation/Verification process. This process improvement will enhance system reliability by facilitating annual verification, on a span-by-span basis, of vegetation conditions on each 138kV transmission line, including a measurement of the current clearance conditions. This action is estimated to incrementally cost $246,834 per year.

F-2: ComEd Personnel Additions. ComEd will enhance the Transmission Vegetation Management staffing levels by adding three additional program manager and support positions. Additionally, a new Key Manager will assume responsibility for the Vegetation Management Department. The increased staffing levels in ComEd's Vegetation Management Department will ensure the transmission vegetation management programs receive the required increased rigor and oversight and that work is completed in accordance with program requirements and documented appropriately. Contractor resources will also be increased in response to the revised procedures and processes to ensure the program requirements are met. The combination of increased contractor resources and ComEd management oversight will improve the reliability of the system by ensuring that all spans are evaluated for conditions that pose a threat to reliability and developing and executing appropriate mitigation plans. The estimated cost of this action is $405,000 per year.

T&S1: Use of Amphibious Vehicles and ATVs for Improved ROW Access. The ComEd Overhead Transmission Department recently purchased two all terrain vehicles (Polaris Ranger 500EFI 4 by 4) that will be utilized for patrolling Overhead Transmission lines where an existing company vehicle cannot be utilized. Additionally, the ComEd Overhead Transmission Department rents two amphibious vehicles. ComEd utilizes these vehicles to access swampy areas of the ROWs in order to perform detailed inspections. This ability to access difficult terrain should improve reliability by allowing ComEd to more quickly and thoroughly inspect and repair transmission line issues. The total cost for purchase of the new ATVs was $25,457, while the annual rental fees for the amphibious vehicles total $28,800 per year.

H: Pursuant to a recommendation from ComEd's Root Cause Analysis, the ComEd Overhead Transmission Department strengthened its procedural guidance for performing aerial inspections of transmission lines. Specifically, the procedure now contains a specific requirement that vegetation issues that are identified during aerial inspections be documented, photographed and forwarded to the ComEd Transmission Vegetation Management Department. This increased level of scrutiny by the ComEd aerial inspectors will increase reliability by ensuring that

vegetation on ComEd ROWs is inspected multiple times a year. The estimated incremental cost of this item is $90,000 per year.

T&S2: Real Time Analysis Group. ComEd's Transmission & Substations Real Time Analysis Group provides 24 by 7 operational analysis support to the company. Following an automatic operation, whether momentary or sustained, the Real Time Analysis Group performs studies in order to quickly and accurately determine the location of transmission line faults. The group members use SCADA, Dynamic Fault Recorder, Relay Information and Targets, and Lightning data to determine both the location and types of the probable faults. The results of the analysis are immediately communicated to ComEd's Transmission System Operations and Transmission & Substation groups for use in locating faulted or damaged equipment. This work of the Real Time Analysis Group helps to improve ComEd's transmission system reliability by quickly identifying areas to be patrolled and probable fault types. Additionally, this provides the ComEd Transmission System Operations Department with information needed to make informed decisions regarding sectionalizing or equipment isolation options, thereby reducing the time that customers are at heightened risk for service interruptions. The estimated cost of these tasks is $38,000 per year.

31. Actions that would ordinarily be required by ComEd as a part of an acceptable mitigation plan shall be an insufficient sole basis for a substantial reduction in penalty in a settlement agreement. Any offer by ComEd must be for actions and commitments above and beyond actions and measures that would form an acceptable mitigation plan. Such actions and commitments must serve to enhance the reliability, within ComEd alone or throughout the industry as a whole, of the Bulk Power System.

32. For purposes of settling any and all disputes arising from Reliability*First*'s investigation into the matters reported by ComEd in the July 17, 2008 self-report, Reliability*First* and ComEd agree that on and after the effective date of this Agreement, as set forth in subsection (b), below, ComEd shall

    (a) Take the following actions:

CA#	Activity	Completion Date
N/A	Removal of vegetation from L2102 span in question	July 16, 2008
N/A	Aerial Inspection	September 11, 2008
N/A	Ground Validation	September 19, 2008
N/A	Mitigation Trimming	October 31, 2008
N/A	QA / QC of Mitigation work	February 4, 2009
A-1	ComEd shall develop a formal approach for thoroughly and electronically documenting 100% of the annual survey results on a span by span (tower by tower) basis that details areas surveyed with GPS verification,	October 31, 2008 (Initial) Ongoing Process Enhancement

	identifies whether issues were or were not found and formally requires the use of criteria to categorize (1,2,or3) all issues identified.	
A-2	ComEd shall ensure the contractor implements (through revision to contract if necessary or other means) the improvements to the process developed by ComEd in Corrective Action-A-1.	November 1, 2008 (Initial) Ongoing Process Enhancement
A-3	ComEd shall develop and implement a review program to ensure contractor Annual Survey results/deliverables are thorough and complete.	December 5, 2008 (Initial) Ongoing Process Enhancement
B-1	ComEd shall incorporate into program documents the requirement for the vegetation contractor to submit a detailed electronic work plan to ComEd for scheduled maintenance activity for each line. This requirement shall include a submission and approval process for routine maintenance activity. ComEd Vegetation Management personnel will determine appropriate timing requirements and details of work plan to be included.	October 31, 2008 (Initial) Ongoing Process Enhancement
B-2	ComEd shall ensure the contractor implements (through revision to contract if necessary or other means) the process developed by ComEd in Corrective Action-B-1.	November 1, 2008 (Initial) Ongoing Process Enhancement
C-1	ComEd shall develop a formal approach for thoroughly and electronically documenting 100% of the QA survey results on a span by span (tower by tower) basis that details areas surveyed with GPS verification, whether issues were or were not found, process for follow-up of identified issues, and formally requires the use of criteria to categorize (1,2, or 3) issues identified.	October 31, 2008 (Initial) Ongoing Process Enhancement
C-2	ComEd shall ensure the contractor implements (through revision to contract if necessary or other means), the process developed by ComEd in Corrective Action-C-1.	November 1, 2008 (Initial) Ongoing Process Enhancement
D-1	Work Planning Software / equipment	January 15, 2009
O	Annual Inspections 138kV	Ongoing Process Enhancement
F-2	Additional Transmission VM Staffing	March 16, 2009
T&S1	Use of Amphibious Vehicles and ATVs for improved ROW access	December 30, 2008 (ATV purchase) Ongoing Process Enhancement
H	The Transmission Overhead Group will develop formal procedures (posted to the Management Model) that define the expectations, criteria and required documentation for a patrol of a transmission line or transmission right-of-way after an automatic operation.	December 18, 2008 (Initial) Ongoing Process Enhancement
T&S2	Real Time Analysis Group	Ongoing

(b) ComEd shall pay a monetary penalty of $225,000 to Reliability*First*. Reliability*First* shall present an invoice to ComEd within twenty days after the Agreement is either approved by the Federal Energy Regulatory Commission or by operation of law, and Reliability*First* shall notify the North American Electric Reliability Corporation if the payment is not received.

In order to facilitate Reliability*First*'s need to communicate the status and provide accountability to the ERO (NERC), ComEd will provide status updates at a minimum on a quarterly basis or, if requested by Reliability*First*, more frequently. ComEd will submit these status updates to Reliability*First* in accordance with the confidentiality provisions of Section 1500 of the NERC Rules of Procedure.

33. It is understood that Reliability*First* staff shall audit the progress of mitigation plans and any other remedies of this Agreement, including, but not limited to site inspection, interviews, and request other documentation to validate progress and/or completion of the mitigation plans and any other remedies of this Settlement Agreement. Reliability*First* shall reasonably coordinate audits and information requests with ComEd related to this Settlement Agreement.

