



NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

July 6, 2010

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

**Re: Abbreviated Notice of Penalty  
NAES Corporation - Lincoln Generating Facility, FERC Docket No. NP10-\_\_-000**

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Abbreviated Notice of Penalty (NOP) regarding NAES Corporation - Lincoln Generating Facility (NAES),<sup>1</sup> with information and details regarding the nature and resolution of the violation<sup>2</sup> discussed in detail in the Settlement Agreement (Attachment b) and the Disposition Document (Attachment c), 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 March 10, 2009, NAES self-reported a violation of VAR-002-1 Requirement (R) 1 to ReliabilityFirst Corporation (ReliabilityFirst) for NAES's failure to operate its generator voltage regulators in automatic voltage control mode. This Notice of Penalty is being filed with the Commission because ReliabilityFirst and NAES have entered into a Settlement Agreement to resolve all outstanding issues arising from a preliminary and non-public assessment resulting in

---

<sup>1</sup> Also concurrently being filed is a Notice of Penalty designated as NOC-447 regarding a separate Settlement Agreement between ReliabilityFirst and Lincoln Generating Facility, LLC (LGF) for a violation of PRC-005-1 R2.1. NAES provides operations and maintenance (O&M) services to LGF under a long-term O&M agreement. There is no corporate affiliation between LGF and NAES. This note is provided for information purposes only due to the instant violation and concurrent violation relative to the same physical facility.

<sup>2</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.

<sup>3</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 (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).

ReliabilityFirst's determination and findings of the enforceable violation of VAR-002-1 R1. According to the Settlement Agreement, NAES neither admits nor denies the violation, but has agreed to the proposed penalty of nine thousand dollars (\$9,000) to be assessed to NAES, 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 RFC200900120 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 January 29, 2010, by and between ReliabilityFirst and NAES and the Supplemental Record Information document issued by ReliabilityFirst on February 1, 2010. The details of the findings and the basis for the penalty are set forth in the Disposition Document. 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, 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 (\$)
ReliabilityFirst	NAES Corporation - Lincoln Generating Facility	NOC-476	RFC200900120	VAR-002-1 <sup>4</sup>	1	Medium	9,000

The text of the Reliability Standard at issue is set forth in the Disposition Document.

### VAR-002-1 R1 - OVERVIEW<sup>5</sup>

ReliabilityFirst determined that NAES, as a Generator Operator, operated its generator voltage regulators in Power Factor mode instead of automatic voltage control mode without notifying its Transmission Operator.

The duration of the VAR-002-1 R1 violation was from June 18, 2007, the date the Standard became enforceable, through March 10, 2009, when NAES completed its Mitigation Plan.

ReliabilityFirst concluded that this violation did not pose a serious or substantial risk to the reliability of the bulk power system (BPS) because while the generator may not have been operating in automatic voltage control mode as required by the Standard, NAES was controlling the generator in the automatic power factor (PF) control mode. The Lincoln Generating Facility has only been dispatched 14 times since June 18, 2007 and there were no reported periods of

<sup>4</sup> 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 interpretation and errata 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.

<sup>5</sup> Further information on this violation is contained in the Disposition Document included as Attachment c.

instability during these operation periods. Therefore, the risk was minimized because the actual connection time to the grid was minimized.

#### Regional Entity's Basis for Penalty

According to the Settlement Agreement, ReliabilityFirst has assessed a penalty of nine thousand dollars (\$9,000) for the referenced violation. In reaching this determination, ReliabilityFirst considered the following factors:

1. the violation constituted NAES's first occurrence of violation of the subject NERC Reliability Standard;
2. NAES was cooperative throughout the compliance enforcement process;
3. NAES's compliance program was considered, as discussed in the Disposition Document;
4. there was no evidence of any attempt to conceal a violation nor evidence of intent to do so;
5. the violation did not pose a serious or substantial risk to the reliability of the BPS, as discussed in the Disposition Document;
6. there was an extenuating circumstance due to the equipment design. In order to have the voltage regulator operate in automatic voltage control the Generator mode had to be in the "OFF" position; and
7. there were no other mitigating or aggravating factors that would affect the assessed penalty.

After consideration of the above factors, ReliabilityFirst determined that, in this instance, the penalty amount of nine thousand dollars (\$9,000) is appropriate and bears a reasonable relation to the seriousness and duration of the violation.

