



NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

June 2, 2010

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

**Re: NERC Notice of Penalty regarding Exelon Generation Company, LLC - Exelon Nuclear
FERC Docket No. NP10-_-000**

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty¹ regarding Exelon Generation Company, LCC - Exelon Nuclear (Exelon Nuclear), NERC Registry ID# NCR00778,² in accordance with the Federal Energy Regulatory Commission's (Commission or FERC) rules, regulations and orders, as well as NERC Rules of Procedure including Appendix 4C (NERC Compliance Monitoring and Enforcement Program (CMEP)).³

On January 7, 2009, Exelon Nuclear self-reported to ReliabilityFirst Corporation (ReliabilityFirst) Exelon Nuclear's possible non-compliance with VAR-002-1 Requirement (R) 1 for Exelon Nuclear's failure to notify its Transmission Operator before taking voltage regulators out of automatic mode. This Notice of Penalty is being filed with the Commission because ReliabilityFirst and Exelon Nuclear have entered into a Settlement Agreement to resolve all outstanding issues arising from a preliminary and non-public assessment resulting in

¹ *Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards* (Order No. 672), III FERC Stats. & Regs. ¶ 31,204 (2006); *Notice of New Docket Prefix "NP" for Notices of Penalty Filed by the North American Electric Reliability Corporation*, Docket No. RM05-30-000 (February 7, 2008). See also 18 C.F.R. Part 39 (2010). *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).

² ReliabilityFirst Corporation confirmed that Exelon Nuclear was included on the NERC Compliance Registry as a Generator Owner (GO) and a Generator Operator (GOP) on May 30, 2007. As a Generator Operator, Exelon Nuclear is subject to the requirements of NERC Reliability Standard VAR-002-1. In addition, Exelon Nuclear was also registered as a Generator Owner as of May 31, 2007 and Generator Operator as of May 31, 2008 in the SERC Reliability Corporation region.

³ See 18 C.F.R. § 39.7(c)(2).

ReliabilityFirst's determination and findings of the enforceable violation⁴ of VAR-002-1 R1.⁵ According to the Settlement Agreement, Exelon Nuclear neither admits nor denies the violation, but has agreed to the proposed penalty of ten thousand dollars (\$10,000) to be assessed to Exelon Nuclear, 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 RFC200900109 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 December 18, 2009, by and between ReliabilityFirst and Exelon Nuclear, which is included as Attachment b. 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 2010), 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 (\$)
Reliability First Corporation	Exelon Generation Company, LCC - Exelon Nuclear	NOC-440	RFC200900109	VAR-002-1 ⁶	1	Medium	10,000

VAR-002-1

The purpose of Reliability Standard VAR-002-1 is to ensure generators provide reactive and voltage control necessary to ensure voltage levels, reactive flows, and reactive resources are maintained within applicable Facility Ratings to protect equipment and the reliable operation of the Interconnection.

VAR-002-1 R1 requires that "The Generator Operator shall operate each generator connected to the interconnected transmission system in the automatic voltage control mode (automatic voltage

⁴ At the time of the Settlement Agreement these violations were alleged violations. For purposes of this document, the violations at issue are described as "violations," regardless of their procedural posture and whether they were possible, alleged, or confirmed violations.

⁵ ReliabilityFirst did not issue a Notice of Alleged Violation and Proposed Penalty or Sanction for these violations prior to entering into settlement discussions.

⁶ VAR-002-1 was enforceable from June 18, 2007 through August 27, 2008. VAR-002-1a was approved by the Commission and became enforceable on August 28, 2008. VAR-002-1.1a is the current enforceable Standard as of May 13, 2009. The subsequent interpretations provide clarity regarding the responsibilities of a registered entity and do not change the meaning or language of the original NERC Reliability Standard and its requirements. For consistency in this filing, the original NERC Reliability Standard, VAR-002-1, is used throughout.

regulator in service and controlling voltage) unless the Generator Operator has notified the Transmission Operator.”

VAR-002-1 R1 has a “Medium” Violation Risk Factor (VRF). The violation applies to Exelon Nuclear’s Generator Operator function.

According to the Settlement Agreement, Exelon Nuclear submitted a Self-Report to ReliabilityFirst dated January 7, 2009, in which Exelon Nuclear identified an instance that occurred on November 28, 2008 where it failed to notify its Transmission Operator, PJM, that the Automatic Voltage Regulator (AVR) equipment at Three Mile Island was briefly taken out of automatic voltage control mode for testing.⁷

Further investigation by Exelon Nuclear identified five additional occasions when, during quarterly surveillance tests at Three Mile Island, notice of the voltage regulator being placed in ‘Manual’ mode was not provided to the Transmission Operator. These five instances occurred on August 31, 2007, December 1, 2007, February 29, 2008, May 30, 2008, and August 29, 2008. Exelon Nuclear reported the AVR was placed in ‘Manual’ mode for approximately 10 minutes during the aforementioned tests.

Additionally, a logbook review revealed three additional instances where Exelon Nuclear failed to notify PJM that the AVR had been placed in ‘Manual’ mode. On two occasions, Exelon Nuclear failed to notify PJM that the AVR had been placed in ‘Manual’ mode, and, on the third occasion, Exelon Nuclear notified PJM of the change but did not do so within 30 minutes as required by the Standard. The two missed notifications occurred at Limerick Generating Station Unit 1 on November 1, 2007 and November 7, 2007. The voltage regulator was placed in ‘Manual’ mode for 5 minutes and for 133 hours, 43 minutes respectively. The untimely notification instance occurred at Peach Bottom Atomic Power Station Unit 2 on October 21, 2008, when the voltage regulator was placed in ‘Manual’ for 151 minutes (just over 2.5 hours) prior to notification. On each occasion, the stations placed the voltage regulator in ‘Manual’ to address generator volt-ampere reactive (VAR) swings or fluctuations caused by plant equipment.

ReliabilityFirst determined that Exelon Nuclear had a violation of VAR-002-1 R1 because Exelon Nuclear failed to notify its Transmission Operator before taking voltage regulators out of automatic voltage control mode in multiple instances.

According to the Settlement Agreement, ReliabilityFirst determined the duration of the violation to be from August 31, 2007, the first date Exelon Nuclear took its AVR out of automatic voltage control mode, through September 18, 2009, when Exelon Nuclear completed its Mitigation Plan.

ReliabilityFirst determined that the violation of VAR-002-1 R1 did not pose a serious or substantial risk to the reliability of the bulk power system (BPS) because all but one of the time periods when the AVR was placed in ‘Manual’ mode were limited in duration. During the one instance where the AVR was in ‘Manual’ mode for a longer time period (133 hours, 43 minutes), Exelon Nuclear was aware that the AVR was in ‘Manual’ mode, was in communication with its

⁷ The Self-Report incorrectly states non-compliance with R3.1 of the Standard,

Transmission Owner, and was maintaining the applicable voltage schedule manually. Moreover, Exelon Nuclear was monitoring and controlling the AVR for all the other instances as well, because all instances involved either Exelon Nuclear addressing fluctuations in VAR swings, or Exelon conducting voltage relay tests where the automatic voltage regulator equipment was placed in manual mode for approximately ten minutes to verify operability of the manual regulator and the relay that controls transfer between auto and manual.