34. Based on the above actions taken or to be taken by ComEd, ComEd shall pay $225,000 to Reliability*First* as stated in this Settlement Agreement. However, if ComEd fails to complete the actions described above, Reliability*First* reserves the right to assess and collect a monetary penalty, to impose a sanction or otherwise to impose enforcement actions. ComEd shall retain all rights to defend against such additional enforcement actions in accordance with NERC Rules of Procedure.

35. The total estimated costs to ComEd to implement the agreed to actions that are above and beyond those that would be expected in an acceptable mitigation plan and as described in Section V are $ 4,748,786[1]. Reliability*First* may audit and inspect financial records to validate actual expenditures with estimates in this Settlement Agreement. Funding and programs associated with this Settlement Agreement will be above the original planned budget and programs for the ComEd budget for Years 2009 and 2010.

36. Failure to make a timely penalty payment or to comply with any of the terms and conditions agreed to herein, or any other conditions of this Settlement Agreement, shall be deemed to be either the same alleged violations that initiated this Settlement and/or additional violation(s) and may subject ComEd to new or additional enforcement, penalty or sanction actions in accordance with the NERC/FERC Rules of Procedure.

37. If ComEd does not make the monetary penalty payment above at the times agreed by the parties, interest payable to Reliability*First* will begin to accrue pursuant to the Commission's regulations at 18 C.F.R. § 35.19(a)(2)(iii) from the date that payment is due, in addition to the penalty specified above.

[1] This total includes the cost of the one-time actions described above. In addition, for the annual actions described above, the total includes twice the annual cost, because ComEd has committed to these actions for two years.

V. ADDITIONAL TERMS

38. The signatories to the Agreement agree that they enter into the Agreement voluntarily and that, other than the recitations set forth herein, no tender, offer or promise of any kind by any member, employee, officer, director, agent or representative of Reliability*First* or ComEd has been made to induce the signatories or any other party to enter into the Agreement.

39. Reliability*First* shall report the terms of all settlements of compliance matters to NERC. NERC will review the settlement for the purpose of evaluating its consistency with other settlements entered into for similar violations or under other, similar circumstances. Based on this review, NERC will either approve the settlement or reject the settlement and notify Reliability*First* and ComEd of changes to the settlement that would result in approval. If NERC rejects the settlement, NERC will provide specific written reasons for such rejection and Reliability*First* will attempt to negotiate a revised settlement agreement with ComEd including any changes to the settlement specified by NERC. If a settlement cannot be reached, the enforcement process shall continue to conclusion. If NERC approves the settlement, NERC will (i) report the approved settlement to the Commission for the Commission's review and approval by order or operation of law and (ii) publicly post the alleged violation and the terms provided for in the settlement.

40. This Agreement shall become effective upon the Commission's approval of the Agreement by order or operation of law as submitted to it or upon the Commission's approval of the Agreement by order or operation of law as modified in a manner acceptable to the parties.

41. ComEd agrees that this Agreement, when approved by NERC and the Commission as stated above shall represent a final settlement of all matters set forth herein and ComEd waives its right to further hearings and appeal, unless and only to the extent that ComEd contends that any NERC or Commission action on the Agreement contains one or more material modifications to the Agreement.

42. Reliability*First* reserves all rights to initiate enforcement, penalty or sanction actions against ComEd in accordance with the NERC Rules of Procedure in the event that ComEd fails to comply with the mitigation plan and compliance program agreed to in this Agreement. In the event that ComEd fails to comply with any of the stipulations, remedies, sanctions or additional terms, as set forth in this Agreement, Reliability*First* will initiate enforcement, penalty, or sanction actions against ComEd to the maximum extent allowed by the NERC Rules of Procedure, up to the maximum statutorily allowed penalty. ComEd shall retain all rights to defend against such enforcement actions, also according to the NERC Rules of Procedure.

43. ComEd consents to the use of Reliability*First*'s determinations, findings, and conclusions set forth in this Agreement for the purpose of assessing the factors, including the factor of determining the company's history of violations, that are set forth in the May 15, 2008 Revised Policy Statement on Enforcement,[2] or that may be set forth in any successor policy statement or order. Such use may be in any enforcement action or compliance proceeding under taken by Reliability*First*; provided however that ComEd does not consent to the use of the specific acts set forth in this Agreement as the sole basis for any other action or proceeding brought by Reliability*First*, nor does ComEd consent to the use of this Agreement by any other party in any other action or proceeding.

44. Each of the undersigned warrants that he or she is an authorized representative of the entity designated, is authorized to bind such entity and accepts the Agreement on the entity's behalf.

45. The undersigned representative of each party affirms that he or she has read the Agreement, that all of the matters set forth in the Agreement are true and correct to the best of his or her knowledge, information and belief, and that he or she understands that the Agreement is entered into by such party in express reliance on those representations, provided, however, that such affirmation by each party's representative shall not apply to the other party's statements of position set forth in Section III of this Agreement.

46. The Agreement may be signed in counterparts.

47. This Agreement is executed in duplicate, each of which so executed shall be deemed to be an original.

[2] *Revised Policy Statement on Enforcement*, 123 FERC ¶ 61,221 (2008).

Agreed to and accepted:

Raymond J. Palmieri
Vice President and Director of Compliance
Reliability*First* Corporation

6/15/09
Date

John Tyler Anthony
Vice President, Transmission & Substations
Commonwealth Edison Company

06/11/09
Date

Approved by:

Tim Gallagher
President
Reliability*First* Corporation

6/15/09
Date

[Include reporting forms as applicable]

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Attachment c

ComEd's Mitigation Plan designated as MIT-08-1081 and Letter Re. ComEd's Immediate Actions to Mitigate Vegetation Management Issues Following the July 2008 L2102 Automatic Operations, submitted October 17, 2008

Mitigation Plan Submittal Form

Date this Mitigation Plan is being submitted: October 17, 2008

Section A: Compliance Notices & Mitigation Plan Requirements

A.1 Notices and requirements applicable to Mitigation Plans and this Submittal Form are set forth in "Attachment A - Compliance Notices & Mitigation Plan Requirements."

A.2 This form must be used to submit required Mitigation Plans for review and acceptance by Reliability*First* and approval by NERC.

A.3 ☒ I have reviewed Attachment A and understand that this Mitigation Plan Submittal Form will not be accepted unless this box is checked.

Section B: Registered Entity Information

B.1 Identify your organization.

Company Name:	Commonwealth Edison Company
Company Address:	440 S LaSalle St. 33rd Floor Chicago, IL 60605
NERC Compliance Registry ID:	NCR 00729 COMEDTO

B.2 Identify the individual in your organization who will be the Entity Contact regarding this Mitigation Plan.

Name:	John Blazekovich
Title:	Manager of Compliance
Email:	john.blazekovich@exeloncorp.com
Phone:	630-691-4777

Section C: Identification of Alleged or Confirmed Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following Alleged or Confirmed violation(s) of the reliability standard listed below. As outlined in the Interim Mitigation Plan that ComEd filed with RFC on August 20, 2008, ComEd is submitting this Amended Mitigation plan to provide information on all corrective actions that ComEd has taken or intends to take in order to ensure full compliance to FAC-003 now and in the future.