#### **Statement Describing the Proposed Penalty, Sanction or Enforcement Action Imposed<sup>6</sup>**

##### **Basis for Determination**

Taking into consideration the Commission's direction in Order No. 693, the NERC Sanction Guidelines, the Commission's July 3, 2008 and October 26, 2009 Guidance Orders,<sup>7</sup> the NERC BOTCC reviewed the Settlement Agreement and supporting documentation on May 14, 2010. The NERC BOTCC approved the Settlement Agreement, including ReliabilityFirst's imposition of a financial penalty, assessing a penalty of nine thousand dollars (\$9,000) against NAES and other actions to 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.

---

<sup>6</sup> See 18 C.F.R. § 39.7(d)(4).

<sup>7</sup> *North American Electric Reliability Corporation*, "Guidance Order on Reliability Notices of Penalty," 124 FERC ¶ 61,015 (2008); *North American Electric Reliability Corporation*, "Guidance Order on Reliability Notices of Penalty," 129 FERC ¶ 61,069 (2009).

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

1. the violation of constituted NAES's first occurrence of violation of the subject NERC Reliability Standards;
2. ReliabilityFirst reported that NAES was cooperative throughout the compliance enforcement process;
3. the quality of the NAES's compliance program, as discussed in the Disposition Document;
4. there was no evidence of any attempt to conceal a violation nor evidence of intent to do so;
8. ReliabilityFirst determined that the violation did not pose a serious or substantial risk to the reliability of the BPS, as discussed above and in the Disposition Document;
9. there was an extenuating circumstance due to the equipment design. In order to have the voltage regulator operate in automatic voltage control the Generator mode had to be in the "OFF" position; and
10. there were no other mitigating or aggravating factors that would affect the assessed penalty.

For the foregoing reasons, the NERC BOTCC approves the Settlement Agreement and believes that the assessed penalty of nine thousand dollars (\$9,000) 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 18 C.F.R. §29.7(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.

**Attachments to be included as Part of this Notice of Penalty**

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

- a) NAES's Self-Report dated March 10, 2009, included as Attachment a;
- b) Settlement Agreement by and between ReliabilityFirst and NAES executed January 29, 2010, included as Attachment b;
  - i. NAES's Mitigation Plan for VAR-002-1 R1 submitted March 10, 2009,<sup>8</sup> included as Attachment a to the Settlement Agreement;
  - ii. NAES's Certification of Completion of the Mitigation Plan for VAR-002-1 R1 dated November 17, 2009, included as Attachment b to the Settlement Agreement;
  - iii. ReliabilityFirst's Verification of Completion of the Mitigation Plan for VAR-002-1 R1 dated January 4, 2010, included as Attachment c to the Settlement Agreement;and
- c) Disposition Document, included as Attachment c.

**A Form of Notice Suitable for Publication<sup>9</sup>**

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

---

<sup>8</sup> The Mitigation Plan was originally submitted to ReliabilityFirst on March 10, 2009, but was unsigned. A signed version of the Mitigation Plan was submitted on March 30, 2009.

<sup>9</sup> See 18 C.F.R § 39.7(d)(6).

## Notices and Communications

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

<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, NJ 08540-5721 (609) 452-8060 (609) 452-9550 – facsimile gerry.cauley@nerc.net david.cook@nerc.net</p> <p>Megan E. Gambrel* Compliance Enforcement Specialist ReliabilityFirst Corporation 320 Springside Drive, Suite 300 Akron, OH 44333 (330) 456-2488 (330) 456-5408 – facsimile megan.gambrel@rfirst.org</p> <p>Ken Ambur* General Counsel NAES Corporation 1180 NW Maple Street, Suite 200 Issaquah, WA 98027-8106 (425) 961-4700 (425) 961-4646 – facsimile ken.ambur@naes.com</p> <p>George A. Lehner* Division Director North American Energy Services 1 Collins Drive, Suite 100 Carneys Point, NJ 08069 (856) 351-6343 george.lehner@NAES.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>Rebecca J. Michael* Assistant General Counsel Holly A. Hawkins* Attorney 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 holly.hawkins@nerc.net</p> <p>Timothy R. Gallagher* President &amp; CEO ReliabilityFirst Corporation 320 Springside Drive, Suite 300 Akron, OH 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, OH 44333 (330) 456-2488 (330) 456-5408 – facsimile ray.palmieri@rfirst.org</p> <p>Robert K. Wargo* Manager of Compliance Enforcement ReliabilityFirst Corporation 320 Springside Drive, Suite 300 Akron, OH 44333 (330) 456-2488 (330) 456-5408 – facsimile bob.wargo@rfirst.org</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## Conclusion

Accordingly, NERC respectfully requests that the Commission accept this Abbreviated NOP as compliant with its rules, regulations and orders.