Regional Entity's Basis for Penalty

According to the Settlement Agreement, ReliabilityFirst has assessed a penalty of ten thousand dollars (\$10,000) for the referenced violation. In reaching this determination, ReliabilityFirst considered the following factors: (1) the violation constituted Exelon Nuclear's first occurrence of violation of NERC Reliability Standards; (2) Exelon Nuclear self-reported the non-compliance; (3) ReliabilityFirst reported that Exelon Nuclear was cooperative throughout the compliance enforcement process; (4) the quality of the Exelon Nuclear compliance program;⁸ (5) there was no evidence of any attempt to conceal a violation nor evidence of intent; and (6) the violation did not pose a serious or substantial risk to the BPS, as stated above.

After consideration of the above factors, ReliabilityFirst determined that, in this instance, the penalty amount of ten thousand dollars (\$10,000) is appropriate and bears a reasonable relation to the seriousness and duration of the violation.

Status of Mitigation Plan⁹

Exelon Nuclear's Mitigation Plan to address its violation of VAR-002-1 R1 was submitted to ReliabilityFirst on May 18, 2009 with a proposed completion date of September 30, 2009. The Mitigation Plan was accepted by ReliabilityFirst on May 22, 2009 and approved by NERC on June 17, 2009. The Mitigation Plan for this violation is designated as MIT-07-1757 and was

⁸ According to the Settlement Agreement, ReliabilityFirst found noteworthy and commendable certain aspects of Exelon Nuclear's compliance program including that executive and senior management are key participants in the corporate level and individual business unit oversight of the program. Their involvement ensures the availability of needed resources to accomplish tasks. For the Nuclear Business Unit, *i.e.*, Exelon Nuclear, the overall responsibility for NERC Compliance resides with the Registered Officer who is the Vice President of Licensing and Regulatory Affairs and is a member of the Steering Committee. Other Steering Committee members from the Nuclear Business Unit in senior management include the Director of Engineering and the Director of Licensing. The Corporate program is designed to ensure continuous improvement to prevent reoccurrence of any actual or potential violations. Exelon Nuclear's NERC Compliance Management team and the business unit implementation personnel accomplish this objective through the process of evaluating implementation efforts and compliance status and the setting of goals around program improvements. Additionally, informal reviews are conducted any time an issue or question is raised around compliance obligations and for some of the more complex requirements. These reviews are utilized to identify any possible gaps to prevent a violation in the first instance and to inform program improvements to prevent reoccurrence of issues. Further, the Nuclear Business Unit utilizes the Exelon Corrective Action Program (CAP) that provides direction on the resolution and documentation of undesirable conditions. The CAP procedures provide personnel direction for using CAP to investigate and take appropriate corrective actions to address identified conditions as appropriate.

⁹ See 18 C.F.R § 39.7(d)(7).

submitted as non-public information to FERC on July 7, 2009¹⁰ in accordance with FERC orders.

Exelon Nuclear's Mitigation Plan required Exelon Nuclear to:

1. confirm that Three Mile Island's quarterly test was a legacy test and to verify that no other Exelon Nuclear site performs a quarterly test on the AVR;
2. revise all applicable site-specific procedures to ensure VAR-002-1 requirements are addressed;
3. disseminate to all operations personnel an information package that provides additional guidance on mandatory NERC compliance;
4. review site-specific procedures for appropriate guidance, including requirements for logging notifications when placing the AVR in 'Manual' mode;
5. complete a review of operator logs at each Exelon nuclear station to identify any similar occurrences of placing the voltage regulator in 'Manual' mode without appropriate notification to the Transmission Operator;
6. complete an investigation to determine the cause of the problem and establish corrective actions;
7. issue a formal communication to increase awareness of VAR-002-1 notification requirements;
8. perform a training analysis to assess the need for additional operations training on NERC compliance;
9. evaluate scope of additional operations training across the nuclear fleet;
10. develop a fleet lesson plan for NERC Standards applicable to operations; and
11. confirm that each Nuclear Regulatory Commission licensed operator in the Exelon Nuclear fleet has completed the NERC compliance training module.

Exelon Nuclear certified on September 29, 2009 that the above Mitigation Plan requirements were completed on September 18, 2009. As evidence of completion of its Mitigation Plan, Exelon Nuclear submitted the following:

1. revised procedures for Exelon Nuclear's plants including, but not limited to, the following procedures:
 - *Exelon Nuclear Voltage Regulator Auto/Manual Transfer Relay Test*, OP-TM-301-362, Revision 1, dated March 3, 2009
 - *Exelon Nuclear Unit Load Changes*, OP-AA-102-101, Revision 5, dated July 21, 2009

¹⁰ The Mitigation Plan designated as MIT-07-1757 and was originally submitted as non-public information to FERC on June 19, 2009 in accordance with FERC orders. NERC resubmitted MIT-07-1757 as non-public information to FERC on July 7, 2009 to correct the name of the Registered Entity as AmerGen Energy Company, LLC, the Registered Entity's name at the time of the violation, and was subsequently bought out by Exelon Generation Company, LLC - Exelon Nuclear.

2. administrative procedures for AVR notifications and outage coordination requirements for Exelon Nuclear's nine stations within the ReliabilityFirst region including, but not limited to:
 - *Exelon Nuclear Interface Agreement Between Exelon Energy Delivery and Exelon Generation for Switchyard Operations*, OP-AA-108-107-1002, Revision 4, dated January 31, 2008
 - *Exelon Nuclear Interface Between FirstEnergy Between FirstEnergy/JCP&L and Exelon Generation for OC Switchyard Operations*, OP-OC-108-107-1002, Revision 7, dated November 24, 2008
 - *Exelon Nuclear TMI Switchyard Operations*, OP-TM-108-107-1002, Revision 2, dated September 30, 2008
3. its newly developed training module, *Exelon Nuclear Document Based Instruction Guide NERC Module*, TQ-AA-223-F070, Revision 1, dated May 22, 2009 which provided training on the documentation changes to the plant operators with its documentation revisions;
4. training slides titled *Exelon Generation, NERC Mandatory Reliability Standards, Nuclear Compliance Program, Operations Module* and a course attendance list, as evidence that the plant operators received the appropriate training.. This same training was also provided to Exelon employees who enter information into the outage coordination system used by its Transmission Operator and Reliability Coordinator.
5. examples from various plants that the new process was in place and being used by Exelon employees through the submission of Operators Narrative Logs and screen shots of market and outage coordination application entries.

On November 18, 2009, after reviewing Exelon Nuclear's submitted evidence, ReliabilityFirst verified that Exelon Nuclear's Mitigation Plan was completed on September 18, 2009 and that Exelon Nuclear was in compliance with VAR-002-1 R1.

Statement Describing the Proposed Penalty, Sanction or Enforcement Action Imposed¹¹

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 and October 26, 2009 Guidance Orders,¹² the NERC BOTCC reviewed the Settlement Agreement and supporting documentation on April 12, 2010. The NERC BOTCC approved the Settlement Agreement, including ReliabilityFirst's imposition of a financial penalty, assessing a penalty of ten thousand dollars (\$10,000) against Exelon Nuclear and other actions to facilitate future compliance required under the terms and conditions of the Settlement Agreement. In approving the Settlement Agreement, the NERC

¹¹ See 18 C.F.R § 39.7(d)(4).

¹² *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 Filing of Reliability Notices of Penalty," 129 FERC ¶ 61,069 (2009).