NERC Violation ID #	Reliability Standard	Requirement Number	Violation Risk Factor	Alleged or Confirmed Violation Date(*)	Method of Detection (*e.g.*, Audit, Self-report, Investigation)
RFC200800071	FAC-003-1	R2.	HIGH	7/18/2008 (Date of Self Report, Not yet Alleged or Confirmed)	Self-report

(*) Note: The Alleged or Confirmed Violation Date shall be expressly specified by the Registered Entity, and subject to modification by Reliability*First*, as: (i) the date the Alleged or Confirmed violation occurred; (ii) the date that the Alleged or Confirmed violation was self-reported; or (iii) the date that the Alleged or Confirmed violation has been deemed to have occurred on by Reliability*First*. Questions regarding the date to use should be directed to the Reliability*First* contact identified in Section G of this form.

C.2 Identify the cause of the Alleged or Confirmed violation(s) identified above. Additional detailed information may be provided as an attachment.

Three automatic open/automatic reclose operations on ComEd 345kV line 2102 were caused by contact with a tree that violated clearance requirements. At the time of the automatic operations, ComEd had no record from either the Utility Line Clearance contractor or the Quality Assurance contractor identifying any problems with the section of L2102 where the tree contacts occurred. ComEd has completed its internal investigation and has submitted a copy of the formal investigation report to RFC on September 22, 2008.

Note: If a formal root cause analysis evaluation was performed, submit a copy of the summary report.

A copy of the formal internal investigation report was filed with RFC, pursuant to RFC's data request, on September 22, 2008.

C.3 Provide any additional relevant information regarding the Alleged or Confirmed violations associated with this Mitigation Plan. Additional detailed information may be provided as an attachment.

Additional relevant information regarding the Alleged or Confirmed violations has been submitted to RFC, pursuant to RFC's data request, on September 22, 2008.

Section D: Details of Proposed Mitigation Plan

Mitigation Plan Contents

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the Alleged or Confirmed violations identified above in Part C.1 of this form. Additional detailed information may be provided as an attachment.

In addition to completion of the internal investigation that is underway, ComEd has identified the following corrective actions that ComEd has taken, is taking and proposes to take. Now that the internal investigation is complete, ComEd is supplementing these corrective actions in this Amended Mitigation Plan.

- On July 16, 2008, ComEd's contractor removed the vegetation within the identified section of the 345kV line.
- Also on July 16, 2008, ComEd's contractor patrolled the remainder of the line and reported that the line is in compliance with the ComEd Vegetation Management program standards.
- From July 16-20, 2008, ComEd's contractor completed a ground inspection of four additional lines that did not have completed "work packages" on file for the 2007 vegetation maintenance program.
- Also on July 16, 2008, ComEd immediately initiated an investigation under its formal NERC Compliance Internal Investigation Procedure to identify causal factors, implement any other necessary immediate remediation, develop an initial and full formal mitigation plan and assign appropriate corrective actions to assure full compliance.
- ComEd initiated a project to review all critical 345kV and all 765kV line rights-of-way (approximately 1623 linear miles) for conditions related to

vegetation encroachment on transmission rights-of-way. For this purpose, 345kV lines were defined as critical if they (a) are a source of nuclear off-site power supply, (b) are a tie line to a neighboring transmission system, or (c) are lines that historically have resulted in post-contingency loading issues following their outage.

i. The inspection, which began on 7/30/2008, was conducted by helicopter by ComEd and an independent vegetation aerial specialist.
ii. The aerial inspection objective was to identify any vegetation that did not appear to meet conservative clearance requirements as provided for purposes of this survey. A third-party contractor performed follow-up ground inspections and verified clearances at the identified locations using laser measurement instrumentation.
iii. Locations that required ground follow-up were entered into the ROWkeeper software that ComEd Vegetation Management currently uses. Geographic locations were identified with an indication of the type of issue for follow-up inspection.
iv. Ground inspections began as soon as work packages were prepared. Ground inspections were documented with specific vegetation dimensions measured with a laser range finder to evaluate the need for maintenance.
v. All identified work has been documented, prioritized and will be tracked (using ROWkeeper software) through completion by ComEd.

- In order to ensure full system integrity, ComEd determined on August 15, 2008 to continue the aerial inspection project to include the remaining 345kV lines (approximately 844 linear miles).
- The following corrective actions were identified in order to address and mitigate the root causes of the events in ComEd's formal investigation and are listed in the formal investigation report that was provided to RFC on September 22, 2008.
    i. A-1: ComEd shall develop a formal approach for thoroughly and electronically documenting 100% of the Annual Survey Results on a Span by Span (Tower by Tower) basis that details areas surveyed by GPS verification, identifies whether issues were or were not found and formally requires the use of criteria to categorize all issues identified.
    ii. A-2: ComEd shall ensure the Contractor implements (through revision to contract if necessary or other means) the improvements to the process developed by ComEd in Corrective Action A-1.
    iii. A-3: ComEd shall develop and implement a review program to ensure Contractor Annual Survey results/deliverables are thorough and complete.

iv. B-1: ComEd shall incorporate into program documents the requirement for the Vegetation Contractor to submit a detailed electronic work plan to ComEd for scheduled maintenance activity for each line. This requirement shall include a submission and approval process for routine maintenance activity. ComEd Vegetation Management personnel will determine appropriate timing requirements and details of work plan to be included.

v. B-2: ComEd shall ensure the Contractor implements (through revision to contract if necessary or other means) the process developed by ComEd in Corrective Action B-1.

vi. C-1: ComEd shall develop a formal approach for thoroughly and electronically documenting 100% of the QA Survey results on a span by span (tower by tower) basis that details areas surveyed with GPS verification, whether issues were or were not found, process for follow-up of identified issues, and formally requires the use of criteria to categorize issues identified.

vii. C-2: ComEd shall ensure the Contractor implements (through revision to contract if necessary or other means), the process developed by ComEd in Corrective Action C-1.

Mitigation Plan Timeline and Milestones

D.2 Provide the date by which full implementation of the Mitigation Plan will be, or has been, completed with respect to the Alleged or Confirmed violations identified above. State whether the Mitigation Plan has been fully implemented, and/or whether the actions necessary to assure the entity has returned to full compliance have been completed.

ComEd has completed the immediate corrective actions as detailed in the Interim Mitigation Plan. ComEd expects to fully complete the new items added in this Amended Mitigation Plan by December 5, 2008.

D.3 Enter Key Milestone Activities (with due dates) that can be used to track and indicate progress towards timely and successful completion of this Mitigation Plan.

Key Milestone Activity	Proposed/Actual Completion Date* (shall not be more than 3 months apart)
Remove vegetation that posed a threat to reliability from line 2102 ROW.	July 16, 2008 (Complete)
Patrol entire line 2102 ROW to determine that there is no further vegetation that is in conflict with program requirements.	July 16, 2008 (Complete)
Perform ground patrol of the four remaining	July 20, 2008 (Complete)

lines from the 2007 Routine Maintenance ROW program to determine that there is no vegetation present that is in conflict with program requirements.	
Review all critical 345kV and all 765kV line rights-of-way (approximately 1,623 linear miles) for conditions related to vegetation encroachment on transmission rights-of-way.	August 7, 2008 (Complete)
Review remaining 345kV rights-of-way (approximately 844 linear miles) for conditions related to vegetation.	September 11, 2008 (Complete)
Perform formal investigation to identify causal factors, implement any other necessary immediate remediation, develop an initial and full formal mitigation plan and assign appropriate corrective actions.	September 15, 2008 (Complete)
Propose corrective actions to implement process enhancements in an Amended Mitigation Plan based on the results of ComEd's Root Cause Investigation.	September 30, 2008 (Complete)
A-1: ComEd shall develop a formal approach for thoroughly and electronically documenting 100% of the Annual Survey Results on a Span by Span (Tower by Tower) basis that details areas surveyed by GPS verification, identifies whether issues were or were not found and formally requires the use of criteria to categorize all issues identified.	October 31, 2008
B-1: ComEd shall incorporate into program documents the requirement for the Vegetation Contractor to submit a detailed electronic work plan to ComEd for scheduled maintenance activity for each line. This requirement shall include a submission and approval process for routine maintenance activity. ComEd Vegetation Management personnel will determine appropriate timing requirements and details of work plan to be included.	October 31, 2008
C-1: ComEd shall develop a formal approach for thoroughly and electronically documenting 100% of the QA Survey results on a span by span (tower by tower) basis that details areas surveyed with GPS verification, whether issues were or were not found, process for follow-up of	October 31, 2008