Respectfully submitted,

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, NJ 08540-5721  
(609) 452-8060  
(609) 452-9550 – facsimile  
gerry.cauley@nerc.net  
david.cook@nerc.net

/s/ Rebecca J. Michael  
Rebecca J. Michael  
Assistant General Counsel  
Holly A. Hawkins  
Attorney  
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  
holly.hawkins@nerc.net

cc: NAES Corporation - Lincoln Generating Facility  
ReliabilityFirst Corporation

Attachments

## **Attachment a**

**NAES's Self-Report dated March 10, 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-002-1

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

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

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

**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:** Generator voltage regulator had been operated in automatic PF control instead of automatic voltage control.

4. **Additional information:** Please note explanation in the mitigation attached mitigation plan section C3.

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

6. **Officer Verification:** I understand that this information is being provided as required by the ReliabilityFirst 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#** NCR00845

Officer's Name: Merle I. Churchill

Officer's Title: Plant Manager

Officer's e-mail address: mchurchill@tpfholdings.com Phone: 815-478-3852

Registered Company Name: North American Energy Services (Lincoln)

Primary Compliance Contact/Secondary: Merle I. Churchill

Email: mchurchill@tpfholdings.com Phone: 815-478-3852 Date: 03/10/2009

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

## **Attachment b**

**Settlement Agreement by and between  
ReliabilityFirst and NAES executed January 29,  
2010**



---

In re	)	
	)	
NAES CORPORATION – LINCOLN	)	
GENERATING FACILITY	)	
	)	
	)	DOCKET NUMBER
	)	
	)	RFC200900120
NERC Registry ID # NCR00845	)	
	)	

**SETTLEMENT AGREEMENT  
OF  
RELIABILITYFIRST CORPORATION  
AND  
NAES CORPORATION – LINCOLN GENERATING FACILITY**

**I. INTRODUCTION**

1. ReliabilityFirst Corporation (“ReliabilityFirst”) and NAES Corporation – Lincoln Generating Facility (“NAES”) 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 NAES 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 NAES and ReliabilityFirst the matters discussed herein and do not constitute stipulations or admissions for any other purpose. NAES and ReliabilityFirst hereby stipulate and agree to the following:

**A. BACKGROUND**

3. North American Energy Services Company, a broad-based provider of services to the power generation industry, provides operations and maintenance (O&M) services at the Lincoln Generating Facility located in the Manhattan Township, approximately sixty miles southwest of Chicago, Illinois. NAES is working under a long-term O&M agreement for the owner of the Lincoln Generating Facility. NAES, headquartered in Issaquah, Washington, is the largest independent, third-party provider of power plant operations and maintenance services in the world, with an experience base of more than 18,500 MW of generation capacity using a wide variety of technologies and fuels in diversified modes of operation. Lincoln Generating Facility is a 656 MW capacity facility. It has been in service since 2000, and was acquired by Tenaska, one of the largest independent power producers in the United States, in 2007. Lincoln Generating Facility is a simple cycle peaking facility consisting of eight GE Frame 7EA dry low NOx combustion turbines fueled by natural gas that provides electric generating capacity for the Midwest region of the United States during peak demand period.
4. ReliabilityFirst staff confirmed that NAES is registered on the NERC Compliance Registry as a Generator Operator (GOP) in the ReliabilityFirst region with the NERC Registry Identification Number of NCR00845 and is therefore subject to compliance with Reliability Standard VAR-002-1, Requirement 1.

