

September 30, 2011

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

**Re: NERC Full Notice of Penalty regarding Metropolitan Edison Company,  
FERC Docket No. NP11-\_-000**

Dear Ms. Bose,

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty<sup>1</sup> regarding Metropolitan Edison Company (MetEd), NERC Registry ID# NCR00821,<sup>2</sup> 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 (NERC Compliance Monitoring and Enforcement Program (CMEP)).<sup>3</sup>

On August 23, 2010 MetEd self-reported a violation<sup>4</sup> of FAC-003-1 Requirement (R) 2 to ReliabilityFirst Corporation (ReliabilityFirst) for MetEd's failure to implement its Transmission Vegetation Management Program (TVMP) in compliance with the Standard.

This Notice of Penalty is being filed with the Commission because ReliabilityFirst and MetEd have entered into a Settlement Agreement to resolve all outstanding issues arising from ReliabilityFirst's determination and findings of the violation of FAC-003-1 R2. According to the Settlement Agreement,

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<sup>1</sup> *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 (2011). *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). See 18 C.F.R. § 39.7(c)(2).

<sup>2</sup> ReliabilityFirst confirmed that MetEd was included on the NERC Compliance Registry as a Distribution Provider, Load Serving Entity, and Transmission Owner as of May 30, 2007; and as a Purchasing-Selling Entity as of November 26, 2007. MetEd as a Transmission Owner is subject to the requirements of NERC Reliability Standards FAC-003-1.

<sup>3</sup> See 18 C.F.R. § 39.7(c)(2).

<sup>4</sup> For purposes of this document, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible, alleged or confirmed violation.

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MetEd neither admits nor denies the facts of the violation and has agreed to the assessed penalty of six hundred and fifty thousand dollars (\$650,000), in addition to other remedies and actions to mitigate the instant violation and facilitate future compliance under the terms and conditions of the Settlement Agreement. Accordingly, the violation identified as NERC Violation Tracking Identification Number RFC201000455 is being filed in accordance with the NERC Rules of Procedure and the CMEP.

**Statement of Findings Underlying the Violation**

This Notice of Penalty incorporates the findings and justifications set forth in the Settlement Agreement executed on July 9, 2011, by and between ReliabilityFirst and MetEd, which is included as Attachment a. 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 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 Std.	Req. (R)	VRF	Total Penalty (\$)
RFC	Metropolitan Edison Company	926	RFC201000455	FAC-003-1	2	High	650,000

FAC-003-1 R2

The purpose of FAC-003-1 provides:

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 transmission ROW, and reporting vegetation related outages of the transmission systems to the respective Regional Reliability Organizations (RRO)<sup>5</sup> and the North American Electric Reliability Council (NERC).

<sup>5</sup> Consistent with applicable FERC precedent, the term ‘Regional Reliability Organization’ in this context refers to ReliabilityFirst.

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FAC-003-1 R2 provides:

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.

FAC-003-1 R2 has a “High” Violation Risk Factor (VRF), and the Violation Severity Level (VSL) applied in this case is “Severe.” The subject violation applies to MetEd’s Transmission Owner (TO) function.

On June 15, 2010, the owner of a residential property called a non-FirstEnergy Corp. (FirstEnergy)<sup>6</sup> utility’s customer service center to report observing a “flash or ball of fire” and a crackling sound (flashover event) near power lines later determined to be MetEd’s 230 kV Transmission Line Number 1074 (Line 1074). The utility that took the call determined that MetEd owned the line and contacted MetEd to report the issue. This violation was a result of the following issues: (1) MetEd hired an independent contractor who performed the required vegetation management inconsistently with MetEd’s TVMP; (2) MetEd’s employee, a Forestry Specialist, failed to perform as required by the TVMP;<sup>7</sup> (3) prior to the flashover event, MetEd had knowledge of the contractor’s failure to perform

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<sup>6</sup> MetEd is a subsidiary of FirstEnergy. MetEd shares certain transmission vegetation management services and associated employees with other transmission owner affiliates of FirstEnergy. MetEd serves approximately 546,000 customers in southern and southeastern Pennsylvania, and operates approximately 1,405 miles of transmission lines at varying voltage levels.

<sup>7</sup> MetEd’s TVMP calls for a Forestry Specialist to inspect all work by vegetation management contractors, which includes a field verification of all work performed by contractors and a review of the documentation that the contractors complete as they perform the work. In addition, the TVMP requires a Forestry Specialist to conduct annual inspections through aerial patrols and other on-site review of transmission corridors. The Forestry Specialist assigned to Line 1074 performed aerial patrols of Line 1074 in 2008, 2009 and 2010 and a foot patrol of Line 1074 in 2008. During the 2010 inspection and other previous inspections, the Forestry Specialist did not identify vegetation conditions under the Spans. On March 30, 2010, the contractor determined that vegetation control was needed under the Spans of Line 1074; however, the landowner associated with the Spans did not authorize application of herbicides and the contractor notified MetEd of the circumstances but failed to provide detailed information about the landowner’s refusal as required by the TVMP. The TVMP required the Forestry

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the maintenance work in compliance with the TVMP and did not take sufficient corrective action to adequately inspect vegetation along Line 1074;<sup>8</sup> and (4) the training program for vegetation management did not include a formal and documented training procedure to demonstrate and evaluate the proficiency of Forestry Specialists and certain designated contract personnel. After the June 15, 2010 event, MetEd performed foot patrols and other inspections of Line 1074, including at least aerial inspections of its entire transmission system, as well as that of other FirstEnergy affiliates, and found that the conditions giving rise to the flashover event were isolated to the area of the Spans of Line 1074.

ReliabilityFirst determined that MetEd had a violation of FAC-003-1 R2 because MetEd failed to implement its TVMP in a manner that would maintain the Clearance 2 radial clearance zone along the spans between and below tower numbers 126, 127 and 128 (collectively, the “Spans”) on Line 1074.

ReliabilityFirst took into account that MetEd was aware of the issues on June 3, 2010 and deemed the duration of the violation to be from June 15, 2010, the date of the flashover event, through June 16, 2010, when MetEd completed clearing vegetation growth below the Spans of Line 1074.

ReliabilityFirst determined that this violation posed a serious risk to the bulk power system (BPS), as inadequate vegetation management presents a serious risk of sustained transmission outages and could directly cause or contribute to BPS instability, separation, or a cascading sequence of failures. ReliabilityFirst noted that due to performance issues on the part of the Forestry Specialist and contractor staff, the vegetation conditions under the Spans of Line 1074 failed to meet the requirements of MetEd’s TVMP. MetEd was aware of these performance issues no later than June 3, 2010, but did not take sufficient corrective action to adequately inspect vegetation along Line 1074 prior to the flashover event. ReliabilityFirst also noted that despite the serious risk posed by this violation, there was no outage of bulk electric system facilities and no loss of customer load. In

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Specialist to perform a physical inspection of the affected spans after receiving the contractor staff’s Forestry Work Refusal Form reporting the property owner’s herbicide application refusal under the spans. The Forestry Specialist did not perform this inspection. The performance issues on the part of the contractor and the Forestry Specialist permitted vegetation to grow under the Spans of Line 1074 in a manner outside the requirements of the TVMP.

<sup>8</sup> Prior to this flashover event, MetEd had observed several issues with the contractor’s implementation of the TVMP. On June 3, 2010, MetEd observed vegetation removal techniques by the contractor on Line 1074 that were inconsistent with provisions of MetEd’s TVMP. These techniques included cutting vegetation using unsuitable roping techniques and the unsuitable use of mechanical equipment to pull the trees over. In addition, during the same second quarter of 2010, MetEd observed the contractor’s insufficient progress of the 2010 work plan. Due to this insufficient progress in completing the 2010 work plan as well as work practices that were inconsistent with MetEd’s TVMP, on June 13, 2010, Met Ed ordered the contractor to cease work on Line 1074.

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addition, the transmission system conditions at the time indicated that, even if there had been an outage on Line 1074, affected customer loads would have been served by other transmission facilities.

#### Regional Entity's Basis for Penalty

According to the Settlement Agreement, ReliabilityFirst has assessed a penalty of six hundred and fifty thousand dollars (\$650,000) for the referenced violation. In reaching this determination, ReliabilityFirst considered the following factors: (1) two-month period that elapsed between the event (June 15, 2010) and MetEd's self report (August 23, 2010); and (2) MetEd's knowledge of the TVMP implementation failure prior to the event on Line 1074 and MetEd's failure to adequately address this issue. ReliabilityFirst also considered the following mitigating factors: (1) certain aspects of MetEd's internal compliance program, such as compliance with FirstEnergy's FERC Reliability and Compliance Policy, which addresses all Reliability Standards, as well as the fact that the compliance program includes engagement and support of senior management; however, the mitigating consideration usually given to the internal compliance program was reduced due to the two-month delay in alerting ReliabilityFirst of the event; and MetEd's knowledge of the TVMP implementation failure; (2) MetEd's efforts to perform an investigation and analysis of the event, as well as MetEd's implementation, through FirstEnergy, of recommended actions resulting from this analysis, such as an analysis of the vegetation conditions on the transmission systems of MetEd and other transmission owning FirstEnergy affiliates; (3) FirstEnergy's restructuring of its vegetation management department to add more supervisory positions which should allow for more oversight of the individuals performing vegetation management work; and (4) MetEd received mitigation credit for its self report; however, the mitigating consideration usually given for self-reporting was reduced due to the two-month delay in alerting ReliabilityFirst of the event.

In assessing the penalty, ReliabilityFirst also took into consideration FirstEnergy's, on behalf of MetEd and other FirstEnergy affiliated companies, commitment to the following activities that enhance reliability above and beyond those activities necessary to mitigate the violation:

- 1) MetEd and the other FirstEnergy affiliated companies listed on the NERC Compliance Registry commit to using Light Detection and Ranging (LiDAR) to model their transmission system and analyze whether actual field conditions are in accordance with FirstEnergy's Facility Ratings Methodology by December 31, 2013;
- 2) FirstEnergy will use LiDAR to evaluate the status of vegetation clearances on its transmission system to evaluate vegetation clearances at maximum sag conditions and

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identify and mitigate any vegetation clearance issues that need to be addressed under FirstEnergy's TVMP by December 31, 2012;

- 3) FirstEnergy will upgrade certain technology used in vegetation management. FirstEnergy will also develop and implement software that will allow it to maximize the use of this hardware by June 30, 2012; and
- 4) FirstEnergy will also revise its TVMP to require mid-cycle ground inspections of vegetation along transmission lines by June 30, 2011.