identified issues, and formally requires the use of criteria to categorize issues identified.	
A-2: ComEd shall ensure the Contractor implements (through revision to contract if necessary or other means) the improvements to the process developed by ComEd in Corrective Action A-1.	November 7, 2008
C-2: ComEd shall ensure the Contractor implements (through revision to contract if necessary or other means), the process developed by ComEd in Corrective Action C-1.	November 7, 2008
B-2: ComEd shall ensure the Contractor implements (through revision to contract if necessary or other means) the process developed by ComEd in Corrective Action B-1.	November 20, 2008
A-3: ComEd shall develop and implement a review program to ensure Contractor Annual Survey results/deliverables are thorough and complete.	December 5, 2008

(*) Note: Additional violations could be determined for not completing work associated with accepted milestones.

Section E: Interim and Future Reliability Risk

Abatement of Interim BPS Reliability Risk

E.1 While your organization is implementing this Mitigation Plan the reliability of the Bulk Power System (BPS) may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take to mitigate this increased risk to the reliability of the BPS. Additional detailed information may be provided as an attachment.

As mentioned above, ComEd has already completed a project to review all critical 345kV and all 765kV line rights-of-way (approximately 1623 linear miles) for conditions related to vegetation encroachment on transmission rights-of-way. The inspection, which began on 7/30/2008, was conducted by helicopter by ComEd and a vegetation aerial specialist. The aerial inspection objective was to identify any vegetation that did not appear to meet conservative clearance requirements as provided for purposes of this survey. A third-party contractor performed follow-up ground inspections and verified clearances at the identified locations using laser measurement instrumentation. Ground inspections began as soon as work packages were prepared. All identified work has been documented, prioritized and will be tracked (using ROWkeeper software) through completion by ComEd.

In order to ensure full system integrity, ComEd determined on August 15, 2008 to continue the aerial inspection project to include the remaining 345kV lines (approximately 844 linear miles). This second phase was completed on September 11, 2008.

See attached letter entitled 'ComEd's Immediate Actions to Mitigate Vegetation Management Issues following the July 2008 L2102 Automatic Operations' for a detailed summary of immediate actions taken by ComEd.

Prevention of Future BPS Reliability Risk

E.2 Describe how successful completion of this Mitigation Plan by your organization will prevent or minimize the probability that the reliability of the BPS incurs further risk of similar violations in the future. Additional detailed information may be provided as an attachment.

The mitigation actions outlined in the Interim Mitigation Plan detailed the immediate actions that ComEd has taken to assure no risks to the transmission facilities subject to FAC-003 currently exist. This Amended Mitigation plan,

which has been created pursuant to the completion of the internal investigation, thoroughly defines how all of the mitigation actions will prevent or minimize the probability of future risks to the reliability of the BPS.

RELIABILITY FIRST

Section F: Authorization

An authorized individual must sign and date this Mitigation Plan Submittal Form. By doing so, this individual, on behalf of your organization:

a) Submits this Mitigation Plan for acceptance by Reliability*First* and approval by NERC, and

b) If applicable, certifies that this Mitigation Plan was completed on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

c) Acknowledges:

1. I am Vice President, Transmission Operations & Planning for Commonwealth Edison.

2. I am qualified to sign this Mitigation Plan on behalf of Commonwealth Edison.

3. I have read and am familiar with the contents of this Mitigation Plan.

4. Commonwealth Edison agrees to comply with, this Mitigation Plan, including the timetable completion date, as accepted by Reliability*First* and approved by NERC.

Authorized Individual Signature Susan O. Ivey

Name (Print): Susan O. Ivey

Title: Vice President, Transmission Operations & Planning

Date: October 17, 2008

Section G: Regional Entity Contact

Please direct completed forms or any questions regarding completion of this form to the Reliability*First* Compliance e-mail address mitigationplan@rfirst.org. Please indicate the company name and reference the NERC Violation ID # (if known) in the subject line of the e-mail. Additionally, any Reliability*First* Compliance Staff member is available for questions regarding the use of this form. Please see the contact list posted on the Reliability*First* Compliance web page.

Attachment A – Compliance Notices & Mitigation Plan Requirements

I. Section 6.2 of the CMEP[1] sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Key implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self-Certification or Self Reporting submittals.

II. This submittal form must be used to provide a required Mitigation Plan for review and acceptance by Reliability*First* and approval by NERC.

III. This Mitigation Plan is submitted to Reliability*First* and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

IV. This Mitigation Plan Submittal Form may be used to address one or more related Alleged or Confirmed violations of one Reliability Standard. A separate

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[1] "*Compliance Monitoring and Enforcement Program" of the ReliabilityFirst Corporation*;" a copy of the current version approved by the Federal Energy Regulatory Commission is posted on the Reliability*First* website.

mitigation plan is required to address Alleged or Confirmed violations with respect to each additional Reliability Standard, as applicable.

V. If the Mitigation Plan is accepted by Reliability*First* and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission in accordance with applicable Commission rules, regulations and orders.

VI. Reliability*First* or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

VII. Remedial action directives also may be issued as necessary to ensure reliability of the BPS.

DOCUMENT CONTROL

Title: Mitigation Plan Submittal Form

Issue: Version 2.0

Date: 11 July 2008

Distribution: Public

Filename: ReliabilityFirst Mitigation Plan Submittal Form - Ver 2.DOC

Control: Reissue as complete document only

DOCUMENT APPROVAL

Prepared By	Approved By	Approval Signature	Date
Robert K. Wargo Senior Consultant Compliance	Raymond J. Palmieri Vice President and Director Compliance	Raymond J. Palmieri	1/2/08

DOCUMENT CHANGE/REVISION HISTORY

Version	Prepared By	Summary of Changes	Date
1.0	Robert K. Wargo	Original Issue – Replaces "Proposed Mitigation Plan" Form	1/2/08
2.0	Tony Purgar	Revised email address from compliance@rfirst.org to mitigationplan@rfirst.org	7/11/08

October 17, 2008

Raymond Palmieri
Vice President & Director - Compliance
Reliability*First* Corporation
320 Springside Drive, Suite 300
Akron, Ohio 44333

Robert Wargo
Manager of Compliance Enforcement
Reliability*First* Corporation
320 Springside Drive, Suite 300
Akron, Ohio 44333

Re. ComEd's Immediate Actions to Mitigate Vegetation Management Issues following the July 2008 L2102 Automatic Operations

Gentlemen:

This letter is being written in response to your request for a summary of the actions that ComEd took immediately following the July 6, 9, and 15, 2008 automatic open/automatic close (OA/RA) operations on 345kV L2102. ComEd fully understands the significance of and accepts the importance of having a comprehensive Transmission Vegetation Management Program in order to prevent violations of NERC Reliability Standard, FAC-003. Following the July 15, 2008 discovery of non-compliant vegetation in one span of L2102, ComEd took the following immediate actions to patrol, identify and mitigate vegetation management issues on all of its 765kV and 345kV Rights of Way (ROWs). **It is important to note that no additional issues were identified during the inspections that represented a violation of Clearance 2 in NERC Reliability Standard FAC-003 or posed a threat to reliability.**

1. On July 16, 2008, ComEd's contractor promptly removed the vegetation within the identified section of the 345kV line. Three of the trees were determined to be in violation of the Clearance 2 distance as defined in NERC Reliability Standard FAC-003. One tree was approximately 32' tall. As a conservative measure, the contractor crews proactively removed all vegetation (approximately 50-100 trees) from the span in question.