**B. ALLEGED VIOLATION OF VAR-002-1, Requirement 1 – RFC200900120**

5. Requirement 1 of VAR-002-1 states,

“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. On March 10, 2009, NAES submitted to ReliabilityFirst a Compliance Monitoring and Enforcement Program Violation Self-Reporting Form in which it identified Non-Compliance to Requirement 1 of Reliability Standard VAR-002-1. Specifically, in the Self-Report, NAES stated that its generator voltage regulators had been continuously operating in automatic Power Factor (“PF”) control instead of “automatic voltage control”. While performing a review of the Lincoln Generating Facility’s standard operating procedures one of the NAES home office engineers noticed that Lincoln Generating Facility appeared to be running the voltage regulator in automatic PF control instead of automatic voltage control. Lincoln Generating Facility management explained that on the GE HMI voltage control screen there are only 3 modes of control: “OFF”, “PF”, or “VAR”. During commissioning in May 2000, the technicians were trained by General Electric (GE) to operate in “VAR” mode. Lincoln understood this to mean that the Units were operating in automatic voltage control when in “VAR”

mode. As a follow up to these concerns, Lincoln checked with other entities with the same GE control systems and found that they had experienced this same confusion. They checked with GE and learned that to in order have the voltage regulator operate in automatic voltage control the Generator mode had to be in the "OFF" position. They then began operating in automatic voltage control and proceeded to remove the word "OFF" from the HMI control panel and replaced it with "Voltage Control" to avoid confusion. Lincoln Generating Facility has eight generators available for operation, all of which have identical GE HMI control interface computer screens and therefore each one was operated in the Power Factor control mode instead of the OFF control mode without notifying the Transmission Operator.

7. NAES indicated that the Lincoln Generating Facility has averaged sixty-six service hours per unit since June 2007. Lincoln Generating Facility has only been dispatched fourteen times since June 18, 2007 and although each dispatch ranges between two and eight hours, the average dispatch lasts about five and a half hours. The last dispatch was on July 30, 2008. The only potential for impact to the Bulk Electric System was during these fourteen listed dispatch periods; and there was no reported impact during these operation periods. NAES performed a review of the 345kV voltage for these dispatch periods, and did not identify any periods of instability. NAES was within its voltage schedule and there were no unexpected unit trips during the enforceable period when the units were operating in the Power Factor mode.
8. ReliabilityFirst alleges that NAES failed to notify its Transmission Operator that the eight (8) generator voltage regulators at Lincoln Generating Facility were operating in automatic Power Factor mode instead in automatic voltage control.

### **III. PARTIES' SEPARATE REPRESENTATIONS**

#### **A. STATEMENT OF RELIABILITYFIRST AND SUMMARY OF FINDINGS**

9. ReliabilityFirst considers this Agreement as the resolution of all issues with regard to the above captioned docket number and to bind NAES in the commitment 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 NAES's compliance program including that the compliance oversight position (Vice President, Operations) reports to the President and CEO, Operations. In addition, the President and CEO, Operations, who is a member of the Executive Committee, has direct access to the Chairman and CEO of Tenaska, Inc. The compliance oversight position attends regular meetings with the President and



CEO, Operations and the Board of Stakeholders and is encouraged to discuss reliability and compliance matters with them. The compliance program has the support of the Board of Stakeholders and Executive Committee, and senior management reviews and ensures corrective actions are taken regarding the program. In order to ensure that the compliance program remains current, the program is reviewed and approved semi-annually. This review includes identification of any revisions to applicable Reliability Standards and the identification and implementation of program changes that may be deemed necessary to enhance the overall effectiveness of the program. In addition, internal compliance reviews are performed annually to verify compliance with all applicable NERC and Regional Reliability Standards.

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 NAES**

13. NAES neither admits nor denies that the facts set forth and agreed to by the parties for purposes of this Agreement constitute a violation of VAR-002-1, Requirement 1.
14. NAES 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. NAES 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 – RFC200900120**

15. On March 10, 2009, NAES submitted to ReliabilityFirst a Mitigation Plan to address the Alleged Violation set forth in this Agreement. On April 9, 2009, ReliabilityFirst accepted the Mitigation Plan (Mitigation Plan Tracking # MIT-07-1569, *see* Attachment a), and submitted the accepted Mitigation Plan to NERC on April 13, 2009. NERC approved the Mitigation Plan and submitted the Mitigation Plan to FERC as confidential, non-public information on April 21, 2009. NAES certified completion within the Mitigation Plan by stating that the Mitigation Plan was completed by March 10, 2009. In addition, NAES submitted a formal Certification of Mitigation Plan Completion (entitled “Certification of Mitigation Plan Completion”, *see* Attachment b) and evidence of completion of the Mitigation Plan on November 17, 2009.