After consideration of the above factors, ReliabilityFirst determined that, in this instance, the penalty amount of six hundred and fifty thousand dollars (\$650,000) is appropriate and bears a reasonable relation to the seriousness and duration of the violation.

#### **Status of Mitigation Plan<sup>9</sup>**

MetEd's Mitigation Plan to address its violation of FAC-003-1 R2 was submitted to ReliabilityFirst on May 13, 2011 with a proposed completion date of June 30, 2011. The Mitigation Plan was accepted by ReliabilityFirst on May 13, 2011 and approved by NERC on June 9, 2011. The Mitigation Plan for this violation is designated as MIT-10-3660 and was submitted as non-public information to FERC on June 9, 2011 in accordance with FERC orders.

MetEd's Mitigation Plan required MetEd to:

1. Revise the existing TVMP and associated documents and procedures to be more efficient, clear, and concise;
  - a. Consolidate and streamline all program documents to improve clarity for MetEd staff and external contractors;
  - b. Incorporate program language that stresses the expectation to exercise legal rights and options regarding herbicide work refusals; and
  - c. Revise existing forms used in the TVMP process;

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<sup>9</sup> See 18 C.F.R § 39.7(d)(7).

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- i. Forestry Work Refusal Form 418.1
  - ii. Work Inspection Report Form 1051;
2. Schedule and conduct periodic observations of field conditions by FirstEnergy management (supervisors and above) to ensure the continued effectiveness of the TVMP and its implementation and establish the observation criteria, train the management staff, implement, and document periodic field observations of in-progress Forestry Specialist and field contractor work activities;
  - a. Include this requirement into the FirstEnergy Performance Objectives of Transmission Vegetation Management supervisory personnel;
3. Develop, perform, and document an assessment, through knowledge checks or required reading lists, of each applicable forestry specialist and contracted forestry specialist, to reinforce performance expectations and understand actual knowledge and capabilities of current in-house and contracted field personnel who implement the TVMP;
  - a. As of February 22, 2011, Transmission Vegetation Management staff conducted kickoff meetings with all vegetation line clearance contractor supervision and work planners to reinforce expectations and communicate requirements of the TVMP. At the completion of the kickoff meetings all participants took a knowledge test and were assigned required readings with the objective of enhancing their understanding and knowledge of the TVMP. Work continues to be completed on this mitigation action effort;
4. Establish and document a formal training program for new hires, existing vegetation management staff personnel and contracted forestry specialists; and
5. Review and modify the current contract language for 2011 and beyond;
  - a. MetEd reviewed and modified the current contract language for 2011 and beyond. The modification includes incorporating vegetation management contractor incentives and contractor penalties to respectively encourage and hold contractors accountable for proactively identifying and mitigating vegetation conditions that may impact the performance and reliability of the bulk electric system. The Contractor's compliance with the contract terms will be the basis of whether an incentive or a penalty, up to and including termination of the contract, will apply.

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MetEd certified on July 29, 2011 that the above Mitigation Plan requirements were completed on June 30, 2011. As evidence of completion of its Mitigation Plan, MetEd submitted the following:

- 1) FirstEnergy FAC-003-1 Mitigation Plan Certification Package\_Final\_7-29-11.PDF Revision July 29, 2011.
  - This included FirstEnergy's TVMP, Revision 6 document which was dated June 30, 2011. FirstEnergy revised its TVMP and associated documents to be more clear, concise, and efficient in addressing FAC-003-1, R2. FirstEnergy's TVMP addresses the following: (1) annual work plan, (2) vegetation management methods, (3) flexibility of the annual work plan, (4) annual work plan adjustments, tracking, and documentation, (5) landowner and regulatory authority notifications, (6) systems and procedures for tracking the transmission vegetation management work, and (7) transmission vegetation management work verification.
  - The Certification package also included: FirstEnergy's field observation program, the established criteria and assessment of each applicable forestry specialist and contracted forestry specialists, and the details of its TVMP training program for new hires, existing vegetation management personnel and contracted forestry specialists.

On August 22, 2011, after reviewing MetEd's submitted evidence, ReliabilityFirst verified that MetEd's Mitigation Plan was completed on June 30, 2011 and that MetEd had revised its procedures in accordance with FAC-003-1 R3.

### **Statement Describing the Assessed Penalty, Sanction or Enforcement Action Imposed<sup>10</sup>**

#### **Basis for Determination**

Taking into consideration the Commission's direction in Order No. 693, the NERC Sanction Guidelines and the Commission's July 3, 2008, October 26, 2009 and August 27, 2010 Guidance Orders,<sup>11</sup> the NERC BOTCC reviewed the Settlement Agreement and supporting documentation on September 19, 2011. The NERC BOTCC approved the Settlement Agreement, including ReliabilityFirst's assessment of a six hundred and fifty thousand dollar (\$650,000) financial penalty against MetEd and other actions to

<sup>10</sup> See 18 C.F.R. § 39.7(d)(4).

<sup>11</sup> *North American Electric Reliability Corporation*, "Guidance Order on Reliability Notices of Penalty," 124 FERC ¶ 61,015 (2008); *North American Electric Reliability Corporation*, "Further Guidance Order on Reliability Notices of Penalty," 129 FERC ¶ 61,069 (2009); *North American Electric Reliability Corporation*, "Notice of No Further Review and Guidance Order," 132 FERC ¶ 61,182 (2010).

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facilitate future compliance required under the terms and conditions of the Settlement Agreement. 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 violation at issue.

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

1. the violation constituted MetEd's first occurrence of violations of the subject NERC Reliability Standards;
2. MetEd self-reported the violation;<sup>12</sup>
3. ReliabilityFirst reported that MetEd was cooperative throughout the compliance enforcement process;
4. MetEd had a compliance program at the time of the violation which ReliabilityFirst considered a mitigating factor;<sup>13</sup>
5. there was no evidence of any attempt to conceal a violation nor evidence of intent to do so;
6. ReliabilityFirst determined that the violation posed a serious or substantial risk to the reliability of the BPS; and
7. ReliabilityFirst reported that there were no other mitigating or aggravating factors or extenuating circumstances that would affect the assessed penalty.

For the foregoing reasons, the NERC BOTCC approved the Settlement Agreement and believes that the assessed penalty of six hundred and fifty thousand dollars (\$650,000) is appropriate for the violation and circumstances at issue, and is consistent with NERC's goal to promote and ensure reliability of the BPS and accountability by registered entities.

Pursuant to 18 C.F.R. § 39.7(e), 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.

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<sup>12</sup> ReliabilityFirst considered the two month delay to alert ReliabilityFirst of the event as reducing the mitigating credit normally afforded to timely self reports.

<sup>13</sup> ReliabilityFirst considered the two month delay to alert ReliabilityFirst of the event as reducing the mitigating credit normally afforded for having a culture of compliance.

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### **Attachments to be Included as Part of this Notice of Penalty**

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

- a) Settlement Agreement by and between ReliabilityFirst and MetEd executed July 9, 2011, included as Attachment a;
  - a. MetEd's self-report form for FAC-003-1 R2 dated August 23, 2010, included as Attachment A to the Settlement Agreement;
  - b. MetEd's Mitigation Plan designated as MIT-10-3660 for FAC-003-1 R2 submitted May 13, 2011, included as Attachment B to the Settlement Agreement;
- b) MetEd's Certification of Mitigation Plan Completion for FAC-003-1 R2 submitted July 29, 2011, included as Attachment b; and
- c) ReliabilityFirst's Verification of Mitigation Plan Completion for FAC-003-1 R2 dated August 22, 2011, included as Attachment c.

### **A Form of Notice Suitable for Publication<sup>14</sup>**

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

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<sup>14</sup> See 18 C.F.R § 39.7(d)(6).

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**Notices and Communications**

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

<p>Gerald W. Cauley                  President and Chief Executive Officer                  3353 Peachtree Road NE, Suite 600, North Tower                  Atlanta, GA 30326-1001                  David N. Cook*                  Sr. Vice President and General Counsel                  North American Electric Reliability Corporation                  1120 G Street, N.W., Suite 990                  Washington, DC 20005-3801                  (202) 393-3998                  (202) 393-3955 – facsimile                  david.cook@nerc.net</p>	<p>Rebecca J. Michael*                  Associate General Counsel for Corporate and                  Regulatory Matters                  North American Electric Reliability Corporation                  1120 G Street, N.W., Suite 990                  Washington, DC 20005-3801                  (202) 393-3998                  (202) 393-3955 – facsimile                  rebecca.michael@nerc.net</p>
<p>Hugh Conley*                  Manager, Reliability Compliance                  Metropolitan Edison Company                  76 South Main Street                  Akron, Ohio 44308                  (330) 761-4460                  hconley@alleghenyenergy.com</p>	<p>Robert K. Wargo*                  Director of Enforcement and Regulatory Affairs                  ReliabilityFirst Corporation                  320 Springside Drive, Suite 300                  Akron, OH 44333                  (330) 456-2488                  bob.wargo@rfirst.org</p>
<p>Mark Koziel*                  Consultant                  Metropolitan Edison Company                  76 South Main Street                  Akron, Ohio 44308                  (330) 761-4416                  makoziel@firstenergycorp.com</p>	<p>L. Jason Blake*                  Corporate Counsel                  ReliabilityFirst Corporation                  320 Springside Drive, Suite 300                  Akron, OH 44333                  (330) 456-2488                  jason.blake@rfirst.org</p>
<p>Robert Mattiuz*                  Director, Transmission Planning and Operations                  Metropolitan Edison Company                  800 Cabin Hill Drive                  Greensburg, Pennsylvania 15601                  (724) 838-6223                  rmattiuz@alleghenypower.com</p>	<p>Michael D. Austin*                  Associate Attorney                  ReliabilityFirst Corporation                  320 Springside Drive, Suite 300                  Akron, OH 44333                  (330) 456-2488                  mike.austin@rfirst.org                  *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.</p>

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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

Rebecca J. Michael  
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and Regulatory Matters  
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cc: Metropolitan Edison Company  
ReliabilityFirst Corporation