2. Also on July 16, 2008, ComEd immediately initiated a Root Cause Investigation (RCI) and began an investigation of the incident using its NERC Compliance Internal Investigation Procedure, which resulted in an initial determination that a self-report to RFC was required.[1] The RCI team was able to identify the root causes and causal factors, identify other necessary immediate remediation steps, develop an initial and full formal mitigation plan and assign appropriate corrective actions to assure necessary improvements are implemented to prevent any future compliance issues. The RCI was led by a member of Exelon's NERC Compliance Management Team at the direction of legal counsel and determined that process gaps and a lack of

[1] ComEd self –reported this incident to RFC on July 18, 2008.

sufficient rigor in the general oversight of ComEd's Transmission Vegetation Management Program were the root causes of the incident. Due to these gaps, performance issues on L2102 went undetected until the operating events in July 2008. This investigation was completed on September 15, 2008 and the team's report has been provided to RFC in the answers to RFC's Data Request on September 22, 2008. The report provides a thorough account of the investigation findings as well as a listing of programmatic corrective actions that are designed to ensure full and continuous compliance with FAC-003. The Root Cause Investigation Corrective Actions, as well as those actions designed to address Other Conditions Adverse to Quality (OCAQ) are listed in Attachment 1.

One of the OCAQs (H-1) directs ComEd's Transmission and Substations Transmission Overhead Group (T&S TOH) to develop formal procedures that clearly define the expectations, criteria and required documentation for patrols of a transmission line or transmission right-of-way after an automatic operation. While full formal implementation for this item is not due until December 19, 2008, ComEd's T&S TOH group has already communicated[2] immediate expectations regarding identification and communication of vegetation issues on ComEd ROWs to the ComEd and contractor field forces that patrol the transmission lines. Whenever a vegetation issue is identified, the T&S Engineering group will be responsible for notifying ComEd's Transmission Vegetation Management personnel. A sample report and photograph of a vine growing up a transmission tower on ComEd's 138kV L14405 appear in Attachment 2.

3. During the Root Cause Investigation, the team identified five 345kV lines that did not have completed "work packages" on file for the 2007 vegetation maintenance program (L2101, L2102, L8001, L10805 and L10806). From July 16-20, 2008, ComEd's contractor completed a ground inspection and survey of these five lines. The purpose of this inspection was to identify and mitigate any potential vegetation issues that may have been missed during ComEd's 2007 Transmission Vegetation Management maintenance cycle. No NERC Reliability Standard FAC-003 Clearance 2 issues or threats to reliability were identified during these triage inspections. The detailed deficiency and closure forms appear in Attachment 3. Note that due to the urgent and focused nature of these inspections, handwritten notes were utilized. The majority of identified issues (29 out of 32) from these triage inspections were completed by August 2, 2008. The two outstanding issues on L2101, access refusals, were addressed on September 12, 2008 while the one verification of clearance on L10805 was resolved on October 9, 2008.

4. In order to ensure that there were no additional locations on ComEd's 765kV and 345kV ROWs[3] where vegetation was non-compliant or posed a threat to reliability, ComEd initiated an aerial inspection project on July 30, 2008. The first phase was to review all critical 345kV and all 765kV line rights-of-way (approximately 1623 linear miles) for conditions related to vegetation encroachment on transmission rights-of-way. For this purpose, 345kV lines were defined as critical if they were (a) a source of nuclear off-site power supply, (b) a tie line to a neighboring transmission system,

[2] ComEd had a face-to-face meeting with its aerial inspection contractor on July 28, 2008.
[3] ComEd does not have any transmission facilities between 200kV and 345kV.

or (c) lines that historically have resulted in post-contingency loading issues following their outage. The second phase of the project included the remaining 345kV lines (approximately 844 linear miles). The first phase of the inspection project ran from July 30, 2008 – August 7, 2008 while the second phase ran from August 15, 2008 – September 11, 2008.

Both phases of the inspection project were conducted by helicopter by ComEd and an independent vegetation aerial specialist. All spans of the 765kV and 345kV transmission systems were inspected. Any locations that appeared to violate the criteria as defined for this project were "tagged" via GPS, entered into ComEd's Transmission Vegetation Management software and referred for ground inspections. A third-party contractor performed follow-up ground inspections and verified clearances using laser measurement instrumentation. In light of the circumstances leading to the initiation of this aerial inspection, and in an effort to assure the most conservative approach, the criteria developed for identification of issues under this assessment was stricter than that normally used under ComEd's Transmission Vegetation Management Program. As locations were surveyed from the ground, ComEd's third-party contractor assessed and assigned a category as follows:

	345kV Clearance	765kV Clearance
"Fix-It-Now" or FIN	<20' Under or <25' Side	<30' Under or <35' Side
Category 1[4]	20-30' Under or 30-35' Side	30-40' Under or 35-40' Side
No Work Needed	>30' Under or >35' Side	>40' Under and >45' Side

The results of the aerial inspection project for the five lines listed above are as follows. Note that these issues were not identified during the initial "triage" ground inspections because the criteria used for the aerial inspection project was more stringent. Additionally, Attachment 4 contains the deficiency identification and closure forms for the five lines listed below. As mentioned above, all spans of the lines were inspected.

Line	FIN Issues Found	Category 1 Issues Found	No Work Needed Issues Found	FIN / Cat 1 Issues Mitigated By Date	QA Inspection Completed
L2101	0	3	1	09/18/2008	09/25/2008
L2102	0	1	2	08/27/2008	09/07/2008
L8001	0	0	0	N/A	N/A
L10805	0	2	2	10/09/2008	10/14/2008
L10806	0	0	0	NA	N/A

[4] The Category 1 designation used for the aerial survey does not correspond to Clearance 1 in NERC Reliability Standard FAC-003. Additionally, Category 1 in the aerial survey does not correspond to or trigger the same follow-up actions as Category 1 in ComEd's Transmission Vegetation Management Program.

The complete results of the aerial inspection project for all of the ComEd 765kV and 345kV lines, categorized by the last year of ROW maintenance, are given in the following table. Note that a five-year maintenance cycle is used in the ComEd Transmission Vegetation Management Plan. Therefore, those ROWs last maintained in 2003 are due for maintenance in 2008. The 2008 maintenance cycle began in July 2008 and is scheduled to be completed by December 31, 2008.

LAST MAINTENANCE YEAR	FIX-IT-NOW	CATEGORY 1	TOTAL
2003	20	51	71
2004	13	29	42
2005	12	17	29
2006	16	27	43
2007	12	27	39

Due to the stringent standards that were used for the aerial inspection, ComEd identified a total of 73 Fix-It-Now and 151 Category 1 vegetation issues. **However, it is important to repeat that none of these issues represented a violation of Clearance 2 in NERC Reliability Standard FAC-003 or posed a threat to reliability.**

All identified work from the aerial inspection project has been documented, prioritized and is being tracked to completion using ComEd's Transmission Vegetation Management software. Attachment 5 shows the current status of all issues that were identified and are being tracked in ComEd's Transmission Vegetation Management software as of October 10, 2008. As of October 10, 2008, all of the identified work at the 73 Fix-It-Now locations has been completed. Work has also been completed at 94 of the 151 Category 1 locations with the balance scheduled for completion by November 8, 2008.