16. In the Mitigation Plan, NAES outlined 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. Meet with entire Lincoln crew and explain the violation and how it is being mitigated. (Completed by March 10, 2009)
  - b. Change the General Electric HMI generator control screen button for voltage control to read "Voltage Control" instead of "OFF". (Completed by March 10, 2009)
  - c. Edit the CTG start up procedure to say "verify in Voltage Control" instead of "place in power factor control". (Completed by March 10, 2009)
17. ReliabilityFirst reviewed the evidence NAES 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 January 4, 2010, 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. NAES shall pay a monetary penalty of \$9,000 to ReliabilityFirst. ReliabilityFirst shall present an invoice to NAES 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, and ReliabilityFirst shall notify the North American Electric Reliability Corporation if the payment is not received.
19. It is understood that ReliabilityFirst staff may audit the progress of mitigation plans and any other remedies of this Agreement, including, but not limited to site inspection, interviews, and request other documentation to validate progress and/or completion of the mitigation plans and any other remedies of this Settlement Agreement. ReliabilityFirst shall reasonably coordinate audits and information requests with NAES related to this Settlement Agreement.
20. NAES shall pay \$9,000 to ReliabilityFirst as stated in this Settlement Agreement. However, if NAES fails to complete the actions described above, ReliabilityFirst reserves the right to assess and collect a monetary penalty, to impose a sanction or otherwise to impose enforcement actions. NAES 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 violation that initiated this Settlement and/or additional violation(s) and may subject NAES to new or

additional enforcement, penalty or sanction actions in accordance with the NERC Rules of Procedure.

22. If NAES does not make the monetary penalty payment 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 NAES 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 NAES 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 NAES 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. NAES agrees that this Agreement, when approved by NERC and the Commission, shall represent a final settlement of all matters set forth herein and NAES waives its right to further hearings and appeal, unless and only to the extent that NAES 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 NAES in accordance with the NERC Rules of Procedure in the event that NAES fails to comply with any of the stipulations, remedies, sanctions, or additional terms, as set forth in this Agreement. In the event that NAES 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 NAES as allowed by the NERC Rules of Procedure, up to the maximum statutorily allowed penalty. NAES shall retain all rights to defend against such enforcement actions, also according to the NERC Rules of Procedure.

28. NAES consents to the use of ReliabilityFirst's determinations, findings, and conclusions set forth in this Agreement for the purpose of assessing the factors, including the factor of determining the company's history of violations, in accordance with the NERC Sanction Guidelines and applicable Commission orders and policy statements. Such use may be in any enforcement action or compliance proceeding undertaken by NERC and/or any Regional Entity; provided, however that NAES does not consent to the use of the specific acts set forth in this Agreement as the sole basis for any other action or proceeding brought by NERC and/or Regional Entity, nor does NAES 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. Palmeri  
Vice President and Director of Compliance  
ReliabilityFirst Corporation

1/11/10  
Date

  
George Lehner  
Division Director  
NAES Corporation – Lincoln Generating Facility

1-27-2010  
Date

Approved by:

  
Timothy R. Gallagher  
President & Chief Executive Officer  
ReliabilityFirst Corporation

1-29-10  
Date

# **Attachment a**

Mitigation Plan (MIT-07-1569)

Submitted March 10, 2009

MIT-07-1569

**RELIABILITY FIRST**

RFC200900120

## Mitigation Plan Submittal Form

Date this Mitigation Plan is being submitted: 03/10/2009

### **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: North American Energy Services (Lincoln)

Company Address: Lincoln Generating Facility  
27150 South Kankakee St.  
Manhattan, IL 60442

NERC Compliance Registry ID: NCR00845

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

Name: Merle I. Churchill

Title: Plant Manager

Email: mchurchill@tpfholdings.com

Phone: 815-478-3852

# RELIABILITY FIRST

## **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)
None	VAR-002-1	R-1		06/18/2007 to Today	Internal Review

(\*) 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.