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 Exelon Nuclear's first occurrence of violation of NERC Reliability Standards;
2. Exelon Nuclear self-reported the violation and upon learning of the first instance, performed an investigation of all of Exelon's nuclear facilities;
3. ReliabilityFirst reported that Exelon Nuclear was cooperative throughout the compliance enforcement process;
4. the quality of the Exelon Nuclear compliance program, as discussed above;
5. there was no evidence of any attempt to conceal a violation nor evidence of intent to do so; and
6. the violation did not pose a serious or substantial risk to the BPS, as discussed above.

For the foregoing reasons, the NERC BOTCC approves the Settlement Agreement and believes that the proposed penalty of ten thousand dollars (\$10,000) is appropriate for the violation and circumstances in question, and is consistent with NERC's goal to promote and ensure reliability of the BPS.

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

Attachments to be Included as Part of this Notice of Penalty

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

- a) Exelon Nuclear's Self-Report for VAR-002-1 dated January 7, 2009, included as Attachment a;
- b) Settlement Agreement by and between ReliabilityFirst and Exelon Nuclear executed December 18, 2009, included as Attachment b with attachments to the Settlement Agreement as follows:
 1. Exelon Nuclear's Mitigation Plan designated as MIT-07-1757 for VAR-002-1 R1 submitted May 18, 2009, included as Attachment a;
 2. Exelon Nuclear's Certification of Completion of the Mitigation Plan for VAR-002-1 R1 submitted September 29, 2009, included as Attachment b; and
 3. ReliabilityFirst's Verification of Completion of the Mitigation Plan for VAR-002-1 R1 dated November 18, 2009, included as Attachment c.

A Form of Notice Suitable for Publication¹³

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

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 David N. Cook* Vice President and General Counsel North American Electric Reliability Corporation 116-390 Village Boulevard Princeton, N.J. 08540-5721 (609) 452-8060 (609) 452-9550 – facsimile gerry.cauley@nerc.net david.cook@nerc.net</p> <p>Alison MacKellar* NERC Compliance Contact Exelon Generation Company, LLC - Exelon Nuclear 4300 Winfield Road Warrenville, Illinois 60555 (630) 657-2817 (630) 657-4327 – facsimile alison.mackellar@exeloncorp.com</p> <p>J. Bradley Fewell* Associate General Counsel Lead Counsel, Exelon Nuclear 4300 Winfield Road Warrenville, Illinois 60555 (630) 657-3769 (630) 657-4335 bradley.fewell@exeloncorp.com</p>	<p>Rebecca J. Michael* Assistant General Counsel Holly A. Hawkins* Attorney North American Electric Reliability Corporation 1120 G Street, N.W. Suite 990 Washington, D.C. 20005-3801 (202) 393-3998 (202) 393-3955 – facsimile rebecca.michael@nerc.net holly.hawkins@nerc.net</p> <p>Timothy R. Gallagher* President & CEO ReliabilityFirst Corporation 320 Springside Drive, Suite 300 Akron, Ohio 44333 (330) 456-2488 (330) 456-5390 – facsimile tim.gallagher@rfirst.org</p> <p>Raymond J. Palmieri* Vice President and Director of Compliance ReliabilityFirst Corporation 320 Springside Drive, Suite 300 Akron, Ohio 44333 (330) 456-2488 (330) 456-5408 – facsimile ray.palmieri@rfirst.org</p>
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¹³ See 18 C.F.R. § 39.7(d)(6).

<p>Keith Jury* Vice President, Licensing and Regulatory Affairs Exelon Generation Company, LLC - Exelon Nuclear 4300 Winfield Road Warrenville, Illinois 60555 (630) 657-2800 (630) 657-4335 – facsimile keith.jury@exeloncorp.com</p> <p>*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>	<p>Robert K. Wargo* Manager of Compliance Enforcement ReliabilityFirst Corporation 320 Springside Drive, Suite 300 Akron, Ohio 44333 (330) 456-2488 (330) 456-5408 – facsimile bob.wargo@rfirst.org</p> <p>Megan E. Gambrel* Compliance Enforcement Specialist ReliabilityFirst Corporation 320 Springside Drive, Suite 300 Akron, Ohio 44333 (330) 456-2488 (330) 456-5408 – facsimile megan.gambrel@rfirst.org</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,

Gerald W. Cauley
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David N. Cook
Vice President and General Counsel
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cc: Exelon Generation Company, LCC - Exelon Nuclear
ReliabilityFirst Corporation

Attachments

Attachment a

**Exelon Nuclear's Self-Report for VAR-002-1 dated
January 7, 2009**



COMPLIANCE MONITORING AND ENFORCEMENT PROGRAM VIOLATION SELF-REPORTING FORM

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

1. **Reliability Standard** (XXX-###-# or XXX-###-RFC-##) VAR-002-1a

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

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

- ☐ Entity is Level 1 Non-Compliance or has Lower VSL for the following: requirement(s): _____ for function(s): _____
- ☐ Entity is Level 2 Non-Compliance or has Moderate VSL for the following: requirement(s): _____ for function(s): _____
- ☒ Entity is Level 3 Non-Compliance or has High VSL for the following: requirement(s): R 3.1 for function(s): GOP
- ☐ Entity is Level 4 Non-Compliance or has Severe VSL for the following: requirement(s): _____ for function(s): _____

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

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

3. **Description of the violation:** Since NERC Standard VAR-002 became effective on August 2, 2007, Automatic Voltage Regulator (AVR) equipment at Three Mile Island (TMI), Unit 1 was briefly taken out of automatic mode for testing in accordance with Exelon Nuclear procedure OP-TM-301-362, "Voltage Regulator Auto/Manual Transfer Relay Test," Revision 0. During each test the equipment is placed in manual mode for approximately ten minutes to verify operability of the manual regulator and the relay that controls transfer between auto and manual. Specifically, on 12/1/08 following the 11/28/08 OP-TM-301-362 test, it was self identified that the Transmission Operator (PJM) was not notified that the equipment had been placed in manual. On further investigation of the issue, it was determined that OP-TM-301-362 is a quarterly surveillance test and that the Transmission Operator (PJM) was not notified that the equipment had been briefly placed in manual during an additional five occurrences.

4. **Additional information:** In addition to the continued investigation and development of the full and formal mitigation plan, certain immediate mitigation actions were implemented. These include: (1) a procedure revision to OP-TM-301-362 to reflect a conservative approach by establishing additional measures to ensure prompt notifications to the Transmission Operator; (2) a full review of the other nuclear stations owned and operated by Exelon Generation/AmerGen¹ to ensure there are no similar conditions at any other station²; and (3) distribution of an informational briefing and a "read-and-sign" to all nuclear stations within the AmerGen and Exelon fleet to reemphasize appropriate communications regarding voltage regulator operation and documentation expectations. A formal mitigation plan is being prepared to document these actions and to implement any other necessary remediation actions to assure full compliance. The formal mitigation plan will be forwarded upon completion.

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

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

Enter NERC Registry ID# NCR00679

Officer's Name: Keith Jury

Officer's Title: Vice President - Licensing and Regulatory Affairs

Officer's e-mail address: keith.jury@exeloncorp.com Phone: (630) 657-2800

Registered Company Name: AmerGen Energy Company, LLC

Primary Compliance Contact/Secondary: Alison Mackellar - NERC Compliance Contact

Email: alison.mackellar@exeloncorp.com Phone: (630) 657-2817 Date: 1/7/09

E-mail Submittals to compliance@rfirst.org Subject Line: Violation Self-Report
For any questions regarding compliance submittals, please e-mail compliance@rfirst.org.