Attachments

**Attachment a**

**Settlement Agreement by and between  
ReliabilityFirst and MetEd executed July 9,  
2011**

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<b>In re: METROPOLITAN EDISON</b>	)	<b>Docket No. RFC201000455</b>
<b>COMPANY</b>	)	
	)	
NERC Registry ID Nos. NCR00821	)	NERC Reliability Standard:
	)	FAC-003-1, R2

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**SETTLEMENT AGREEMENT  
BETWEEN  
RELIABILITYFIRST CORPORATION  
AND  
METROPOLITAN EDISON COMPANY**

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**I. INTRODUCTION**

1. ReliabilityFirst Corporation (“ReliabilityFirst”) and Metropolitan Edison Company (“MetEd”) enter into this Settlement Agreement (“Agreement”) to resolve an alleged violation by MetEd of Reliability Standard FAC-003-1, Requirement 2.
2. MetEd is a subsidiary of FirstEnergy Corp. (“FirstEnergy”).<sup>1</sup> MetEd serves approximately 546,000 customers in southern and southeastern Pennsylvania, and operates approximately 1,405 miles of transmission lines at varying voltage levels.
3. MetEd is registered on the North American Electric Reliability Corporation (“NERC”) Compliance Registry as a Distribution Provider, Load Serving Entity, Purchasing-Selling Entity, and Transmission Owner with the NERC Registry Identification Number NCR00821. MetEd, in its capacity as a Transmission Owner, is required to comply with FAC-003-1, R2.
4. MetEd and ReliabilityFirst agree and stipulate to this Agreement in its entirety. The facts stipulated herein are stipulated solely for the purpose of resolving

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<sup>1</sup> MetEd shares certain transmission vegetation management services and associated employees with other transmission owner affiliates of FirstEnergy. For brevity, to the extent that this Agreement refers to such FirstEnergy employees in reference to MetEd’s compliance obligations, this Agreement refers to such employees as “MetEd.”

between MetEd and ReliabilityFirst the subject matter of this Agreement and do not constitute admissions or stipulations for any other purpose. MetEd neither admits nor denies that the facts stipulated herein constitute a violation of FAC-003-1, R2.

## II. ALLEGED VIOLATION OF FAC-003-1, R2 (RFC201000455)

5. On August 23, 2010, MetEd submitted a self report identifying a possible violation of FAC-003-1, R2, to ReliabilityFirst. See, Violation Self-Reporting Form (attached as **Attachment A**). FAC-003-1, R2 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.

6. On June 15, 2010, at approximately 1:30 p.m., the owner of a residential property located in Newmanstown, Pennsylvania, phoned a non-FirstEnergy utility's customer service center to report observing a "flash or ball of fire" and hearing a crackling sound near power lines that later were determined to be MetEd's 230 kV Transmission Line Number 1074 ("Line 1074"). The utility that took the call determined that MetEd owned the line, and contacted MetEd to report the issue.
7. Upon learning of this report, MetEd dispatched a Transmission Maintenance Supervisor to the location to assess the situation. This individual arrived at Line 1074 at approximately 7:00 p.m. At that time, this individual observed dense vegetation growing along the spans between and below tower numbers 126, 127 and 128 (collectively, the "Spans") on MetEd's Line 1074 and advised MetEd as such and left the site.
8. MetEd next sent a Transmission Forestry Supervisor and a contractor tree crew to the site, and they arrived between 9:30 p.m. and 10:00 p.m. The Transmission Forestry Supervisor directed the tree crew to clear certain vegetation from beneath the 126 and 127 spans of Line 1074. The tree crew worked until approximately 2:00 a.m. on June 16, 2010, at which time the Transmission Forestry Supervisor and tree crew left the site.

9. The Transmission Forestry Supervisor and contractor tree crew returned to the site at 10:00 a.m. on June 16, 2010, and resumed vegetation clearing activities – this time under the 127 and 128 spans of Line 1074.
10. Between 12:00 p.m. and 1:00 p.m., the tree crew cut down two cherry brush stalks and one sumac brush stalk with dry leaves and split bark along portions of the respective stalks that were consistent with the customer call that was placed on June 15, 2010 at approximately 1:30 p.m. MetEd’s clearance of the vegetation growth from under the Spans on June 15 and 16, 2010 ensured adequate clearances under all operating conditions for these spans.
11. The condition of the vegetation under the 127 and 128 spans and the description of the events of June 15, 2010 from the property owner are consistent with a flashover event, which are consistent with a failure to maintain the minimum Clearance 2 radial clearance zone. MetEd’s Transmission Vegetation Management Program (“TVMP”) requires that MetEd maintain a minimum radial vegetation clearance zone of 5.14 feet (known as “Clearance 2”) for 230 to 242 kV transmission lines under all operating conditions, pursuant to Reliability Standard FAC-003-1, R1.2.2. MetEd determined that Line 1074 was operating at approximately 85 degrees Celsius at the time of the June 15, 2010 events, compared to its maximum rating of 125 degrees Celsius.
12. Prior to June 15, 2010, MetEd utilized an independent contractor to perform vegetation management work on Line 1074 and in other areas. MetEd observed several issues with this contractor’s implementation of the TVMP.
13. The contractor performed planning for vegetation clearing and control activities for MetEd from January to March of 2010. On March 10, 2010, the contractor determined that vegetation control was needed under the Spans of Line 1074. The landowner associated with the Spans did not authorize application of herbicides, and the contractor notified MetEd of the circumstances. The contractor did not, however, provide the detailed information about the landowner’s refusal of herbicides as required by MetEd’s TVMP.
14. On June 3, 2010, two weeks before the event, MetEd observed vegetation removal techniques by the contractor on Line 1074 that were inconsistent with provisions of MetEd’s TVMP.<sup>2</sup> Additionally, during the same second quarter of 2010, MetEd observed the contractor’s insufficient progress of the 2010 work plan. Due to this insufficient progress in completing the 2010 work plan as well as work practices that were inconsistent with MetEd’s TVMP, on June 13, 2010, two days before the event, MetEd ordered the contractor to cease work on Line 1074.

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<sup>2</sup>These techniques included cutting vegetation using unsuitable roping techniques and the unsuitable use of mechanical equipment to pull the trees over.

15. MetEd's TVMP calls for a MetEd employee (a "Forestry Specialist") to inspect all work by vegetation management contractors. This inspection includes a field verification of all work performed by contractors and a review of the documentation that the contractors complete as they perform the work. MetEd's TVMP also calls for a Forestry Specialist to conduct annual inspections through aerial patrols, and other on-site review, of transmission corridors.
16. MetEd also observed performance problems with the Forestry Specialist responsible for Line 1074. MetEd hired and assigned this Forestry Specialist to this area of responsibility in 2007. The Forestry Specialist performed aerial patrols of Line 1074 in 2008, 2009 and 2010. The Forestry Specialist also performed a foot patrol of Line 1074 in 2008.
17. During the 2010 inspection, or any other previous inspection, the Forestry Specialist did not identify vegetation conditions under the Spans. Additionally, MetEd's TVMP required the Forestry Specialist to perform a physical inspection of the affected spans after receiving the contractor staff's Forestry Work Refusal Form March 10, 2010 reporting the property owner's herbicide application refusal under the Spans. However, the Forestry Specialist did not perform this physical inspection as required by MetEd's TVMP.
18. The vegetation management contractor and the Forestry Specialist did not perform as required by MetEd's TVMP. Specifically, MetEd determined that performance issues on the part of the vegetation management contractor and the Forestry Specialist permitted vegetation to grow under the Spans of Line 1074 in a manner outside of the requirements of MetEd's TVMP.
19. After the June 15, 2010 event, MetEd performed foot patrols and other inspections of Line 1074 and elsewhere on its transmission system. MetEd represents that these inspections established that the conditions giving rise to the event were isolated to the area of the Spans of Line 1074.
20. ReliabilityFirst alleges that MetEd violated FAC-003-1, R2 by failing to implement its TVMP in a manner that would maintain the Clearance 2 radial clearance zone under the Spans of Line 1074.

*Risk Considerations and Duration of Alleged Violation*

21. FAC-003-1, R2 has a Violation Risk Factor ("VRF") of "High," consistent with the VRF Matrix promulgated by NERC. Applying the Violation Severity Level ("VSL") Matrix promulgated by NERC, ReliabilityFirst determined that the facts and circumstances of this violation warranted a "Severe" VSL.
22. Inadequate vegetation management presents a serious risk of sustained transmission outages and could directly cause or contribute to Bulk-Power System

instability, separation, or a cascading sequence of failures. *See*, FERC Docket No. RR07-12, Order on Violation Risk Factors, 119 FERC ¶ 61,321, P. 10 (2007).

23. Performance issues on the part of the Forestry Specialist and the contractor staff resulted in vegetation conditions under the Spans of Line 1074 that were outside of the requirements of MetEd's TVMP. ReliabilityFirst considered that MetEd was aware of these performance issues no later than June 3, 2010. Nevertheless, MetEd still did not take sufficient corrective action to adequately inspect vegetation along Line 1074 prior to the flashover event.
24. ReliabilityFirst considered that despite the serious risk posed by this alleged violation, MetEd's transmission operators observed neither an outage of bulk electric system facilities nor a loss of customer load in connection with the events of June 15, 2010 described herein. MetEd determined that the transmission system conditions at the time indicated that, even if there had been an outage on Line 1074, affected customer loads would have been served by other transmission facilities.
25. The duration of this alleged violation is from June 15, 2010, the date of the event, until June 16, 2010, the date MetEd completed clearing of the vegetation growth below Spans of Line 1074.

#### *Mitigating Actions*

26. On May 13, 2011, MetEd submitted to ReliabilityFirst a mitigation plan to address the alleged violation described in this Agreement. *See*, NERC Mitigation Plan ID No. MIT-10-3660 (attached as **Attachment B**). ReliabilityFirst accepted it on May 13, 2011, and on May 18, 2011, submitted it to NERC for approval. NERC approved it on June 9, 2011 and submitted it to the Federal Energy Regulatory Commission ("FERC" or the "Commission") as confidential, non-public information.
27. MetEd's mitigation plan describes actions taken to ensure full adherence with MetEd's TVMP and the requirements of the FAC-003-1 standard. In an effort for brevity, MetEd's mitigation plan is incorporated herein by reference. *See*, Attachment B. These actions were completed by June 30, 2011, except as otherwise noted.
28. Pursuant to Section 6.6 of the Compliance Monitoring and Enforcement Program, ReliabilityFirst will verify that this Mitigation Plan was performed in accordance with its terms. MetEd shall certify completion of this mitigation plan and provide evidence demonstrating as such to ReliabilityFirst within 30 days of the proposed completion date included in this mitigation plan.