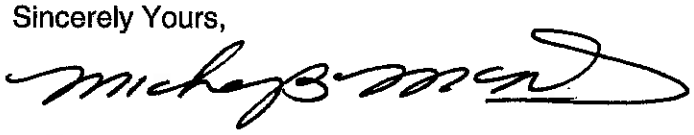
All locations that were identified as Fix-It-Now and subsequently mitigated received follow-up ground inspections from ComEd's QA contractor. ComEd's QA contractor also randomly surveyed locations that were identified as Category 1 or No Work Required in order to verify the categorization. Once the Category 1 locations are fully addressed, these locations will receive full QA inspections as well. To date, the QA inspections have not identified any additional issues and in many locations, the QA inspectors noted clearances in excess of those required by ComEd's Transmission Vegetation Management Program.

While the 138kV system was not the focus of the aerial inspection project, approximately 25% of the ComEd 138kV overhead system is located in the same ROWs as 345kV lines. To the extent that 138kV lines are in the same ROW, any issues that were identified were also documented, prioritized and scheduled for mitigation. Ten locations on the 138kV system were identified and have been scheduled for mitigation. Detailed descriptions of the issues appear in the tabular summary of the aerial inspection results as of October 10, 2008 as shown in Attachment 5.

5. Finally, ComEd provided a comprehensive response to RFC's data request inquiry on September 22, 2008 and provided supplemental documentation on October 3, 2008. ComEd gave detailed responses to 45 questions (including subparts) and supplied 23 attachments. For your convenience, a listing of the attachments that were included in ComEd's September 22, 2008 and October 3, 2008 submissions is provided in Attachment 6 to this letter. On October 7, 2008, three members of ComEd's Vegetation Management Staff, including the interim Director and two members of Exelon's Transmission Strategy and Compliance staff, including the Director met with RFC Compliance Staff representatives. The objective of this meeting was to go over in detail the immediate steps taken by ComEd in response to the July 2008 L2102 operating incidents as well as answer additional questions regarding the information provided in ComEd's September 22, 2008 and October 3, 2008 submittals. At the October 7, 2008 meeting, the RFC Compliance staff representatives asked that ComEd compile a summary of the immediate actions that were taken in order to assure reliability and compliance to NERC Reliability Standard FAC-003. This letter is being provided as ComEd's response to that request.

Following these immediate mitigation efforts, I hereby attest and affirm that the ComEd 765kV and 345kV ROWs are free from vegetation that would violate either ComEd's Transmission Vegetation Management Program Requirements or the Requirements in NERC Reliability Standard FAC-003.

Sincerely Yours,



Michael B. McMahan
ComEd Vice President, Engineering and Project Management

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Attachment d

ComEd's Certification of Completion of the Mitigation Plan, dated January 6, 2009

Susan O. Ivey
Vice President
Transmission Operations & Planning

Exelon Corporation
2301 Market Street, S8-2
Philadelphia, PA 19101-8699
Phone: 215-841-4706
Fax: 215-841-5945
Email: susan.ivey@exeloncorp.com

January 6, 2009

Mr. Robert K. Wargo
Manager of Compliance Enforcement
ReliabilityFirst Corporation
320 Springside Drive, Suite 300
Akron, Ohio 44333
Bob.wargo@rfirst.org

NERC Registry ID Number: NCR00729

Re: NERC Violation ID Number RFC20080071 – Status of Corrective Actions

Dear Mr. Wargo,

This letter is intended to provide you with an update of the status of corrective actions associated with ComEd's self reported tree contact event. Listed below you will find a listing of corrective actions and completion dates for all corrective actions that were scheduled for completion prior to year end 2008.

Number	Corrective Action	Completion Date
A-1	ComEd shall develop a formal approach for thoroughly and electronically documenting 100% of the annual survey results on a span by span (tower by tower) basis that details areas surveyed with GPS verification, identifies whether issues were or were not found and formally requires the use of criteria to categorize (1,2,or 3) all issues identified.	10/31/2008
A-2	ComEd shall ensure the contractor implements (through revision to contract if necessary or other means) the improvements to the process developed by ComEd in Corrective Action-A-1.	11/7/2008
A-3	ComEd shall develop and implement a review program to ensure contractor Annual Survey results/deliverables are thorough and complete.	12/5/2008
B-1	ComEd shall incorporate into program documents the requirement for the vegetation contractor to submit a detailed electronic work plan to ComEd for scheduled maintenance activity for each line. This requirement shall include a submission and approval process for routine maintenance activity. ComEd Vegetation Management personnel will determine appropriate timing requirements and details of work plan to be included.	10/31/2008
B-2	ComEd shall ensure the contractor implements (through revision to contract if necessary or other means) the process developed by ComEd in Corrective Action-B-1.	11/5/2008

Number	Corrective Action	Completion Date
C-1	ComEd shall develop a formal approach for thoroughly and electronically documenting 100% of the QA survey results on a span by span (tower by tower) basis that details areas surveyed with GPS verification, whether issues were or were not found, process for follow-up of identified issues, and formally requires the use of criteria to categorize (1,2, or 3) issues identified.	10/31/2008
C-2	ComEd shall ensure the contractor implements (through revision to contract if necessary or other means), the process developed by ComEd in Corrective Action-C-1.	11/5/2008

Please feel free to contact John Blazekovich if you have any questions.

Regards,

Susan O. Ivey

cc: Jennifer Sterling
Ken Bowman
Charles Sheppard
John Blazekovich
Shari Gribbin

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Attachment e

RFC's Verification of Completion of the Mitigation Plan, dated February 27, 2009

February 27, 2009

Summary and Review of Evidence of Mitigation Plan Completion

NERC Violation ID #:	**RFC200800071**
NERC Plan ID:	**MIT-08-001081**
Registered Entity;	**Commonwealth Edison Company**
NERC Registry ID:	**NCR0729**
Standard:	**FAC-003-1**
Requirement:	**R2**
Status:	**Compliant**

Review Process:

Commonwealth Edison Company (ComEd) certified [in its letter of January 6, 2009] that the Mitigation Plan for FAC-003-1, Requirement R2 has been completed. Reliability*First* requested and received evidence of completion for actions taken by ComEd as specified in the Mitigation Plan. Reliability*First* performed a review to verify that all actions specified in the Mitigation Plan were successfully completed.

FAC-003-1, Requirement 2, states:

> **R2:** *The Transmission Owner shall create and implement an annual plan for vegetation management work to ensure the reliability of the system. The plan shall describe the methods used, such as manual clearing, mechanical clearing, herbicide treatment, or other actions. The plan should be flexible enough to adjust to changing conditions, taking into consideration anticipated growth of vegetation and all other environmental factors that may have an impact on the reliability of the transmission systems. Adjustments to the plan shall be documented as they occur. The plan should take into consideration the time required to obtain permissions or permits from landowners or regulatory authorities. Each Transmission Owner shall have systems and procedures for documenting and tracking the planned vegetation management work and ensuring that the vegetation management work was completed according to work specifications.*

On July 15, 2008 during an inspection relating to a momentary line operation, ComEd discovered that clearance to the 345 kV line 2102 (Kincaid-Latham-Blue Mound) was not properly maintained in accordance with the ComEd vegetation management program. Three trees were found to be in violation of the Clearance 2 distance as identified in the standard. One of the trees was approximately 32 feet tall.