¹ AmerGen is a wholly owned subsidiary of Exelon Generation Corporation but is currently registered separately under the NERC functional model as a GO/GOP.

² This review is still in process. Preliminary results indicate that there are no other similar issues (i.e. insufficient procedural guidance for periodic surveillances) but there may have been one additional instance at another Exelon Nuclear station where notification provided to the TOP was done, but not within thirty minutes. Results of the full review will be provided as a report out on the formal mitigation plan.

Attachment b

**Settlement Agreement by and between
ReliabilityFirst and Exelon Nuclear executed
December 18, 2009**



In re)	
)	
Exelon Generation Company, LLC -)	
Exelon Nuclear)	
)	
)	DOCKET NUMBER
)	
)	RFC200900109
NERC Registry ID # NCR00778)	
)	

**SETTLEMENT AGREEMENT
OF
RELIABILITYFIRST CORPORATION
AND
EXELON GENERATION COMPANY, LLC – EXELON NUCLEAR**

I. INTRODUCTION

1. ReliabilityFirst Corporation (“ReliabilityFirst”) and Exelon Generation Company, LLC (“Exelon Nuclear”) enter into this Settlement Agreement ("Agreement") to resolve all outstanding issues arising from a preliminary and non-public investigation resulting in ReliabilityFirst’s determination and findings, pursuant to the North American Electric Reliability Corporation (“NERC”) Rules of Procedure, of an alleged violation by Exelon Nuclear of the NERC Reliability Standard VAR-002-1, Requirement 1.

II. STIPULATION OF FACTS

2. The facts stipulated herein are stipulated solely for the purpose of resolving between Exelon Nuclear and ReliabilityFirst the matters discussed herein and do not constitute stipulations or admissions for any other purpose. Exelon Nuclear and ReliabilityFirst hereby stipulate and agree to the following:

A. BACKGROUND

3. Exelon Corporation is the second tier parent company of Exelon Nuclear. There are seventeen (17) operating nuclear reactors in the Exelon nuclear fleet at ten separate locations in Illinois, New Jersey and Pennsylvania. Sixteen of the seventeen nuclear reactors are within the jurisdiction of ReliabilityFirst Corporation, for a total of 16,950.7 MW: Braidwood Station Unit 1 (1242 MW) and Unit 2 (1210 MW), Byron Station Unit 1 (1242 MW) and Unit 2 (1210 MW), Dresden Nuclear Power Station Units 2 and 3 (912 MW each), LaSalle County Station Units 1 and 2 (1170 MW each), Limerick Generating Station Units 1 and 2 (1138.5 MW each), Oyster Creek Nuclear Generating Station (640.7 MW), Peach Bottom Atomic Power Station Units 2 and 3 (1152 MW each), Quad Cities Nuclear Power Station Units 1 and 2 (912 MW each) and Three Mile Island Unit 1 (837 MW).
4. ReliabilityFirst staff confirmed that Exelon Generation Company, LLC - Exelon Nuclear is registered on the NERC Compliance Registry as a Generator Owner (GO) and Generator Operator (GOP) in the ReliabilityFirst region with the NERC Registry Identification Number of NCR00778 and is therefore subject to compliance with VAR-002-1, Requirement 1.

B. ALLEGED VIOLATION OF VAR-002-1, Requirement 1 – RFC200900109

5. Requirement 1 of NERC Reliability Standard VAR-002-1 states in part,

“The Generator Operator shall operate each generator connected to the interconnected transmission system in the automatic voltage control mode (automatic voltage regulator in service and controlling voltage) unless the Generator Operator has notified the Transmission Operator.”
6. In the Self-Report submitted by Exelon Nuclear on January 7, 2009, Exelon Nuclear stated, “Since NERC Standard VAR-002 became effective on August 2, 2007, Automatic Voltage Regulator (AVR) equipment at Three Mile Island (TMI), Unit 1 was briefly taken out of automatic mode for testing in accordance with Exelon Nuclear procedure OP-TM-301-362, ‘Voltage Regulator Auto/Manual Transfer Relay Test’, Revision 0. During each test the equipment is placed in manual mode for approximately ten minutes to verify operability of the manual regulator and the relay that controls transfer between auto and manual. Specifically, on [December 1, 2008] following the [November 28, 2008] OP-TM-301-362 test, it was self identified that the Transmission Operator (PJM) was not notified that the equipment had been placed in manual.”
7. In a March 26, 2009 response to a ReliabilityFirst information request letter, Exelon Nuclear provided the following information: “On [December 1, 2008], an Operations Manager at TMI raised a concern to the Exelon Nuclear NERC Compliance Contact regarding notifications that may be required during a routine surveillance test. Previously, on [November 28, 2008], TMI had

performed voltage regulator relay testing which placed the voltage regulator into 'Manual' mode for approximately ten minutes. The purpose of the surveillance test is to verify operability of the voltage regulator and the relay that controls transfer between 'Automatic' and 'Manual.' A review of the TMI log entry for [November 28, 2008] at 9:10 a.m. documented that the Operations team provided notification to FirstEnergy (i.e., the Transmission Owner). However, it was not clear whether the appropriate communications were made to PJM (i.e., the Transmission Operator). FirstEnergy was later contacted and verified that they did not notify PJM...[A]ll communications with PJM are through the Exelon Power Team. The Nuclear Duty Officer (NDO) who was on-shift on [November 28, 2008] during this event and the Power Team Generation Dispatcher were contacted to determine if they were aware of the voltage regulator change of status or if an eDART ticket was entered. It was determined that neither the NDO nor the Power Team Generation Dispatcher was notified by the station; therefore, the status of the TMI voltage regulator was not communicated to PJM.

Further investigation identified that OP-TM-301-362, a quarterly surveillance test, was performed six times at TMI since the VAR-002-1 was implemented ([August 2, 2007]). Notice of the voltage regulator being placed in 'Manual' mode during the test for approximately ten minutes was not provided to PJM on any of these occasions. " Exelon Nuclear included a table as part of its response to the ReliabilityFirst information request which listed each of the six dates on which the Transmission Operator (PJM) was not notified that the equipment had been briefly placed in manual during the voltage regulator relay testing. These instances occurred on August 31, 2007, December 1, 2007, February 29, 2008, May 30, 2008, August 29, 2008, and November 28, 2008 (the date disclosed in the January 7, 2009 Self-Report). Exelon Nuclear also stated in the March 26, 2009 letter that "[a] logbook review was also completed at each Exelon Nuclear station to ensure that there were no similar occurrences of placing the voltage regulator in 'Manual' mode without appropriate notifications to PJM (i.e., the Transmission Operator). The result of the logbook review produced two additional instances . . . where PJM was not notified that the voltage regulator had been placed in 'Manual' mode and one instance where notification was provided, but not within the required 30 minutes. The two missed notifications occurred at Limerick Generating Station Unit 1 on [November 1, 2007, when the voltage regulator was placed in 'Manual' for 5 minutes] and [November 7, 2007, when the voltage regulator was placed in 'Manual' for 133 hours, 43 minutes]. The untimely notification instance occurred at Peach Bottom Atomic Power Station Unit 2 on [October 21, 2008, when the voltage regulator was placed in 'Manual' for 151 minutes prior to notification to PJM]. For each of the three additional instances identified by the logbook review, the stations placed the voltage regulator in Manual to address generator VAR swings or fluctuations caused by plant equipment.