### III. ADJUSTMENT FACTORS

29. Reliability*First* considered as a mitigating factor certain aspects of MetEd's compliance program. For instance, MetEd abides by FirstEnergy's FERC Reliability and Compliance Policy, which addresses all Reliability Standards. The policy and procedures are updated as necessary and distributed to FirstEnergy and affiliate employees. The compliance program includes engagement and support of senior management.
30. Reliability*First* also considered as a mitigating factor MetEd's efforts to perform an investigation and analysis of the event that identified two root causes and one contributing cause. MetEd, through FirstEnergy, sought to implement the recommended actions resulting from this analysis, which Reliability*First* favorably considered. These recommended actions included an analysis of the vegetation conditions on the transmission systems of MetEd and other transmission owning FirstEnergy affiliates.<sup>3</sup>
31. Additionally, FirstEnergy restructured its vegetation management department to add more supervisory positions. These new positions should allow for more oversight of the individuals performing vegetation management work. In particular, FirstEnergy delineated responsibility for vegetation management on the transmission system from vegetation management on the distribution system. Certain supervisors will also perform aerial inspections of vegetation on transmission lines.
32. The favorable consideration given to MetEd's culture of compliance was offset by Reliability*First*'s negative consideration of the two-month period that elapsed, during the summer, between the event (June 15, 2010) and MetEd's August 23, 2010 self report to Reliability*First*. Reliability*First* also considered this two month delay to alert Reliability*First* of the event as reducing the mitigating credit normally afforded for timely self reports.
33. MetEd contends that the two month delay was occasioned by MetEd's desire to simultaneously report the occurrence of the event and also an analysis of the underlying causes of the event. MetEd further contends that the two month period between the event and submission of the self report enabled MetEd to act based on accurate information about the event and the underlying causes of the event. Reliability*First* stresses that timely self reporting enables timely mitigation of any risk to the reliability of the bulk electric system.
34. The favorable consideration given to MetEd's culture of compliance was also offset by MetEd's knowledge of the vegetation contractor's failure to comply

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<sup>3</sup> This review did not include the transmission owning FirstEnergy affiliates registered as Allegheny Power and Trans-Allegheny Interstate Line Company because, at the time of this review, those affiliates were not yet affiliated with FirstEnergy.

with various aspects of the MetEd TVMP, including the implementation of the 2010 vegetation work plan. Specifically, ReliabilityFirst considered MetEd's knowledge of this implementation failure prior to the event on Line 1074 and that MetEd nevertheless failed to adequately address it.

35. When assessing the penalty for the alleged violation at issue in this Agreement, ReliabilityFirst considered whether the facts of these alleged violations evidenced any: (a) repeated or continuing conduct similar to that underlying a prior violation of the same or a closely related Reliability Standard Requirement; (b) conduct addressed in any previously submitted mitigation plan for a prior violation of the same or a closely-related Reliability Standard Requirement; or (c) multiple violations of the same Reliability Standard and Requirement. Neither MetEd, nor its parent company FirstEnergy, nor any of its affiliated companies have any prior violations of the same or a closely related Reliability Standard. Therefore, ReliabilityFirst did not consider the violation at issue a repetitive infraction.

#### IV. ABOVE AND BEYOND ACTIVITIES

36. In addition to the actions described in MetEd's mitigation plan, described above, FirstEnergy, on behalf of MetEd and the other FirstEnergy affiliated companies listed on the NERC Compliance Registry, has committed to the following activities that enhance reliability above and beyond only those activities necessary to mitigate the alleged violation addressed herein.

##### *Use of LiDAR in Facility Ratings*

37. FirstEnergy submitted a response to the NERC Recommendation to Industry, Consideration of Actual Field Conditions in Determination of Facility Ratings (the "Recommendation"). In its response, FirstEnergy committed generally to use Light Detection and Ranging ("LiDAR") based Power Line Systems—Computer Aided Design and Drafting ("PLS-CADD") to model its transmission system and analyze whether actual field conditions are in accordance with FirstEnergy's Facility Ratings Methodology. FirstEnergy now commits that it will complete these activities by December 31, 2013.
38. In the event that FirstEnergy determines – as a result of the modeling and analysis activities described in Paragraph 37 – that mitigation activities are necessary, FirstEnergy hereby commits to schedule and perform any necessary mitigation efforts within the time periods described in FirstEnergy's response to NERC's Recommendation. Such mitigation efforts could include conductor de-ratings, construction activities, grading activities, any combination of the above, or other activities as determined by FirstEnergy. Additionally, FirstEnergy may, after a reasonable engineering analysis, determine that mitigation efforts beyond a conductor de-rating are unnecessary.
39. In addition to this commitment, FirstEnergy hereby commits to report to ReliabilityFirst as to the status of these activities on a quarterly basis. These

reports shall be consistent with the semi-annual updates associated with the Recommendation that are provided to NERC. Through these quarterly updates, ReliabilityFirst will monitor FirstEnergy's activities to completion. In the event that any possible violations are discovered during the performance of this commitment, ReliabilityFirst will hold the processing of any such violations until FirstEnergy completes the mitigation activities described in Paragraph 38, provided that FirstEnergy is proceeding in good faith to complete the mitigation activities in accordance with the timelines in FirstEnergy's response to the Recommendation. ReliabilityFirst will analyze those possible violations in light of the fact that they were discovered through FirstEnergy's voluntary undertaking of reliability enhancing activities and in response to the Recommendation.

#### *Use of LiDAR in Vegetation Management*

40. In addition to using LiDAR in responding the Recommendation, and in addition to activities performed pursuant to the mitigation plan described above, FirstEnergy will use LiDAR to evaluate the status of vegetation clearances on its transmission system. FirstEnergy recognizes that the use of this technology will allow it to evaluate vegetation clearances at maximum sag conditions and identify and mitigate any vegetation clearance issues that need to be addressed under FirstEnergy's TVMP. FirstEnergy will complete this activity by December 31, 2012.
41. FirstEnergy shall report on its use of LiDAR for evaluating vegetation clearances on its transmission system on a quarterly basis. These reports shall include, *inter alia*, the identification of any circuits on which possible vegetation management conditions were discovered, the circumstances of the condition, and the descriptions of any necessary mitigation work completed to address any identified conditions. Through these quarterly updates, ReliabilityFirst will monitor FirstEnergy's activities to completion and, upon completion, any findings will be treated in accordance with Section 6.0 of the NERC Compliance Monitoring and Enforcement Program, except for circumstances where vegetation within a right of way results in a flashover or vegetation contact or would have been observable as a Clearance 2 encroachment through activities described in FirstEnergy's TVMP.

#### *Vegetation Management Enhancements*

42. FirstEnergy will upgrade certain technology used in vegetation management. For instance, those individuals performing vegetation management in the field will be equipped with "toughbook" hardware that will allow them to provide real time updates as to the status of vegetation management activities. FirstEnergy will also develop and implement software that will allow it to maximize the use of this hardware. FirstEnergy will complete this activity by June 30, 2012. ReliabilityFirst will monitor FirstEnergy's activities to completion in accordance with Section 6.0 of the NERC Compliance Monitoring and Enforcement Program.

43. FirstEnergy will also revise its TVMP to require mid-cycle ground inspections of vegetation along transmission lines. These revisions were completed on June 30, 2011, and ReliabilityFirst will verify this completion in accordance with Section 6.0 of the NERC Compliance Monitoring and Enforcement Program.

## V. PENALTY

44. Based upon the foregoing, MetEd shall pay a monetary penalty of \$650,000 to ReliabilityFirst.
45. ReliabilityFirst shall present an invoice to MetEd within 20 days after this Agreement is approved by the Commission or affirmed by operation of law. Upon receipt, MetEd shall have 30 days to remit payment. ReliabilityFirst will notify NERC if it does not timely receive the payment.
46. If MetEd fails to timely remit the monetary penalty payment to ReliabilityFirst, interest will commence to accrue on the outstanding balance, pursuant to 18 C.F.R. § 35.19a(a)(2)(iii), on the earlier of (a) the 31<sup>st</sup> day after the date on the invoice or (b) the 51<sup>st</sup> day after this Agreement is approved by the Commission or operation of law.

## VI. ADDITIONAL TERMS

47. ReliabilityFirst and MetEd agree that this Agreement is in the best interest of bulk electric system reliability. The terms and conditions of this Agreement are consistent with the regulations and orders of the Commission and the NERC Rules of Procedure.
48. ReliabilityFirst shall report the terms of all settlements of compliance matters to NERC. NERC will review this Agreement for the purpose of evaluating its consistency with other settlements entered into for similar violations or under similar circumstances. Based on this review, NERC will either approve or reject this Agreement. If NERC rejects this Agreement, NERC will provide specific written reasons for such rejection and ReliabilityFirst will attempt to negotiate with MetEd a revised settlement agreement that addresses NERC's concerns. If a settlement cannot be reached, the enforcement process shall continue to conclusion. If NERC approves this Agreement, NERC will (a) report the approved settlement to the Commission for review and approval by order or operation of law and (b) publicly post the alleged violation and the terms provided for in this Agreement.
49. This Agreement shall become effective upon the Commission's approval of this Agreement by order or operation of law or as modified in a manner acceptable to the parties. MetEd expressly waives its rights to any hearing or appeal concerning any matter set forth herein, unless NERC or Commission action constitutes a material modification to this Agreement.