Evidence Submitted:

Attachment RFC-1-5c-2102 2008 Photographs – Submitted in Response to Reliability*First* Data Request

Additional Photos Submitted to Reliability*First* on February 12, 2009 as an Addendum Earlier Submission

Attachment 1 – Crew Timesheets

Attachment 1 – Invoice Data for Work Associated With 2102

Attachment RFC-1-5c-2102 Walkdown Notes

Root Cause Investigation (RCI) Report On Tree Contact on 345 kV Line 2102 (Kincaid-Latham-Blue Mound): Report by John Blazekovich, Lead Investigator; Approved by Susan O Ivey, Vice President. – September 22, 2008

Letter from Michael B. McMahan, ComEd Vice President, Engineering and Project Management to Raymond Palmieri, Reliability*First* Vice President and Director-Compliance and Robert Wargo, Reliability*First* Manager of Compliance Enforcement – October 17, 2008

Letter from Susan O. Ivey, ComEd Vice President Transmission Operations & Planning to Robert K. Wargo, Reliability*First* Manager of Compliance Enforcement – January 6, 2009

ComEd Completed Work Packages (Vegetation Management Deficiency Form) from Walk-Down

Attachment RFC-1-11b-2102 Work Plan Completion Report (VM Transmission QA Summary Form 26394) – Submitted in Response to Reliability*First* Data Request

Attachment 4 to Michel McMahan letter of October 17: Deficiency Identification and Closure Forms for Five Lines with Incomplete Work Packages (Results from Aerial Survey)

Attachment RFC-1-8d – General Inspection Report – Submitted in Response to Reliability*First* Data Request

Attachment 3 – Air Update 2-04-2009

Letter from Susan O. Ivey, ComEd Vice President Transmission Operations & Planning to Megan Mahany, Reliability*First* Compliance Enforcement Specialist – February 12, 2009

Attachment 4-A (to Susan O. Ivey's letter of February 12, 2009) – VM-ED-PO41 Transmission Maintenance Work Plans, Rev 1a, 12/19/2008

Attachment 4-B (to Susan O. Ivey's letter of February 12, 2009) – VM-ED-PO40 Transmission Work Scope Validation/Verification, Rev 01a, 12/18/2008

Attachment 4-C (to Susan O. Ivey's letter of February 12, 2009) – VM-ED-1001 Transmission Inspection Procedure, Rev 1a, 12/19/2008

On July 16, 2007, following the discovery of non-compliant vegetation in one span of L2102, ComEd's contractor removed the vegetation within the identified section of the 345 kV line. As a proactive move, the contractor removed all vegetation (approximately 50-100 trees) from the span in question. The photographs submitted in Attachment RFC-1-5c-2102 2008 show the vegetation in the span in question. The pictures were taken before and during the removal of the trees on July 16, 2008.

Attachment 1-Crew Timesheets are a record of the workers and equipment utilized in the removal of the trees on July 16, 2008 show the work that was performed on L2102. The timesheets indicate the equipment utilized, the hours worked, the location and the work performed. Attachment 1-Invoice Data is a spreadsheet summary of the contractor invoice for the work performed on L2102 on July 16, 2008. At the request of Reliability*First*, ComEd submitted photographs of the span taken on August 23, 2008 after it was cleared of vegetation. The photographs indicate that all vegetation was removed from the span.

The walk-down submitted in Attachment RFC-1-5c-2102 are notes by the inspectors who performed the ground inspection of the entire L2102 ROW immediately after the event of July 15, 2008. The notes and corresponding maps show the areas patrolled by each inspector. The notes are a record of their observations and the needed corrective actions.

On July 16, 2008 ComEd initiated a Root Cause Investigation (RCI). The RCI Root Cause Investigation (RCI) Report On Tree Contact on 345 kV Line 2102 dated September 22, 2008 identified causal factors and other immediate remediation steps. The RCI determined that process gaps and a lack of sufficient Rigor in the general oversight of ComEd's Transmission Vegetation Management Program (TVMP) were the root causes of the incident. As a result of these gaps, performance issues on L2102 went undetected. The three (3) root causes identified are listed below.

Root Cause A: The current Survey Program requires improved oversight, rigor and documentation to ensure surveys are completed in accordance with ComEd program requirements.

Root Cause B: The current Work Plan program requires more rigorous oversight and documentation to ensure maintenance activities are completed in accordance with ComEd program requirements.

Root Cause C: The Quality Assurance program requires more rigorous oversight and documentation to ensure that maintenance activities are completed in accordance with the ComEd program requirements.

In addition to the three (3) root causes, ComEd also identified five (5) "Other Conditions Adverse to Quality" (OCAQ) as follows. The QCAQ's have the same characteristics as Causal Factors except these conditions did not cause this event, but could cause or exacerbate other events.

OCAQ D: Data management tool (ROW Keeper) is not fully utilized or utilized at varying degrees by field personnel, which degrades ComEd's ability to track issues and plan work.

OCAQ E: There is no formal ComEd procedure for the tracking and reporting of issues associated with open REP items, QA findings, refusals or other open items that require follow up and tracking to completion.

OCAQ F: All methods of survey currently utilized at ComEd rely solely on human visual observation to identify vegetation issues.

OCAQ G: The ComEd vegetation management program documents do not clearly and directly convey the alignment of the program with the vegetation management activities.

OCAQ H: The ComEd transmission overhead patrol program requires more rigorous oversight and documentation to assure results (Line, structure and ROW) of a patrol are documented following an automatic operation of a transmission line.

Causal factors have been identified for each Root Cause and OCAQ. In addition, corrective actions, closure criteria and due dates have been established for all Root Causes and OCAQ's.

All corrective actions related to the Root Causes have implementation due dates prior to the close of 2008. In ComEd's letter of January 6, 2009 to Robert Wargo, Reliability*First* Manager of Compliance Enforcement, Susan O. Ivey, ComEd Vice President Transmission Operations & Planning has attested that the all corrective actions related to the Root Causes have been completed.

All corrective actions related to the OCAQ's have implementation due dates in the first quarter of 2009 with the exception of corrective action H-1 (OCAQ H) which had a due date of December 19, 2009. OCAQ H-1 was completed on schedule in December and the remaining OCAQ corrective actions are proceeding on schedule.

The RCI team leader will perform a Corrective Action Effectiveness Review (CAER) of selected corrective actions per the RCI. The due date for this review is September 25, 2009.

The RCI team identified five 345 kV lines that did not have completed "work packages" on file for the 2007 maintenance program. From July 16-20, 2008 the ComEd contractor completed a ground inspection and survey of these five lines to identify and mitigate any potential vegetation issues that may have been missed during the 2007 Vegetation Management Cycle. No FAC-003 Clearance 2 issues or threats were identified. The ComEd Completed Work Packages (Vegetation Management Deficiency Form) from Walk-Down that ComEd submitted are the are the work sheets from ComEd's contractor for the five (5) lines. The five lines in question are:

- 345 kV line 2101 – Kincaid Station to Lanesville Sub (Ameren)
- 345 kV line – Kincaid Station – (tap to Latham [Ameren]) to TSS 178 Blue Mound
- The line was originally Kincaid to Pontiac but was split with the installation of the TSS 178 Blue Mound (February 2007)
- 345 kV line 8001 – Lanesville (Ameren) to Pontiac
- 345 kV line 10805 and 10806 – TSS 108 Lockport to TSS 935 Kendall Energy – These lines are located on the same ROW.