8. ReliabilityFirst alleges that several instances occurred where a voltage regulator was taken out of automatic mode to address generator VAR swings or

fluctuations, but without notification (on two occasions) or timely notification (on one occasion) to the Transmission Operator, or was briefly taken out of automatic mode for testing in accordance with Exelon Nuclear procedure, but without notification to the Transmission Operator. During the voltage relay tests, the automatic voltage regulator equipment was placed in manual mode for approximately ten minutes to verify operability of the manual regulator and the relay that controls transfer between auto and manual.

III. PARTIES' SEPARATE REPRESENTATIONS

A. STATEMENT OF RELIABILITYFIRST AND SUMMARY OF FINDINGS

9. ReliabilityFirst considers this Agreement as the resolution of any and all issues with regard to the above captioned docket number, including the Self-Report and responses to the ReliabilityFirst information request letters, and as binding on Exelon Nuclear to perform actions hereafter enumerated and listed as conditions for this Agreement.
10. VAR-002-1, Requirement 1 has a Violation Risk Factor (VRF) of Medium, as evidenced by the NERC Violation Risk Factor Matrix.
11. ReliabilityFirst found noteworthy and commendable certain aspects of Exelon Nuclear's compliance program including that executive and senior management are key participants in the corporate level and individual business unit oversight of the program. Their involvement assures the ability to obtain additional necessary senior management involvement and provide needed resources to accomplish tasks. For the Nuclear Business Unit (i.e., Exelon Generation Company, LLC – Exelon Nuclear), the overall responsibility for NERC Compliance resides with the Registered Officer who is the Vice President of Licensing and Regulatory Affairs and is a member of the Steering Committee. Other Steering Committee members from the Nuclear Business Unit in senior management include the Director of Engineering and the Director of Licensing. The Corporate program is designed to assure continuous improvement to prevent reoccurrence of any actual or potential violations. The NERC Compliance Management team and the business unit implementation personnel accomplish this objective through the process of evaluating implementation efforts and compliance status and the setting of goals around program improvements. Additionally, informal reviews are conducted any time an issue or question is raised around compliance obligations and for some of the more complex requirements. These reviews are utilized to identify any possible gaps to prevent a violation in the first instance and to inform program improvements to prevent reoccurrence of issues. Additionally, the Nuclear Business Unit utilizes the Exelon Corrective Action Program (CAP) that provides direction on the resolution and documentation of undesirable conditions. The CAP procedures provide personnel direction for using CAP to investigate and take appropriate corrective actions to address identified conditions as appropriate.

12. ReliabilityFirst agrees that this agreement is in the best interest of the parties and in the best interest of bulk power system reliability.

B. STATEMENT OF EXELON NUCLEAR

13. Exelon Nuclear neither admits nor denies that the facts set forth and agreed to by the parties for purposes of this Agreement constitute violations of VAR-002-11, Requirement 1.
14. Exelon Nuclear has agreed to enter into this Settlement Agreement with ReliabilityFirst to avoid extended litigation with respect to the matters described or referred to herein, to avoid uncertainty, and to effectuate a complete and final resolution of the issues set forth herein. Exelon Nuclear agrees that this Agreement is in the best interest of the parties and in the best interest of maintaining a reliable electric infrastructure.

IV. MITIGATING ACTIONS, REMEDIES AND SANCTIONS

A. Mitigating Actions for VAR-002-1, Requirement 1 – RFC200900109

15. On May 18, 2009, Exelon Nuclear submitted to ReliabilityFirst a Mitigation Plan to address the Alleged Violation set forth in this Agreement. On May 22, 2009, ReliabilityFirst accepted the Mitigation Plan (Mitigation Plan Tracking # MIT-07-1757, *see* Attachment a), and submitted the accepted Mitigation Plan to NERC. NERC approved the Mitigation Plan on June 17, 2009 and submitted the Mitigation Plan to FERC as confidential, non-public information on July 7, 2009. Exelon Nuclear submitted to ReliabilityFirst a certification of completion of the Mitigation Plan, dated September 29, 2009, which stated that the Mitigation Plan was completed by September 18, 2009 (entitled “Certification of Mitigation Plan Completion”, *see* Attachment b), and also submitted evidence of completion of the Mitigation Plan on September 29, 2009.
16. In the Mitigation Plan, Exelon Nuclear outlines actions identified to be taken in order to mitigate the violation, as well as the dates by which the actions were to be taken:
 - a. Verify that no other Exelon Nuclear site performs a quarterly test on the voltage regulator. (Completed on December 30, 2008).
 - b. Revise all applicable site-specific procedures to ensure VAR-002 Requirements are addressed. (Completed on December 4, 2008).

- c. Disseminate to all operations personnel an information package that provides additional guidance on mandatory NERC compliance. (Completed on December 4, 2008).
- d. Review site-specific procedures for appropriate guidance including requirements for logging notifications when placing the voltage regulator in “Manual” mode. (Completed on December 30, 2008).
- e. Complete a review of operator logs at each Exelon nuclear station to identify any similar occurrences of placing the voltage regulator in “Manual” mode without appropriate notification to the Transmission Operator. (Completed on January 20, 2009).
- f. Notify Exelon Generation Company, LLC – Exelon Power of the issue. (Completed on December 30, 2008).
- g. Complete an investigation to determine the cause of the problem at TMI and establish corrective actions. (Completed on January 9, 2009).
- h. Issue a formal communication to increase awareness of VAR-002 notification requirements. (Completed on January 16, 2009).
- i. Perform a training analysis to assess the need for additional Operations Training on NERC Compliance. (Completed on February 12, 2009).
- j. Evaluate scope of additional Operations Training across nuclear fleet. (Completed on April 30, 2009).
- k. Develop a fleet lesson plan for NERC Compliance Standards applicable to Operations. (Completed on June 30, 2009).
- l. Confirm that each Nuclear Regulatory Commission (NRC) licensed operator (i.e., operators licensed to manipulate controls in the nuclear generating stations) in the Exelon Nuclear fleet has completed the NERC Compliance training module. (Completed by September 30, 2009).

17. ReliabilityFirst reviewed the evidence Exelon Nuclear submitted in support of its certification of completion of the Mitigation Plan. ReliabilityFirst performed an in-depth review to verify that all actions specified in the Mitigation Plan were successfully completed. On November 18, 2009, ReliabilityFirst verified that the Mitigation Plan was completed in accordance with its terms (*see* Attachment c, “Summary and Review of Evidence of Mitigation Plan Completion”).