Generator voltage regulator was being operated in "automatic PF control" instead of "automatic voltage control". Please note Attachment-B.

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

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.

Please review Attachment-B.

## **Section D: Details of Proposed Mitigation Plan**

# RELIABILITY FIRST

## 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.
1. Meet with entire LGF crew and explain the violation and how it is being mitigated.
  2. Change the General Electric HMI generator control screen button for voltage control to read "Voltage Control" instead of "OFF".
  3. Edit the CTG start up procedure to say "verify in Voltage Control" instead of "place in power factor control".

## 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.

Full implementation of mitigation plan was completed on 03/10/2009 and the GOP is now in full compliance.

- 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)
Meet with entire Lincoln crew and explain the violation and how it is being mitigated.	03/10/2009
Change the General Electric HMI generator control screen button for voltage control to read "Voltage Control" instead of "OFF".	03/10/2009
Edit the CTG start up procedure to say "verify in Voltage Control" instead of "place in power factor control".	03/10/2009

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

# RELIABILITY FIRST

## **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.

N/A

### **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.

Risk is prevented by using the proper voltage control automatic set point and keeping the Lincoln technicians trained to do such.

# RELIABILITY FIRST

## Section F: Authorization

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

- a) Submits this Mitigation Plan for acceptance by 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 Plant Manager of North American Energy Services (Lincoln).
  - 2. I am qualified to sign this Mitigation Plan on behalf of North American Energy Services (Lincoln).
  - 3. I have read and am familiar with the contents of this Mitigation Plan.
  - 4. North American Energy Services (Lincoln) agrees to comply with, this Mitigation Plan, including the timetable completion date, as accepted by ReliabilityFirst and approved by NERC.

Authorized Individual Signature

*Merle L. Churchill* 3/30/09

Name (Print): Merle L. Churchill

Title: Plant Manager

Date: 03/10/2009

## 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.



# RELIABILITY FIRST

## **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

---

<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.

# RELIABILITY *FIRST*

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.

# RELIABILITY FIRST

## 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**

## **Certification of Mitigation Plan Completion**

**Submitted November 17, 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: NAES Corporation - Lincoln Generating Facility

NERC Registry ID:NCR00845

Date of Submittal of Certification:11/17/2009

NERC Violation ID No(s):RFC200900120

Reliability Standard and the Requirement(s) of which a violation was mitigated:VAR-002-1 R1

Date Mitigation Plan was scheduled to be completed per accepted Mitigation Plan:3/10/2009

Date Mitigation Plan was actually completed:3/10/2009

Additional Comments (or List of Documents Attached):Additional comments explaining these attachments can be found in the cover email.

Mar 10 2009\_LGF\_AVR Ops Email.pdf

Mar 10 2009\_LGF\_AVR Ops.pdf

NERC\_VAR-002\_LGF-att4 Generator Control Screen - Before.pdf

NERC\_VAR-002\_LGF-att4 Generator Control Screen - After.pdf

VAR-002 Support - SOP-001A Edit.pdf

SOP-001A CRO Plant Startup rev14.doc

---

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:Merle Churchill

Title:Plant Manager - Lincoln Generating Facility

Email:MChurchill@TPFHoldings.com



Phone: 815-478-3852

Authorized Signature Mark A. Churchill

Date 11/17/08

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

# **Attachment c**

## Summary and Review of Mitigation Plan Completion

Dated January 4, 2010



January 4, 2010

**Summary and Review of Evidence of Mitigation Plan Completion**

<b>NERC Violation ID #:</b>	<b>RFC200900120</b>
<b>NERC Plan ID:</b>	<b>MIT-07-1569</b>
<b>Registered Entity:</b>	<b>NAES Corporation - Lincoln Generating Facility</b>
<b>NERC Registry ID:</b>	<b>NCR00845</b>
<b>Standard:</b>	<b>VAR-002-1</b>
<b>Requirement:</b>	<b>1</b>
<b>Status:</b>	<b>Compliant</b>

NAES Corporation - L incoln Generating Facility (“NAES – Lincoln” ) submitted a Self Report of noncom pliance with NERC Reliab ility Standard VAR-002-1, Requirem ent 1, on March 10, 2009. NAES – Lincoln sub mitted a P roposed M itigation P lan to ReliabilityFirst on March 10, 2009, whereby stating NAES – Lincoln would complete all mitigating actions on or about March 10, 2009. This Mitigation Plan, designated MIT-07-1569, was accepted by ReliabilityFirst on April 9, 2009 and approved by NERC on April 21, 2009.