The completed forms show the locations (map) inspected and include a Vegetation Management Deficiency Form which lists the line, the region and the specific location of any observed concerns. Due to the urgent nature of these inspections, hand written notes were utilized. The majority of the issues identified by these inspections were completed by August 2, 2008. The two outstanding issues related to access refusals were addressed on September 12, 2008 while the one verification of clearance on L10805 was resolved on October 9, 2008. There were locations listed that required more follow-up such as the application of herbicide, but there were no items that required immediate attention.

Attachment RFC-1-11b-2102_Work Plan Completion Report (VM Transmission QA Summary Form 26394) lists the results of the follow-up Quality Assurance survey of the contractor work. The QA team, an independent contractor, other than the contractor that performed the initial inspection, conducted an inspection of the ROWs and reported its findings. The results of the QA team inspection confirmed the findings of the initial walk-down.

Attachment 4 - Michel McMahan letter of October 17: Deficiency Identification and Closure Forms for Five Lines with Incomplete Work Packages (Results from Aerial Survey) gives the details of the disposition of the findings of the contractor and QA team inspections. Included on the forms is a description of the action taken and the completion date.

ComEd initiated an aerial inspection project on July 30, 2008 in order to ensure there were no additional locations on the ComEd 765 kV and 345 kV ROWs where vegetation was non-compliant or posed a threat to reliability. The first phase was to review all critical 345 kV and all 765 kV line ROWs for conditions related to vegetation encroachment. The second phase of the project included the remaining 345 kV lines. The first phase was completed on August 7, 2008 and the second phase on September 11, 2008.

Both phases were conducted by helicopter. All spans of the 765 kV and 345 kV transmission systems were inspected. Any locations that appeared to violate the criteria as defined for this project were tagged via GPS and referred for ground inspections. Follow-up ground inspections were conducted and clearances were verified using laser instrumentation. The criteria developed for this assessment was stricter than normal. The results of this aerial inspection project for the five (5) lines resulted in 6 category 1 issues as defined for this project. Attachment 4 contains the deficiency identification and closure forms for the five (5) lines. It is important to note that category 1 as defined for the project does not correspond to Clearance 1 in the standard. These issues were not identified during the initial ground inspections because the criteria used for the aerial inspection project was more stringent.

The complete results of the aerial inspection Project for the ComEd 765 kV and 345 kV lines, categorized by the last year of ROW maintenance, are given in the following table. Note that a five-year maintenance cycle is used in the ComEd TVMP. Therefore, those ROWs last maintained in 2003 are due for maintenance in 2008. The 2008 maintenance cycle began in July 2008 and was scheduled to be completed by December 31, 2008.

Last Maintenance Year	Fix-It-Now	Category 1	Total
2003	20	51	71
2004	13	29	42
2005	12	17	29
2006	16	27	43
2007	12	27	39

Due to the stringent standards that were used for the aerial inspections, ComEd identified a total of 73 Fix-It-Now and 151 Category 1 vegetation issues. It should be noted that none of these issues represented a violation of Clearance 2 distances as defined in the standard. Attachment RFC-1-8d-General Inspection Report is a tabular account of the findings from the complete inspection. The spreadsheet includes such details as, ROW, year of last vegetation trim, date of aerial and subsequent ground inspection, description of finding and a unique ID which corresponds to the GPS coordinate.

All work identified from the aerial inspection project has been documented prioritized and is being tracked to completion using ComEd's Transmission Vegetation Tracking Software. All of the identified work at the 73 Fix-It-Now locations has been completed. Work also has completed at all category 1 locations. All locations identified as Fix-It-Now and subsequently mitigated received follow up ground inspections from ComEd's QA contractor.

Attachment 3 – Air Update 2-04-2009 shows the status of all issues that were identified and are being tracked in ComEd's Transmission Vegetation Management software as of February 4, 2008. To the extent that 138 kV lines are in the same ROW as the 345 kV lines, any issues that were identified were also documented, prioritized and scheduled for mitigation. Ten such locations were identified. Detailed descriptions of the issues appearing the tabular summary of the aerial inspection results as of February 4, 2009 and will be addressed in the Spring of 2009.

The letter from ComEd Vice President Susan O. Ivey dated January 6, 2009 gives the status of corrective actions associated with the identified Root Causes that were scheduled for completion by the end of 2008. All corrective actions associated with the identified Root Causes were completed on schedule as shown in the RCI and the mitigation plan. Susan O. Ivey's letter of February 12, 2009 reaffirms that all corrective actions associated with the identified Root have been completed on schedule and transmits the revised procedures that address the corrective actions.

Attachment 4A (to Susan O. Ivey's letter of February 12, 2009) – VM-ED-PO41 Transmission Maintenance Work Plans, Rev 1a, 12/19/2008 contains revisions that address Corrective Action B-1 of the RCI. Footnotes within the document as well as the notes in the revision history provide a brief description of why the procedure was revised.

Attachment 4-B (to Susan O. Ivey's letter of February 12, 2009) – VM-ED-PO40 Transmission Work Scope Validation/Verification, Rev 01a, 12/18/2008 contains revisions that address Corrective Actions A-1 and C-1of the RCI. The notes in the revision history provide a brief description of why the procedure was revised.

Attachment 4-C (to Susan O. Ivey's letter of February 12, 2009) – VM-ED-1001 Transmission Inspection Procedure, Rev 1a, 12/19/2008 contains revisions that address Corrective Actions A-1 and C-1of the RCI. Footnotes within the document as well as the notes in the revision history provide a brief description of why the procedure was revised.

ComEd provided redacted copies of the amendments to the contracts that ComEd has with the Annual Survey Contractor as well as the QA Contractor to demonstrate that it has implemented the contract revisions required by Corrective Actions A-2, B-2, and C-2.

In addition to procedural updates to VM-ED-P040 and VM-ED-1001, the following actions have been taken by ComEd to complete Corrective Action A-3:

- ComEd's Vegetation Management software has been updated to include the ability to enter verified span-by-span data points for all spans.
- The base map in ComEd's Vegetation Management, has been updated to include up-to-date transmission line and tower information.
- The updates to ComEd's Vegetation Management software have been field tested
- Inspectors have been trained and tested on the new process on the utilization of the up-dated Vegetation Management software.
- The ComEd Vegetation Management contractors have added new equipment to complete the work planning with GPS verification devices.

Status: **Compliant**

Review Results:

Reliability*First* Corporation reviewed the evidence the Commonwealth Edison Company submitted in support of its Certification of Completion. On February 27, 2009 Reliability*First* Corporation verified that the Mitigation Plan was completed in accordance with its terms and therefore deemed compliant to the aforementioned NERC Reliability Standard.

Respectfully Submitted,

Robert K. Wargo
Manager of Compliance Enforcement
Reliability*First* Corporation

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Attachment f

Notice of Filing

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Commonwealth Edison Company Docket No. NP10-___-000

NOTICE OF FILING
October 2, 2009

Take notice that on October 2, 2009 , the North American Electric Reliability Corporation (NERC) filed a Notice of Penalty regarding Commonwealth Edison Company in the Reliability*First* Corporation region.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211, 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. Such notices, motions, or protests must be filed on or before the comment date. On or before the comment date, it is not necessary to serve motions to intervene or protests on persons other than the Applicant.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the "eFiling" link at http://www.ferc.gov. Persons unable to file electronically should submit an original and 14 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426.

This filing is accessible on-line at http://www.ferc.gov, using the "eLibrary" link and is available for review in the Commission's Public Reference Room in Washington, D.C. There is an "eSubscription" link on the web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email FERCOnlineSupport@ferc.gov, or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Comment Date: [BLANK]

Kimberly D. Bose,
Secretary