18. Exelon Nuclear shall pay a monetary penalty of \$10,000 to ReliabilityFirst. ReliabilityFirst shall present an invoice to Exelon Nuclear within twenty days after the Agreement is approved (as submitted or as modified in a manner acceptable to the parties) either by the Federal Energy Regulatory Commission or by operation of law. No later than thirty days following receipt of the invoice, Exelon Nuclear will send to the address listed in the invoice a check payable to ReliabilityFirst in the amount of \$10,000. ReliabilityFirst shall notify the North American Electric Reliability Corporation if the payment is not timely received.
19. It is understood that ReliabilityFirst staff may audit compliance with the obligations of this Agreement. ReliabilityFirst shall reasonably coordinate audits, including any information requests, related to this Settlement Agreement with Exelon Nuclear.
20. Exelon Nuclear shall pay \$10,000 to ReliabilityFirst as stated in this Settlement Agreement. However, if Exelon Nuclear fails to timely pay this penalty payment amount, ReliabilityFirst reserves the right to assess and collect a monetary penalty, to impose a sanction or otherwise to impose enforcement actions. Exelon Nuclear shall retain all rights to defend against such additional enforcement actions in accordance with NERC Rules of Procedure.
21. Failure to make a timely penalty payment or to comply with any of the terms and conditions agreed to herein, or any other conditions of this Settlement Agreement, shall be deemed to be either the same alleged violations that initiated this Settlement and/or additional violation(s) and may subject Exelon Nuclear to new or additional enforcement, penalty or sanction actions in accordance with the NERC Rules of Procedure.
22. If Exelon Nuclear does not make the penalty payment described above at the times agreed by the parties, interest payable to ReliabilityFirst will begin to accrue pursuant to the Commission's regulations at 18 C.F.R. § 35.19a(a)(2)(iii) from the date that payment is due, in addition to the penalty specified above.

V. ADDITIONAL TERMS

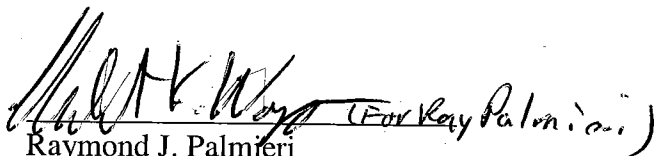
23. The signatories to the Agreement agree that they enter into the Agreement voluntarily and that, other than the recitations set forth herein, no tender, offer or promise of any kind by any member, employee, officer, director, agent or representative of ReliabilityFirst or Exelon Nuclear has been made to induce the signatories or any other party to enter into the Agreement.
24. ReliabilityFirst shall report the terms of all settlements of compliance matters to NERC. NERC will review the settlement for the purpose of evaluating its consistency with other settlements entered into for similar violations or under other, similar circumstances. Based on this review, NERC will either approve the settlement or reject the settlement and notify ReliabilityFirst and Exelon

Nuclear of changes to the settlement that would result in approval. If NERC rejects the settlement, NERC will provide specific written reasons for such rejection and ReliabilityFirst will attempt to negotiate a revised settlement agreement with Exelon Nuclear including any changes to the settlement specified by NERC. If a settlement cannot be reached, the enforcement process shall continue to conclusion. If NERC approves the settlement, NERC will (i) report the approved settlement to the Commission for the Commission's review and approval by order or operation of law and (ii) publicly post the alleged violation and the terms provided for in the settlement.

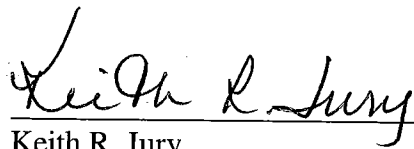
25. This Agreement shall become effective upon the Commission's approval of the Agreement by order or operation of law as submitted to it or as modified in a manner acceptable to the parties.
26. Exelon Nuclear agrees that this Agreement, when approved by NERC and the Commission, shall represent a final settlement of all matters set forth herein and Exelon Nuclear waives its right to further hearings and appeal, unless and only to the extent that Exelon Nuclear contends that any NERC or Commission action on the Agreement contains one or more material modifications to the Agreement.
27. ReliabilityFirst reserves all rights to initiate enforcement, penalty or sanction actions against Exelon Nuclear in accordance with the NERC Rules of Procedure in the event that Exelon Nuclear fails to comply with the requirements of this Agreement. In the event that Exelon Nuclear fails to comply with any of the stipulations, remedies, sanctions or additional terms, as set forth in this Agreement, ReliabilityFirst will initiate enforcement, penalty, or sanction actions against Exelon Nuclear as allowed by the NERC Rules of Procedure, up to the maximum statutorily allowed penalty. Exelon Nuclear shall retain all rights to defend against such enforcement actions, also according to the NERC Rules of Procedure.
28. Exelon Nuclear consents to the use of ReliabilityFirst's determinations, findings, and conclusions set forth in this Agreement for only the purpose of assessing relevant factors, including the factor of determining the company's history of violations, in accordance with the NERC Sanction Guidelines and applicable Commission orders and policy statements. Such use is limited solely to an enforcement action or compliance proceeding undertaken by NERC and/or any Regional Entity as to Exelon Nuclear; provided, however that Exelon Nuclear does not consent to the use of the determinations, findings, conclusions, or specific acts set forth in this Agreement as the sole basis for any other action or proceeding brought by NERC and/or any Regional Entity, nor does Exelon Nuclear consent to the use of this Agreement by any other party in any other action or proceeding.

29. Each of the undersigned warrants that he or she is an authorized representative of the entity designated, is authorized to bind such entity and accepts the Agreement on the entity's behalf.
30. The undersigned representative of each party affirms that he or she has read the Agreement, that all of the matters set forth in the Agreement are true and correct to the best of his or her knowledge, information and belief, and that he or she understands that the Agreement is entered into by such party in express reliance on those representations, provided, however, that such affirmation by each party's representative shall not apply to the other party's statements of position set forth in Section III of this Agreement.
31. The Agreement may be signed in counterparts.
32. This Agreement is executed in duplicate, each of which so executed shall be deemed to be an original.

Agreed to and accepted:

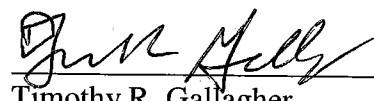

Raymond J. Palmieri
Vice President and Director of Compliance
ReliabilityFirst Corporation

12/17/09
Date


Keith R. Jury
Vice President, Licensing and Regulatory Affairs
Exelon Generation Company, LLC – Exelon Nuclear

12/16/09
Date

Approved by:


Timothy R. Gallagher
President & Chief Executive Officer
ReliabilityFirst Corporation

12/18/09
Date

Attachment a

Mitigation Plan (MIT-07-1757)

Submitted May 18, 2009

Mit Plan ID #:
MIT-07-1757



RFC200900109

Mitigation Plan Submittal Form

Date this Mitigation Plan is being submitted: May 18, 2009

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: Exelon Generation Company, LLC –
Exelon Nuclear

Company Address: 4300 Winfield Road
Warrenville, IL 60555

NERC Compliance Registry ID: NCR00778

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

Name: Alison Mackellar

Title: NERC Compliance Contact

Email: alison.mackellar@exeloncorp.com

Phone: (630) 657-2817



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 ^(*)	Method of Detection (e.g., Audit, Self-report, Investigation)
RFC 200900109	VAR-002-1	R.1	MEDIUM	1/7/2009	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.

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

Response:

OP-TM-301-362, "Voltage Regulator Auto/Manual Transfer Relay Test," a quarterly surveillance test, was performed six times at Exelon Nuclear's Three Mile Island (TMI) Unit 1 since NERC Standard VAR-002-1 was implemented on 8/2/07. The purpose of the test is to verify operability of the voltage regulator and the relay that controls transfer between "Automatic" and "Manual." Notice of the voltage regulator being placed in "Manual" mode was not provided to the Transmission Operator (i.e., PJM) as required by VAR-002-1.