50. Reliability*First* reserves all rights to initiate enforcement actions against MetEd in accordance with the NERC Rules of Procedure in the event that MetEd fails to comply with any of the terms or conditions of this Agreement, including failure to timely complete mitigation plans or other remedies of this Agreement. In the event MetEd fails to comply with any of the terms or conditions of this Agreement, Reliability*First* may initiate an action or actions against MetEd to the maximum extent allowed by the NERC Rules of Procedure, including, but not limited to, the imposition of the maximum statutorily allowed monetary penalty. MetEd will retain all rights to defend against such action or actions in accordance with the NERC Rules of Procedure.
51. MetEd consents to the future use of this Agreement for the purpose of assessing the factors within the NERC Sanction Guidelines and applicable Commission orders and policy statements, including, but not limited to, the factor evaluating MetEd's history of violations. Such use may be in any enforcement action or compliance proceeding undertaken by NERC or any Regional Entity or both, provided however that MetEd does not consent to the use of the conclusions, determinations, and findings set forth in this Agreement as the sole basis for any other action or proceeding brought by NERC or any Regional Entity or both, nor does MetEd consent to the use of this Agreement by any other party in any other action or proceeding.
52. MetEd affirms that all of the matters set forth in this Agreement are true and correct to the best of its knowledge, information, and belief, and that it understands that Reliability*First* enters into this Agreement in express reliance on the representations contained herein, as well as any other representations or information provided by MetEd to Reliability*First* during any interaction between MetEd and Reliability*First* relating to the subject matter of this Agreement.
53. Each of the undersigned warrants that he or she is an authorized representative of the entity designated below, is authorized to bind such entity, and accepts this Agreement on the entity's behalf.
54. The signatories to this Agreement agree that they enter into this 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 MetEd has been made to induce the signatories or any other party to enter into this Agreement.
55. This Agreement may be signed in counterparts.
56. This Agreement is executed in duplicate, each of which so executed shall be deemed to be an original.

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

**[SIGNATURE PAGE TO FOLLOW]**

**[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]**

**Agreed to and accepted:**

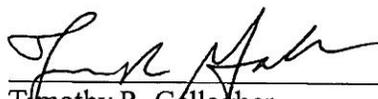
  
Robert K. Wargo  
Director of Enforcement & Regulatory Affairs  
ReliabilityFirst Corporation

7/8/2011  
Date

  
Robert R. Mattiuz, Jr.  
Director, FERC Compliance Department  
On behalf of Metropolitan Edison Company

7/9/2011  
Date

**Approved:**

  
Timothy R. Gallagher  
President & Chief Executive Officer  
ReliabilityFirst Corporation

7/8/2011  
Date

# Attachment A



**COMPLIANCE MONITORING AND ENFORCEMENT PROGRAM**

**VIOLATION SELF-REPORTING FORM**

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

- 1. Date: 8/23/10
- 2. Registered Entity: Metropolitan Edison Company (“MetEd”)
- 3. NERC Registry ID: Joint Registration ID (JRO) (if applicable :)
- 4. Multiple Regional Registered Entity (MRRE) Regional Affiliates (if applicable :)
- 5. Reliability Standard: FAC-003-1 Requirement<sup>a</sup>: 2
- 6. Reporting for registered function(s): Transmission Owner
- 7. Date Violation was discovered: 6/15/10  
Beginning Date of Violation:  
End or Expected End Date of Violation: 6/16/10
- 8. Has this violation been previously reported: Yes  or No   
If yes, Provide NERC Violation ID number:
- 9. Has this violation been reported to another region(s): Yes  or No   
If yes, Provide Region(s):
- 10. Is the violation still occurring: Yes  or No

11. Detail description and cause of the violation:

This self-report describes a potential violation of NERC reliability standard FAC-003, and the factual events and circumstances that led to the investigation and identification of the potential violation. The potential violation relates to MetEd’s 230 kV Line 1074 in Pennsylvania.

Specifically, this self-report involves a vegetation encroachment into the “Clearance 2 zone”, as described in R.1.2.2 of the FAC-003-1 Reliability Standard. R2 specifies that the vegetation management program be implemented such that R1.2.2 is met. R1.2.2 requires that all applicable registered entities maintain a minimum clearance of 5.14 feet (the “Clearance 2 zone”) between

vegetation and Bulk Electric System (“BES”) conductors rated at a voltage of 230 kV, under all rated electrical operating conditions.

MetEd determined that vegetation within a single span would have encroached into the Clearance 2 zone under “maximum sag conditions” at a specific point on MetEd’s Line 1074. Line 1074 is a 230 kV transmission line that extends from MetEd’s South Lebanon substation to PP&L’s (Pennsylvania Power and Light) Berks substation, all in Pennsylvania. The vegetation within span 127-128 of Line 1074 occupied a herbicide refusal area, in which the local property owner refused permission to apply herbicides to control vegetation growth within the MetEd right-of-way. MetEd removed the encroaching vegetation immediately upon discovery.

A local property owner reported a flashover-type event which led to the investigation and discovery of the vegetation encroachment. The reported flashover event occurred on June 15, 2010, at approximately 13:30 hours EDT (1:30 p.m. prevailing Eastern Time). The reported incident did not cause or result in a fault, outage, or operation of any protective equipment on the MetEd BES or on any other electric system. Indeed, MetEd’s data establish that there was no meaningful BES or other electric device or protection operation or condition on any MetEd system or facilities as a result of the reported flashover event. Rather, all data and internal reviews lead to a conclusion that the reported incident did not impact the reliability of the BES, or any other electric system or facility.

An internal apparent cause analysis review concluded that human performance issues on the part of staff of the vegetation contractor who was hired in January 2010 to inspect and conduct scheduled vegetation maintenance on Line 1074, and on the part of a utility employee who had responsibility to report inspection findings and monitor the contractor’s work, are the apparent cause of the vegetation encroachment. Specifically, MetEd’s Transmission Vegetation Management Program (“TVMP”) provides for a five-year cycle for maintaining and clearing vegetation in all rights-of-way associated with BES transmission lines. As an integral

component of the TVMP, aerial (helicopter) vegetation inspections of all BES lines are scheduled and conducted annually throughout the five-year cycle to ensure maintenance of required clearances.

There are integrated checks and balances within the TVMP, including inspections performed by contractors, and utility vegetation management personnel check and confirm all contractor inspection results. Aerial inspections are performed by utility vegetation management personnel, who are also responsible to check and verify all vegetation contractor completed work. There are further provisions for addressing easement restrictions on rights-of-way, such as the herbicide refusal area, that require inspections by utility vegetation management employees coupled with appropriate responsive actions.

The Line 1074 corridor was last cleared in 2005. A thorough mid-cycle foot patrol, vegetation inspection of this corridor was conducted in 2008, including the performance of steps to address any herbicide and other refusal areas. In addition, MetEd's records reflect that, as called for in the TVMP, aerial vegetation inspections were conducted in the spring of 2006, 2007, 2008, 2009 and 2010. The utility vegetation management employee did not identify any significant problematic vegetation conditions related to span 127-128 of Line 1074 during the aerial vegetation patrols during the period referenced above nor were there any significant items identified during the 2008 mid-cycle review.

The vegetation contractor staff and utility vegetation management employee evaluated the line in the period between January 1, 2010 and June 15<sup>th</sup> (the date of the flashover event) for the purposes of identifying vegetation conditions for the 2010 clearance cycle. The vegetation contractor staff conducted 2010 cycle vegetation clearing pre-planning work and ground patrols starting in January, and the utility vegetation management employee conducted an aerial patrol in

May. Additionally, the contractor visited span 127-128 on several occasions during the period between January 1, 2010 and June 15, 2010. Neither the contractor nor the employee identified the affected parcel as requiring immediate vegetation remediation. This unfortunate “overlap” of a performance gap in identifying vegetation requiring clearance attention between the vegetation contractor staff and the supervising utility vegetation management employee responsible for contractor oversight and TVMP compliance means that MetEd did not have opportunity to execute immediate remediation steps – recognizing and clearing of the vegetation – that are called for in MetEd’s TVMP.

MetEd conducted an engineering/survey evaluation of the condition of the vegetation within span 127-128, and concluded it was indeterminate whether the vegetation involved in the reported flashover event, a stalk of cherry brush, encroached on the Clearance 2 zone of Line 1074 when the flashover event happened. Specifically, the engineering/survey evaluation determined that the weather conditions and line loading/operating conditions at the time of the reported flashover event resulted in the affected part of the conductor being approximately 35 feet above grade. The conductor’s position was estimated to be beyond the Clearance 2 zone away from the top of the affected stalk of cherry brush when the flashover occurred and, hence, the affected vegetation stalk was beyond the 5.14 feet required of Clearance 2 zone when the flashover occurred.

MetEd’s engineering/survey analysis determined that the vegetation would have been in the Clearance 2 zone during maximum sag conditions. The affected segment of line is designed to achieve maximum sag conditions when the line is operating at 257° F. Under these conditions, the distance between the affected point on the line (where the flashover event occurred) and the ground is approximately 27 feet. Under these conditions, the affected point of

the line is approximately 3 feet below the top of the affected cherry stalk. As such, while the affected cherry stalk is approximately 6 feet to the side of the conductor, branches and foliage from vegetation within the right-of-way would have extended into the Clearance 2 zone under these maximum sag conditions.

12. Violation Risk Factor: Lower ( ) – Medium ( ) – High ( X ) – Not Specified ( )      Select One

13. Violation Severity Level: Lower ( X ) – Moderate ( ) – High ( ) – Severe ( )      Select One  
Provide justification for this determination:

The VSL's only provide guidance for not having required elements of R2 included in the TVMP. Since MetEd has an adequate TVMP, there was no outage or impact on the BES, and this was an isolated human performance issue, the VSL is identified as Lower.

14. Provide a determination of the Potential Impact to the Bulk Electric System:

Neither the encroachment of vegetation into the Zone 2 clearance, nor the flashover which occurred on June 15<sup>th</sup> caused, or resulted in a fault, outage, or operation of protective equipment. Therefore, there was no impact to the BES.

15. Mitigation Plan attached<sup>b</sup>:      Yes  or No

16. Additional Comments:

As noted above, MetEd caused the encroaching vegetation to be cleared immediately upon discovery. In addition, MetEd directed immediate ground inspection of the remainder of Line 1074, and for all other lines and rights-of-way that were the responsibility of the contractor staff and utility vegetation management employee who had responsibility for inspecting and reporting on vegetation conditions in the Line 1074 corridor. Furthermore, MetEd undertook

other steps (e.g., additional aerial and ground patrols) to ensure that no other vegetation encroachments existed on its transmission system that required remediation.

MetEd concluded that no other vegetation conditions existed on its transmission system that constitute a potential violation of the FAC-003-1 Reliability Standard, and that the potential violation associated with the vegetation encroachment into a small span of Line 1074 (under maximum sag conditions) was an isolated incident attributable to the combined and contemporaneous performance deficiencies of the contractor staff and utility vegetation management employee.

17. 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.