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Notification requirements for voltage regulator manipulations existed in an administrative procedure, OP-TM-108-107-1002, "TMI Switchyard Operations (TMI-1 Supplement to OP-AA-108-107)," prior to 6/18/07; however, the impact on site-specific operational procedures was neither evaluated nor assessed. In addition, site-specific knowledge of notification requirements for VAR-002 was less than adequate.

Attachment 1 provides the investigation report associated with the TMI Unit 1 potential issue of non-compliance with NERC Standard VAR-002.

- 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.

Response:

A review at the other 17 nuclear reactors owned and operated by Exelon Generation Company, LLC – Exelon Nuclear was performed to ensure that no similar conditions existed. Sixteen of the Exelon Nuclear units are within RFC. The remaining station, Clinton Power Station, is within the SERC Reliability Corporation (SERC) region. The initial review verified that no other site performs a quarterly test on the voltage regulator.

A review of operator logs was also completed at each Exelon nuclear station to determine whether there were similar occurrences of placing the voltage regulator in "Manual" mode without appropriate notifications to the Transmission Operator (i.e., PJM). The log review identified three additional instances other than previously documented in the Self-Report, where the Transmission Operator (i.e., PJM) was not notified or was not timely notified that the voltage regulator had been placed in "Manual." Two of the missed notifications occurred at Limerick Generating Station Unit 1 on 11/1/07 and 11/7/07. The untimely notification occurred at Peach Bottom Atomic Power Station Unit 2 on 10/21/08.

Additional relevant information regarding the Alleged or Confirmed violation was submitted to RFC, pursuant to RFC's data request, on March 26, 2009.

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.

**Response:**

The internal investigation and review at the other nuclear stations owned and operated by Exelon Generation Company, LLC – Exelon Nuclear has been completed to identify if any similar conditions existed and to provide additional measures to prevent reoccurrence of failed or untimely notifications. The review and corrective actions are as follows:

- Verified that no other site performs a quarterly test of the voltage regulator;
- Completed revisions to all applicable site-specific procedures fleet wide to ensure VAR-002 Requirements are addressed. Ensured that specific procedural guidance exists for operations personnel to log communications to the Transmission Operator. Completed a review for other requirements within VAR-002 to ensure appropriate procedural guidance exists for notifications and logging requirements;
- Disseminated to all operations personnel in the main control room (i.e., the individuals who could operate the voltage regulator) an information package that provides additional guidance on mandatory NERC Compliance;
- Completed a review and confirmation by each site's Operations Director of site-specific procedures for appropriate guidance, including requirements for logging notifications;
- Completed a review of operator logs at each Exelon nuclear station to identify any similar occurrences of placing the voltage regulator in "Manual" mode without appropriate notification to the Transmission Operator (i.e., PJM). The review identified two additional instances where the Transmission Operator (i.e., PJM) was not notified and one instance when the Transmission Operator was not timely notified that the voltage regulator had been placed in "Manual" mode. Additional relevant information regarding the three additional instances has been submitted to RFC, pursuant to RFC's data request, on March 26, 2009;
- Notified Exelon Generation Company, LLC – Exelon Power (NCR00779) of the issue. This subsidiary of Exelon Nuclear's parent company operates fossil and hydro stations within RFC;
- Completed an investigation to determine the cause of the problem at TMI and establish additional corrective actions;

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- Issued a Supervisory Brief to TMI personnel to increase awareness of VAR-002 notification requirements;
- Performed a training analysis to assess the need for additional Operations Training on NERC Compliance;
- Evaluate scope of additional Operations Training across nuclear fleet;
- Develop a fleet lesson plan for NERC Compliance Standards applicable to Operations;
- Confirm that each Nuclear Regulatory Commission (NRC) licensed operator (i.e., operators licensed to manipulate controls in the nuclear generating stations) in the Exelon Nuclear fleet has completed the NERC Compliance training module.

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.

Response:

Exelon Generation Company, LLC – Exelon Nuclear will implement and complete all corrective actions detailed in this Mitigation Plan by 9/30/09.

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

Key Milestone Activity	Proposed/Actual Completion Date* (shall not be more than 3 months apart)
Verify that no other Exelon Nuclear site performs a quarterly test on the voltage regulator.	Completed on 12/30/08
Revise all applicable site-specific procedures to ensure VAR-002 Requirements are addressed.	Completed on 12/04/08
Disseminate to all operations personnel an information package that provides additional guidance on mandatory NERC Compliance.	Completed on 12/04/08

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Review site-specific procedures for appropriate guidance including requirements for logging notifications when placing the voltage regulator in "Manual" mode.	Completed on 12/30/08
Complete a review of operator logs at each Exelon nuclear station to identify any similar occurrences of placing the voltage regulator in "Manual" mode without appropriate notification to the Transmission Operator.	Completed on 1/20/09
Notify Exelon Generation Company, LLC – Exelon Power of the issue.	Completed on 12/30/08
Complete an investigation to determine the cause of the problem at TMI and establish corrective actions.	Completed on 1/09/09
Issue a formal communication to increase awareness of VAR-002 notification requirements.	Completed on 1/16/09
Perform a training analysis to assess the need for additional Operations Training on NERC Compliance.	Completed on 2/12/09
Evaluate scope of additional Operations Training across nuclear fleet.	Completed on 4/30/09
Develop a fleet lesson plan for NERC Compliance Standards applicable to Operations.	Complete by 6/30/09
Confirm that each Nuclear Regulatory Commission (NRC) licensed operator (i.e., operators licensed to manipulate controls in the nuclear generating stations) in the Exelon Nuclear fleet has completed the NERC Compliance training module.	Complete by 9/30/09

(*) 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

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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.

Response:

Exelon Nuclear completed all actions necessary to ensure guidance exists in site-specific procedures to both provide the proper notifications and document the status of the voltage regulator to the Transmission Operator (PJM).

Prevention of Future BPS Reliability Risk

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

Response:

The activities outlined in this Mitigation Plan detail the actions that Exelon Nuclear has taken to assure operations personnel make the appropriate notifications to Power Team so that Power Team can make the proper notifications to the Transmission Operator (PJM) in accordance with VAR-002 when the voltage regulator is operated. Increased awareness across the nuclear fleet combined with comprehensive procedure revisions provide a high degree of assurance that the appropriate VAR-002 notifications will be made. This will minimize the probability of future risks to the reliability of the Bulk Power System.

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 Vice President, Licensing and Regulatory Affairs of Exelon Generation Company, LLC – Exelon Nuclear.



2. I am qualified and authorized to sign this Mitigation Plan on behalf of Exelon Generation Company, LLC – Exelon Nuclear.
3. I have read and am familiar with the contents of this Mitigation Plan.
4. Exelon Generation Company, LLC – Exelon Nuclear agrees to comply with this Mitigation Plan, including the timetable completion date, as accepted by ReliabilityFirst and approved by NERC.

Authorized Individual Signature

A handwritten signature in black ink, appearing to read "Keith R. Jury", written over a horizontal line.

Name (Print): Keith R. Jury

Title: Vice President - Licensing and Regulatory Affairs

Date: 5/18/09

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.

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 CMEP¹ 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

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



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

- V. If the Mitigation Plan is accepted by ReliabilityFirst 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. ReliabilityFirst 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.

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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 compliance@rfirst.org to mitigationplan@rfirst.org	7/11/08

Attachment b

Certification of Mitigation Plan Completion

Submitted September 18, 2009

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)

Registered Entity Name: Exelon Generation Company, LLC - Exelon Nuclear

NERC Registry ID:NCR00778

Date of Submittal of Certification:9/29/09

NERC Violation ID No(s):RFC200900109

Reliability Standard and the Requirement(s) of which a violation was mitigated:VAR-002-1 Requirement R.1

Date Mitigation Plan was scheduled to be completed per accepted Mitigation Plan:9/30/09

Date Mitigation Plan was actually completed:9/18/09

Additional Comments (or List of Documents Attached): The final two milestone activities as documented in the May 18, 2009 Mitigation Plan are complete.

The actions required to satisfy the final two milestones are as follows:

1) Develop a fleet lesson plan for NERC Compliance Standards applicable to Operations.

Supporting evidence for this milestone is presented in Attachment 1, "Document Based Instruction Guide (DBIG) NERC Module and DBIG Rev 00." This module was prepared for and distributed to each Exelon Nuclear station to facilitate training during Licensed Operator Requalification Training (LORT).

2) Confirm that each Nuclear Regulatory Commission (NRC) licensed operator (i.e., operators licensed to manipulate controls in the nuclear generating stations) in the Exelon Nuclear fleet has completed the NERC Compliance training module.

Supporting evidence for this milestone is presented in Attachment 2, "Operations Training Completion Verification." These training records document completion of the NERC Module by all NRC licensed operators at each Exelon Nuclear station.

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.

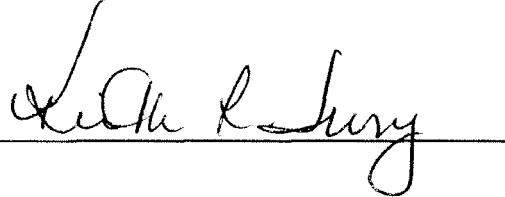
Name: Keith R. Jury

Title: Vice President - Licensing and Regulatory Affairs

Email: keith.jury@exeloncorp.com

Phone: 630-657-2800

Authorized Signature



Date 9/28/09

Please direct completed forms or any questions regarding completion of this form to the ReliabilityFirst Compliance e-mail address mitigationplan@rfirst.org.

Please indicate the company name and reference the NERC Violation ID # (if known) in the subject line of the e-mail. Additionally, any 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
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1.0	Robert K. Wargo	Original Issue	1/5/2009

Attachment c

Summary and Review of Mitigation Plan Completion

Dated November 18, 2009

November 18, 2009

Summary and Review of Evidence of Mitigation Plan Completion

NERC Violation ID #:	RFC200900109
NERC Plan ID:	MIT-07-1757
Registered Entity;	Exelon Generation Company, LLC – Exelon Nuclear
NERC Registry ID:	NCR00778
Standard:	VAR-002-1
Requirement:	1
Status:	Compliant

Exelon Generation Company, LLC – Exelon Nuclear (“Exelon Nuclear”) submitted a Self Report of noncompliance with NERC Reliability Standard VAR-002-1, Requirement 1, on January 7, 2009. Exelon Nuclear submitted a Proposed Mitigation Plan to ReliabilityFirst on May 18, 2009, whereby stating Exelon Nuclear would complete all mitigating actions on or about September 30, 2009. This Mitigation Plan, designated MIT-07-1757, was accepted by ReliabilityFirst on May 22, 2009 and approved by NERC on June 17, 2009.

Review Process:

On September 29, 2009, Exelon Nuclear certified that the Mitigation Plan for VAR-002-1, Requirement 1 was completed as of September 18, 2009. Reliability First requested and received evidence of completion for actions taken by Exelon Nuclear as specified in the Mitigation Plan. Reliability First performed an in-depth review of the information provided to verify that all actions specified in the Mitigation Plan were successfully completed.

VAR-002-1, Requirement 1 states: “Each Generator Operator shall operate each generator connected to the interconnected transmission system in the automatic voltage control mode (automatic voltage regulator in service and controlling voltage) unless the Generator Operator has notified the Transmission Operator.”

Evidence Submitted:

Requirement 1: Exelon Nuclear verified or made revisions as necessary to multiple procedures for their Nuclear Plans including, but not limited to, the following procedures:

- “Exelon Nuclear Voltage Regulator Auto /Manual Transfer Relay Test; OP-TM-301-362, revision 1, March 3, 2009.”
- “Exelon Nuclear Unit Load Changes; OP-AA-102-101, Revision 5, July 21, 2009.”

Summary and Review of Mitigation Plan Completion
Exelon Generation Company, LLC – Exelon Nuclear
November 18, 2009
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- “Exelon Nuclear Interface Agreement Between Exelon Energy Delivery and Exelon Generation for Switchyard Operations; OP-AA-108-107-1002, Revision 4, January 31, 2008.”
- “Exelon Nuclear Interface Between FirstEnergy Between FirstEnergy/JCP&L and Exelon Generation for OC Switchyard Operations; OP-OC-108-107-1002, Revision 7, November 24, 2008.”
- “Exelon Nuclear TMI Switchyard Operations; OP-TM-108-107-1002, Revision 2, September 30, 2008.”

All of the above referenced procedures indicate when notifications and outage coordination requirements, associated with the requirements of this standard, need to be made.

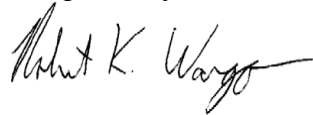
Exelon Nuclear provided additional training on NERC Compliance to the Nuclear Plant Nuclear Regulatory Commission (NRC) licensed operators (i.e., operators licensed to manipulate controls in the nuclear generating stations) in concert with its document revisions. Exelon Nuclear developed “Exelon Nuclear Document Based Instruction Guide NERC Module, ‘NERC Compliance – Standards Applicable to Operations,’ Revision 00, dated May 22, 2009.” Exelon Nuclear provided ReliabilityFirst the training documents that included training slides titled “Exelon Generation, NERC Mandatory Reliability Standards, Nuclear Compliance Program, Operations Module”, as evidence that the plant operators were informed along with course attendance lists as further verification that the training was attended by the plant operators.

Exelon Nuclear further provided examples from various plants verifying that the process was in place and being used by Exelon employees through the submission of Operator Narrative Logs and screen shots of market and outage coordination application entries.

Review Results:

ReliabilityFirst Corporation reviewed the evidence that Exelon Nuclear submitted in support of its Certification of Completion. On November 18, 2009 ReliabilityFirst verified that the Mitigation Plan was completed in accordance with its terms and has therefore deemed Exelon Generation Company, LLC – Exelon Nuclear compliant to the aforementioned NERC Reliability Standard.

Respectfully Submitted,



Robert
Manager
Reliability

K. Wargo
of Compliance Enforcement
First Corporation

Attachment c

Notice of Filing

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Exelon Generation Company, LCC - Exelon Nuclear

Docket No. NP10-____-000

NOTICE OF FILING
June 2, 2010

Take notice that on June 2, 2010, the North American Electric Reliability Corporation (NERC) filed a Notice of Penalty regarding Exelon Generation Company, LCC - Exelon Nuclear in the Reliability *First* Corporation region.

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

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

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

Comment Date: [BLANK]

Kimberly D. Bose,
Secretary