Officer's Name: FirstEnergy Service Company on behalf of Metropolitan Edison Company,  
by Stan Szwed

Title: VP, FERC Policy and Chief FERC Compliance Officer

E-mail address: [sfszwed@firstenergycorp.com](mailto:sfszwed@firstenergycorp.com) Phone: 330-384-2454

Primary Compliance Contact: Henry Stevens

E-mail address: [hwstevens@firstenergycorp.com](mailto:hwstevens@firstenergycorp.com) Phone: 330-761-4460

**E-mail Submittals to [self-reports@rfirst.org](mailto:self-reports@rfirst.org) Subject Line: (Registered No.) - Violation Self-Report**  
**For any questions regarding compliance submittals, please e-mail [self-reports@rfirst.org](mailto:self-reports@rfirst.org).**

<sup>a</sup>. Report on a requirement basis. If the violation is to a sub requirement, or multiple sub requirements, include

all sub requirements relevant to this violation.

<sup>b</sup>. Mitigation Plans are to be submitted to [mitigationplan@rfirst.org](mailto:mitigationplan@rfirst.org) with the subject line **(Registered No. - Mitigation Plan)**.

# Attachment B

## Mitigation Plan Submittal Form

Date this Mitigation Plan is being submitted: May 13, 2011

### **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 ReliabilityFirst 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: Metropolitan Edison Company  
Company Address: 76 S. Main Street, Akron, OH 44308  
NERC Compliance Registry ID: NCR00821

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

Name: Robert R. Mattiuz, Jr.  
Title: Director, FERC Compliance  
Email: rmattiu@alleghenypower.com  
Phone: (330) 384-1207



**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.

NERC Violation ID #	Reliability Standard	Requirement Number	Violation Risk Factor	Alleged or Confirmed Violation Date <sup>(*)</sup>	Method of Detection (e.g., Audit, Self-report, Investigation)
RFC20100455	FAC-003-1	R2	High	8/23/10	Self-report

(\*) Note: The Alleged or Confirmed Violation Date shall be expressly specified by the Registered Entity, and subject to modification by ReliabilityFirst, 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 ReliabilityFirst. Questions regarding the date to use should be directed to the ReliabilityFirst 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.

Vegetation in the right-of-way (“ROW”) in Metropolitan Edison Company’s (“MetEd”) Line 1074 encroached beyond allowed radial clearances as described in NERC Reliability Standard FAC-003-1, Requirement R2, and beyond criteria described in the FirstEnergy (FE) Transmission Vegetation Management Program (TVMP).

On June 15, 2010, MetEd’s representatives learned that vegetation had encroached into the Clearance 2 radial clearance zone (at maximum design load conditions) between towers 126 and 128 in the Line 1074 230kV corridor that is located in the Lebanon/Easton/Reading area of MetEd’s Bulk Electric System (BES). The Clearance 2 zone is defined for this transmission voltage as 5.14 feet. It should be noted that this encroachment did not result in an outage of any type.

This encroachment was self-reported on August 23, 2010 to the ReliabilityFirst Corporation (“RFC”) as a violation of FAC-003-1, Requirement 2 which specifies that the TVMP be implemented in order to meet R2.

**Investigation**

A root cause investigation team was formed to collect facts and data through reviews of pertinent documents and through interviews of individuals with knowledge of the event and conditions. Thus, as sponsored, the root cause team’s charter became: identify how aspects of the TVMP and its implementation could have led to this event or could lead to other similar events in the future.

# RELIABILITY FIRST

This investigation and analysis utilized a structured root cause analysis approach (TapRooT®) to identify two (2) root causes and one (1) contributing cause. The causes are summarized as follows:

## Root Causes

1. The TVMP process failed to minimize the potential for human error to adversely affect TVMP implementation. Examples associated with the incident include:
  - Forestry Specialist for Line 1074 did not identify vegetation conditions at the problem site on Line 1074 during the 2008 mid-cycle inspection that took place on January 21, 2008;
  - The Contractor responsible for this work did not provide detailed information about the vegetation issues at the problem site on Line 1074 on the applicable Forestry Work Refusal Form in March of 2010;
  - Forestry Specialist for Line 1074 did not observe the spans in question after receipt of the contractor- generated Forestry Work Refusal Form in March of 2010; and
  - Forestry Specialist for Line 1074 did not identify any abnormalities in the spans in question during aerial patrols on May 20, 2008, May 28, 2009 and May 24, 2010.
2. Frequent observations (“spot checks”), consistent with FirstEnergy’s expectations for a Forestry Specialist’s performance and contractor activities, were not consistently performed by FirstEnergy management (supervisors and above). Such observations may have prevented this incident.

## Contributing Cause

1. The current training program for vegetation management does not include a formal and documented training procedure to demonstrate and evaluate the proficiency of Forestry Specialists and certain designated contract personnel.

The root cause summary is attached hereto as Attachment A: Event Analysis Report – Metropolitan Edison Company – Transmission Line (1074 Corridor -230kV) – Vegetation Incident (June 15, 2010).

- 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.

The encroachment of vegetation beyond allowed radial clearances that occurred in Metropolitan Edison Company’s (“MetEd’s”) right-of-way (“ROW”) did not cause or result in a fault, outage, electrical disturbance, or operation of any protective equipment

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on the MetEd BES or on any other electric system. All data and internal reviews lead to a conclusion that the event did not adversely impact the reliability of the BES, or any other electric system or facility.

In an effort to assure that similar conditions as those that occurred on June 15, 2010 in the 1074 corridor did not exist elsewhere and do not occur in the future, MetEd performed a detailed extent of condition review. This involved a documentation review, aerial patrol inspection, ground patrol inspection, refusal documentation and field review and review of the annual work plan.

Immediate actions that were completed through September 21, 2010 following the incident are summarized below:

- The brush stalk with browned leaves, located in Span 127 - 128, was cut down between 12:00 PM and 1:00 PM the day after the incident.
- Cut and mowed the brush from 1074 line spans 126-128
- Completed 100% foot patrol of the 1004, 1073 and 1074 transmission lines for which the Forestry Specialist for Line 1074 had responsibility
- Repeated 100% aerial patrols of 1074 transmission corridor and other corridors (see Attachment 1) for which the Forestry Specialist for Line 1074 had responsibility
- Completed 100% foot patrols of 2009 and 2010 Forestry Work Refusal Forms (herbicide refusals only) of the Reading/Easton/Lebanon districts 230 kV corridors (this includes MetEd line 1074).
- Four maintenance and herbicide refusal records for MetEd's York district's 230 kV line 1052 and 500 kV lines 5006 and 5013 were reviewed and locations inspected
- Five maintenance and herbicide refusal records for Pennsylvania Electric Company's ("Penelec's") Johnstown district HCH 230 kV line were reviewed and locations inspected
- Completed 100% aerial patrols on a sample of transmission corridors within Ohio Edison Company, The Cleveland Electric Illuminating Company and Pennsylvania Power Company
- Completed 100% aerial patrols of transmission corridors >200 kV within Penelec

None of the conditions found during the extent of condition review were determined to be in conflict with NERC Clearance requirements.

In addition to the immediate and completed actions taken through September 21, 2010, please see the tables below for an update as of January 14, 2011 on FirstEnergy's condition assessment and actions regarding vegetation management for affiliated registered entities.

The following tables demonstrate that all vegetation findings that were identified on the extent of condition review are now complete. The vegetation findings are categorized as

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Urgent, Critical or Important. This is done to provide a timeframe to perform a field investigation and/or corrective action if necessary. Identifying these vegetation findings and mitigating them within the set timeframe assures the vegetation is removed eliminating the potential for the vegetation to encroach under maximum sag conditions.

- **Urgent** conditions require immediate on-site inspection and are to be worked within 24 hours.
- **Critical** conditions require on-site inspection within one week. This inspection is to allow the staff to determine the timing of and needed corrective action. The corrective action is then performed within 30 days unless, based upon review of the corridor's identified conditions, where the critical designation is deemed unnecessary after the inspection, the category can be downgraded. Where the category is downgraded, no immediate work is required and the location is worked during its normal maintenance cycle.
- **Important** conditions rely on the results of the ground inspection and may be classified as needing corrective action within the calendar year.

The Urgent and Critical vegetation clearance distances are defined as:

Line Voltage (kV)	Urgent	Critical
69	<3 feet	3 to 10 feet
115 to 138	<12 feet	12 to 15 feet
230 to 345	<16 feet	16 to 20 feet
500	<20 feet	20 to 25 feet
<b>Important (I)</b>	Vegetation conditions that will require corrective action and can be scheduled for corrective action within the near future or an observation that appears suspicious from the air and warrants a closer inspection from the ground to determine its risk category of either Urgent or Critical.	

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MetEd –

Table 1 provides the number and classification of the findings and work status on all BES transmission lines >200 kV, that were the responsibility of the Forestry Specialist for Line 1074

**Table 1 – BES Assessment Summary (>200 kV) for Circuits Assigned to the Forestry Specialist Responsible for the MetEd 1074 Line**

Voltage	Urgent		Critical		Important	
	Findings	Worked	Findings	Worked	Findings	Worked
500 kV	1	1	11	11	37	37
230 kV	8	8	22	22	103	103
Totals	9	9	33	33	140	140

Total Findings: 182

Total Worked: 182

The following Table 2 provides the number and classification of the findings and work status of the 1004, 1073 and 1074 corridors foot patrol results.

**Table 2 – Foot Patrol Results for 1004, 1073 and 1074 Transmission Corridors**

Voltage	Urgent		Critical		Important	
	Findings	Worked	Findings	Worked	Findings	Worked
230 kV	4	4	9	9	2	2
Totals	4	4	9	9	2	2

Total Findings: 15

Total Worked: 15

Table 3 provides the number and classification of the findings and work status of the 69 kV and 115 kV transmission corridor inspections for Reading, Easton, and Lebanon districts of the Forestry Specialist for Line 1074 and contracted tree vendor in question.

**Table 3 – Assessment Summary (115 kV and below) for Circuits Assigned to the Forestry Specialist Responsible for the MetEd 1074 Line**

Voltage	Urgent		Critical		Important	
	Findings	Worked	Findings	Worked	Findings	Worked
115kV	6	6	10	10	9	9
69kV	20	20	166	166	77	77
Totals	26	26	176	176	86	86

Total Findings: 288

Total Worked: 288

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Table 4 provides the number and classification of the findings and work status of the MetEd's York district 230 kV and 500 kV corridors.

**Table 4 – Assessment Summary (>200 kV) for Circuits in MetEd's York District**

Voltage	Urgent		Critical		Important	
	Findings	Worked	Findings	Worked	Findings	Worked
500 kV	0	0	0	0	0	0
230 kV	0	0	2	2	3	3
Totals	0	0	2	2	3	3

Total Findings: 5

Total Worked: 5

Table 5 provides the number and classification of the findings, and work status of 80 herbicide refusal locations from 2009 and 2010 for the Reading, Easton, and Lebanon districts' 230 kV corridors, which include Line 1074.

**Table 5 – Herbicide Refusal Assessment Summary (230 kV) for MetEd Circuits in the Reading, Easton and Lebanon Districts**

Refusal Year	Urgent		Critical		Important	
	Findings	Worked	Findings	Worked	Findings	Worked
2010 (230kV)	0	0	5	5	18	18
2009 (230kV)	0	0	3	3	7	7
Totals	0	0	8	8	25	25

Total Findings: 33

Total Worked: 33

## ATSI

Table 6 provides the number and classification of the findings and work status for the additional flights on a sample of ATSI Transmission Facilities in Ohio Edison Company, The Cleveland Electric Illuminating Company and Pennsylvania Power Company.

**Table 6 – Assessment Summary (69 kV thru 345 kV) for ATSI Circuits**

Voltage	Urgent		Critical		Important	
	Findings	Worked	Findings	Worked	Findings	Worked
345 kV	0	0	1	1	9	9
138 kV	3	3	13	13	12	12
69 kV	0	0	5	5	11	11
Totals	3	3	19	19	32	32

Total Findings: 54

Total Worked: 54

## Penelec

July 19-24, 2010 – All 230 kV, 345 kV and 500 kV corridors were 100% aerial patrolled in Penelec territory by the Regional Operations Supervisor-PA/NJ. This patrol was intended to review each of the Forestry Specialist’s region of responsibility and contractor adherence to specifications.

- 230 kV lines include ALT, ESEE, ETH, EED, GS, ETP, FE, GES, GF, GW, GFL, HCH, HCJ, HCS, JA, KHC, LM, LY2, RL, SET, SHM, SHS, SJ, SL and SR
- 345 kV lines include HE, WEW, EWO and ESEW
- 500 kV lines include 5003, 5004A, 5004B, 5004C, 5005 and 5006

Table 7 provides the number and classification of the Penelec findings and work status.

**Table 7 – Assessment Summary (> 200 kV) for Penelec Circuits**

Voltage	Urgent		Critical		Important	
	Findings	Worked	Findings	Worked	Findings	Worked
500 kV	0	0	1	1	1	1
230 kV	1	1	12	12	30	30
345 kV	0	0	0	0	8	8
Totals	1	1	13	13	39	39

Total Findings: 53

Total Worked: 53

Important Note: In the Event Analysis Report provided as Attachment A, Extent of Condition, the table summary of total findings and total worked showed 55 instances; however the correct number is 53 which is the detailed table total shown above.

## **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.

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1. Revise the existing TVMP and associated documents and procedures to be more efficient, clear, and concise.
  - a. Consolidate and streamline all program documents to improve clarity for MetEd staff and external contractors.
  - b. Incorporate program language that stresses the expectation to exercise legal rights and options regarding herbicide work refusals.
  - c. Revise existing forms used in the TVMP process.
    - Forestry Work Refusal form 418.1
    - Work Inspection Report form 1051
2. Schedule and conduct periodic observations of field conditions by FirstEnergy management (supervisors and above) to ensure the continued effectiveness of the TVMP and its implementation.
  - a. Include this requirement into the FirstEnergy Performance Objectives of Transmission Vegetation Management supervisory personnel.

Establish the observation criteria, train the management staff, implement, and document periodic field observations of in-progress Forestry Specialist and field contractor work activities.

3. Develop, perform, and document an assessment, through knowledge checks or required reading lists, of each applicable forestry specialist and contracted forestry specialist, to reinforce performance expectations and understand actual knowledge and capabilities of current in-house and contracted field personnel who implement the TVMP.
  - a. As of February 22, 2011, Transmission Vegetation Management staff conducted kickoff meetings with all vegetation line clearance contractor supervision and work planners to reinforce expectations and communicate requirements of the TVMP. At the completion of the kickoff meetings all participants took a knowledge test and were assigned required readings with the objective of enhancing their understanding and knowledge of the TVMP. Work continues to be completed on this mitigation action effort.
4. Establish and document a formal training program for new hires, existing vegetation management staff personnel and contracted forestry specialists.
5. Review and modify the current contract language for 2011 and beyond.  
**Action Completed: January 18, 2011**

MetEd reviewed and modified the current contract language for 2011 and beyond. The modification includes incorporating vegetation management contractor

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incentives and contractor penalties to respectively encourage and hold contractors accountable for proactively identifying and mitigating vegetation conditions that may impact the performance and reliability of the bulk electric system. The Contractor's compliance with the contract terms will be the basis of whether an incentive or a penalty, up to and including termination of the contract, will apply.

## 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.

MetEd is in full compliance with FAC-003 as a result of completing the immediate corrective actions. The detailed extent of condition review and corresponding actions completed, described in Section C3 of this Mitigation Plan, provide further assurance of comprehensive vegetation management results. MetEd has begun implementation of the Mitigation Plan content described in Section D and all items will be fully implemented by June 30, 2011.

- 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*
<p>D.1-1: Revise the TVMP and associated documents through consolidation and streamlining of all program documents to provide clarity for staff and External Contractors.</p> <ul style="list-style-type: none"> <li>○ Incorporate program language that stresses expectation to exercise legal rights and options regarding herbicide work refusals.</li> <li>○ Revise existing forms used in the TVMP process. Forestry Work Refusal form 418.1 Work Inspection form 1051</li> </ul>	<p style="text-align: right;">Forestry Work Refusal Form 418.1 Completed January 14, 2011 Deadline to complete remaining work: June 30, 2011</p>

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

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Key Milestone Activity	Proposed/Actual Completion Date*
D.1-2: Establish, schedule the field observations conducted by Management (supervisors and above) to review in-progress Forestry Specialist and field contractor work activities to ensure the continued effectiveness of the TVMP and its implementation.	June 30, 2011
D.1-3: Establish the criteria and schedule performing an assessment of each applicable forestry specialist and contracted forestry specialist to reinforce performance expectations and understand actual knowledge and capabilities of current in-house and contracted field personnel who implement the TVMP.	June 30, 2011
D.1-4: Develop and schedule formal training program for new hires, existing vegetation management staff personnel and contracted forestry specialists.	June 30, 2011
D.1-5: Review and modify the current contract language for 2011 and beyond.	January 18, 2011 - Completed

(\* 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.

The Transmission Operations group conducted a Study Network Contingency Analysis for June 15, 2010, the day of the 1074 Line vegetation encroachment discovery, (provided as Attachment A in Request For Information dated August 25, 2010 - Docket Number RFC201000455 - Question 36). The result of this analysis is calculated by the program using a snapshot of real-time conditions and then removing the 1074 Line from service simulating the loss of the 1074 Line. These results demonstrate conclusively that there would have been no operations criteria or voltage limit violations had the 1074 Line actually tripped. With this information, MetEd determined that there was no threat to the bulk electric system as a result of the vegetation encroachment on the 1074 Line.

As a direct result of MetEd completing the immediate actions at the time of the event and the detailed extent of condition review that MetEd performed afterward, both described in Section C3 of this Mitigation Plan, there are no known or anticipated risks.

### **Prevention of Future BPS Reliability Risk**

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 event that occurred in Metropolitan Edison Company's ("MetEd's") right-of-way ("ROW") due to vegetation encroaching beyond allowed radial clearances did not cause or result in a fault, outage, electrical disturbance, or operation of any protective equipment on the MetEd BES or on any other electric system.

The successful completion of the Mitigation Plan will assure that the potential for human error to adversely affect TVMP implementation is minimized thereby reducing the risk to the reliability of the BES. The Mitigation Plan involves conducting periodic reviews of in-progress work activities of the Forestry Specialist and field contractor work activities by management (supervisors and

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above) to ensure the continued effectiveness of the TVMP and its implementation. Additionally a formal assessment of each applicable forestry specialist and contracted forestry specialist will be performed to reinforce performance expectations and assure there is understanding and actual knowledge and capabilities of current in-house and contracted field personnel who implement the TVMP. Establishing and documenting a formal training program for new hires, existing vegetation management staff personnel and contracted forestry specialists will ensure that forestry specialist and designated contractor personnel are provided with the necessary skills to demonstrate their proficiency in the execution of the newly revised and streamlined TVMP. These reviews and assessments are an ongoing part of executing the TVMP.

By June 30, 2011 items D.1.1 through D.1.5 under the Mitigation Plan Content will be completed.



**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 ReliabilityFirst 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 Director, FERC Compliance.
  - 2. I am qualified to sign this Mitigation Plan on behalf of Metropolitan Edison Company.
  - 3. I have read and am familiar with the contents of this Mitigation Plan.
  - 4. Metropolitan Edison Company agrees to comply with, this Mitigation Plan, including the timetable completion date, as accepted by ReliabilityFirst and approved by NERC.

**Authorized Individual Signature** Robert R. Mattiuz, Jr

Name (Print): Robert R. Mattiuz, Jr.  
Title: Director, FERC Compliance  
Date: May 13, 2011

**Section G: Regional Entity Contact**

Please direct completed forms or any questions regarding completion of this form to the ReliabilityFirst Compliance e-mail address [mitigationplan@rfirst.org](mailto: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 ReliabilityFirst Compliance Staff member is available for questions regarding the use of this form. Please see the contact list posted on the ReliabilityFirst Compliance web page.



## Attachment A – Compliance Notices & Mitigation Plan Requirements

- I. Section 6.2 of the CMEP<sup>1</sup> 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 ReliabilityFirst and approval by NERC.
- III. This Mitigation Plan is submitted to ReliabilityFirst 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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<sup>1</sup> "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 ReliabilityFirst website.

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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	<i>Raymond J. Palmieri</i>	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 <a href="mailto:compliance@rfirst.org">compliance@rfirst.org</a> to <a href="mailto:mitigationplan@rfirst.org">mitigationplan@rfirst.org</a>	7/11/08

**Attachment b**

**MetEd's Certification of Mitigation Plan  
Completion for FAC-003-1 R2 submitted July  
29, 2011**

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## Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for ReliabilityFirst Corporation to verify completion of the Mitigation Plan. ReliabilityFirst Corporation may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

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Registered Entity Name: **Metropolitan Edison Company**

NERC Registry ID: **NCR00821**

Date of Submittal of Certification: **July 29, 2011**

NERC Violation ID No(s): **RFC201000455**

Reliability Standard and the Requirement(s) of which a violation was mitigated: **FAC-003-1, Requirement 2**

Date Mitigation Plan was scheduled to be completed per accepted Mitigation Plan: **June 30, 2011**

Date Mitigation Plan was actually completed: **June 30, 2011**

- o Additional Comments (or List of Documents Attached): **Explanation and documentation of completion of all required actions is included in the attached pdf file.**

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I certify that the Mitigation Plan for the above named violation has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: **William J. Boyd**

A handwritten signature in black ink, appearing to read "WJ Boyd".

Title: **Director, Vegetation Management**

Email: **wjboyd@firstenergycorp.com**

Phone: **330-384-5819**

Authorized Signature

A handwritten signature in black ink, appearing to read "WJ Boyd".

Date **7/29/2011**



Please direct completed forms or any questions regarding completion of this form to the ReliabilityFirst Compliance e-mail address [mitigationplan@rfirst.org](mailto: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 ReliabilityFirst Compliance Staff member is available for questions regarding the use of this form. Please see the contact list posted on the ReliabilityFirst Compliance web page.

**DOCUMENT CONTROL**

**Title:** Certification of Mitigation Plan Completion  
**Issue:** Version 1  
**Date:** 5 January 2008  
**Distribution:** Public  
**Filename:** Certification of a Completed Mitigation Plan\_Ver1.doc  
**Control:** Reissue as complete document only

**DOCUMENT APPROVAL**

Prepared By	Approved By	Approval Signature	Date
Robert K. Wargo Manager of Compliance Enforcement	Raymond J. Palmieri Vice President and Director Compliance	<i>Raymond J. Palmieri</i>	1/5/2009

**DOCUMENT CHANGE/REVISION HISTORY**

Version	Prepared By	Summary of Changes	Date
1.0	Robert K. Wargo	Original Issue	1/5/2009



**DOCUMENT CONTROL**

**Title:** Certification of Mitigation Plan Completion  
**Issue:** Version 1  
**Date:** 5 January 2008  
**Distribution:** Public  
**Filename:** Certification of a Completed Mitigation Plan\_Ver1.doc  
**Control:** Reissue as complete document only

**DOCUMENT APPROVAL**

<b>Prepared By</b>	<b>Approved By</b>	<b>Approval Signature</b>	<b>Date</b>
Robert K. Wargo Manager of Compliance Enforcement	Raymond J. Palmieri Vice President and Director Compliance	<i>Raymond J. Palmieri</i>	1/5/2009

**DOCUMENT CHANGE/REVISION HISTORY**

<b>Version</b>	<b>Prepared By</b>	<b>Summary of Changes</b>	<b>Date</b>
1.0	Robert K. Wargo	Original Issue	1/5/2009

**Attachment c**

**ReliabilityFirst's Verification of Mitigation  
Plan Completion for FAC-003-1 R2 dated  
August 22, 2011**

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<b>In re: METROPOLITAN EDISON</b>	)	<b>Docket No. RFC201000455</b>
<b>COMPANY</b>	)	
	)	
NERC Registry ID No. NCR00821	)	NERC Reliability Standard:
	)	FAC-003-1, Requirement 2
	)	

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**VERIFICATION OF MITIGATION PLAN COMPLETION  
FOR MIT-10-3660**

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**I. RELEVANT BACKGROUND**

On August 23, 2010 Metropolitan Edison Company (“MetEd”) self-reported a possible violation of Reliability Standard FAC-003-1, R2.<sup>1</sup> MetEd allowed vegetation to encroach into the right-of-way of Line 1074 beyond allowed radial clearances pursuant to Reliability Standard FAC-003-1, R2 and beyond criteria described in MetEd’s Transmission Vegetation Management Program (“TVMP”).<sup>2</sup> On June 15, 2010, MetEd’s representatives learned that vegetation had encroached into the Clearance 2 radial clearance zone between towers 126 and 128 in the Line 1074 230kV corridor.<sup>3</sup> The encroachment did not result in an outage of any type.

Following the encroachment, FirstEnergy performed the following mitigating actions. First, FirstEnergy removed the vegetation that breached the Clearance 2 radial zone. Second, FirstEnergy conducted foot patrols and aerial patrols of the transmission lines for which the Forestry Specialist associated with Line 1074 had responsibility. Third, FirstEnergy conducted foot patrols of certain areas associated with herbicide refusal records. Fourth, FirstEnergy conducted aerial patrols on sample transmission corridors within Ohio Edison Company, the Cleveland Electric Illuminating Company, and Pennsylvania Power Company. Fifth, FirstEnergy completed aerial patrols of 100% of its transmission corridors greater than 200kV within Penelec. FirstEnergy represents that none of the vegetation conditions found during these actions conflicted with the clearance requirements mandated by Reliability Standard FAC-003-1 or its TVMP.

After reporting the foregoing to ReliabilityFirst, FirstEnergy submitted a proposed mitigation plan to ReliabilityFirst on May 4, 2011. In this mitigation plan, FirstEnergy committed to complete all of its mitigating actions by June 30, 2011. ReliabilityFirst accepted this mitigation plan, designated MIT-10-3660, on May 13, 2011, and NERC approved the mitigation plan on June 9, 2011.

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<sup>1</sup> MetEd is a subsidiary of FirstEnergy Corp. (“FirstEnergy”) and shares certain transmission vegetation management services and associated employees with other affiliates of FirstEnergy.

<sup>2</sup> MetEd abides by FirstEnergy’s FERC Reliability and Compliance policy and implements FirstEnergy’s TVMP.

<sup>3</sup> The required Clearance 2 zone for 230 kV is 5.14 feet.

## II. MITIGATION PLAN COMPLETION REVIEW PROCESS

On July 29, 2011, FirstEnergy certified that it completed the mitigation plan associated with FAC-003-1, R2 as of June 30, 2011. ReliabilityFirst requested and received evidence of completion for the actions FirstEnergy took as specified in the mitigation plan. ReliabilityFirst performed an in depth review of the information FirstEnergy provided to verify that FirstEnergy successfully completed all actions specified in the mitigation plan.

### A. Evidence Reviewed per Standard and Requirement.

	<u>Evidence Reviewed</u>	<u>Applicable Standard and Requirement</u>
1.	<b>FirstEnergy FAC-003-1 Mitigation Plan Certification Package_Final_7-29-11.PDF Revision July 29, 2011</b>	<b>FAC-003-1, Requirement 2</b>

### B. Verification of Mitigation Plan Completion.

Reliability Standard FAC-003-1, R2 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.

#### ***Pages 22 – 57 of the FirstEnergy FAC-003-1 Mitigation Plan Certification Package\_Final\_7-29-11***

FirstEnergy includes its TVMP, Revision 6, dated June 30, 2011, on pages 22 through 57 of the Mitigation Plan Certification Package. FirstEnergy revised its TVMP and associated documents to be more clear, concise, and efficient in addressing FAC-003-1, R2. FirstEnergy addresses the annual work plan in Section 7 of the TVMP. FirstEnergy

addresses the vegetation management methods in Section 7.1 of the TVMP. FirstEnergy addresses the flexibility of the annual work plan in Section 7.2 of the TVMP and addresses the annual work plan adjustments, tracking, and documentation in Section 7.3. FirstEnergy addresses landowner and regulatory authority notifications in Section 7.4 of the TVMP. FirstEnergy addresses the systems and procedures for tracking the transmission vegetation management work in Section 7.5 of the TVMP. Finally, FirstEnergy addresses the transmission vegetation management work verification in Section 7.6 of the TVMP.

**Pages 59 – 83 of the *FirstEnergy FAC-003-1 Mitigation Plan Certification Package\_Final\_7-29-11***

FirstEnergy includes its field observation program on pages 59 through 83 of the Mitigation Plan Certification Package. FirstEnergy management (supervisors and above) will conduct the field observation program and will review in-progress forestry specialist and contractor work activities to ensure the continued effectiveness and implementation of the TVMP.

**Pages 85 – 201 of the *FirstEnergy FAC-003-1 Mitigation Plan Certification Package\_Final\_7-29-11***

FirstEnergy includes the established criteria and assessment of each applicable forestry specialist and contracted forestry specialists on pages 85 through 201 of the Mitigation Plan Certification Package. These established criteria will help FirstEnergy reinforce performance expectations and understand the capabilities and knowledge of current in-house and contracted personnel who implement FirstEnergy's TVMP.

**Pages 204 – 292 of the *FirstEnergy FAC-003-1 Mitigation Plan Certification Package\_Final\_7-29-11***

FirstEnergy includes the details of its TVMP training program for new hires, existing vegetation management personnel and contracted forestry specialists on pages 204 through 292 of the Mitigation Plan Certification Package.

### III. CONCLUSION

ReliabilityFirst reviewed the evidence FirstEnergy submitted in support of its Certification of Completion. This evidence demonstrates FirstEnergy successfully completed the mitigating activities in the mitigation plan associated with FAC-003-1, R2.

ReliabilityFirst hereby verifies that FirstEnergy completed the mitigation plan associated with the alleged violation of the aforementioned Reliability Standard in accordance with its terms and conditions.

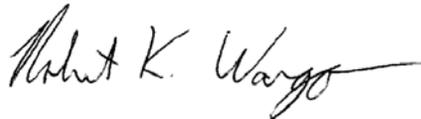
**Accepted:**



Carl J. Dister  
Senior Enforcement Engineer  
ReliabilityFirst Corporation

Date: August 16, 2011

**Approved:**



Robert K. Wargo  
Director, Enforcement & Regulatory Affairs  
ReliabilityFirst Corporation

Date: August 22, 2011

**Attachment d**

**Notice of Filing**

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Metropolitan Edison Company

Docket No. NP11-\_\_\_\_-000

NOTICE OF FILING  
September 30, 2011

Take notice that on September 30, 2011, the North American Electric Reliability Corporation (NERC) filed a Notice of Penalty regarding Metropolitan 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](mailto:FERCOnlineSupport@ferc.gov), or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Comment Date: [BLANK]

Kimberly D. Bose,  
Secretary