**Review Process:**

On November 17, 2009, NAES – Lincoln certifi ed that Mitigation Plan for VAR-002-1, Requirement 1, was completed as of March 1 0, 2009. Reliability First requested and received evidence of completion for actions taken by NAES – Lincoln 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 M itigation P lan were succes sfully completed.

**VAR-002-1, Requirement 1** states: “The Generator Op erator shall operate each generator connected to the in terconnected transmission system in the a utomatic control mode (autom atic voltage regulator in se rvice and controlling voltage) unless the Generator Operator has notified the Transmission Operator.”

**Evidence Submitted:** NAES – Lincoln supplied a red- line version of their start-up revised procedure titled, “SOP:001A (Shor t Form ) – Nor mal Plant StartUp, Rev 14”, dated March 10, 2009 that was updated to ensure that during plant start-up the unit would be placed in automatic voltage control when started as required by Standard VAR-002. A clean version of the same form, Revision 17 was provided on Nove mber 17, 2009 as the form currently being used by the NAES Unit operators.

**Evidence Submitted:** NAES – Li ncoln supplied a versio n of their start-up procedure titled, “SOP-001 Integrated Plan t Operations, R evision 0”, that is undated, which is a

Summary and Review of Mitigation Plan Completion  
NAES Corporation – Lincoln Generating Facility  
January 4, 2010  
Page 2 of 2

support document to S OP-001A to ensure that during plant start-up the unit would be placed in automatic voltage control when started as required by Standard VAR-002.

**Evidence Submitted:** NAES – Lincoln supplied an e-mail that a lessons learned document titled, “2009 LGF AVR Ops” document dated March 10, 2009, as well as the red-line version and clean version of their start-up procedure, “SOP-001A Short Form – Normal Plant StartUp, Rev 14”, dated March 10, 2009, was distributed to the appropriate personnel to ensure that their unit will be placed in automatic voltage control when started as required by Standard VAR-002.

**Evidence Submitted:** NAES – Lincoln supplied before and after screen shots of their operator’s screen to show that proper labeling has been made to ensure that their unit is running in automatic voltage control as required by Standard VAR-002. To further show compliance, a screen shot of screen titled “Unit\_Control.cim” for all eight (8) units was provided.

**Evidence Submitted:** NAES – Lincoln supplied “Black Start Completed Procedure 12\_09\_2009 Lincoln.pdf” to show that the new process is being used. Since Lincoln has not been dispatched this year, this was the only use of the process to date.

**Review Results:**

Reliability *First* Corporation reviewed the evidence the NAES – Lincoln submitted in support of its Certification of Completion. On January 4, 2010 Reliability *First* verified that the Mitigation Plan was completed in accordance with its terms and has therefore deemed NAES – Lincoln compliant to the aforementioned NERC Reliability Standard.

Respectfully Submitted,



Robert  
Manager  
Reliability

K. Wargo  
of Compliance Enforcement  
*First* Corporation

## **Attachment c**

# **Disposition Document**

## **DISPOSITION OF VIOLATION<sup>1</sup>**

NERC TRACKING  
NO.  
**RFC200900120**

REGIONAL ENTITY TRACKING  
NO.  
**RFC200900120**

NOC#  
  
**NOC-476**

REGISTERED ENTITY  
**NAES Corporation - Lincoln Generating Facility (NAES)**

NERC REGISTRY ID  
**NCR00845**

REGIONAL ENTITY  
**ReliabilityFirst Corporation (ReliabilityFirst)**

### **I. REGISTRATION INFORMATION**

ENTITY IS REGISTERED FOR THE FOLLOWING FUNCTIONS:

BA	DP	GO	GOP	IA	LSE	PA	PSE	RC	RP	RSG	TO	TOP	TP	TSP
			<b>X</b>											
			<b>5/30/07</b>											

\* VIOLATION APPLIES TO SHADED FUNCTIONS

#### DESCRIPTION OF THE REGISTERED ENTITY

**NAES' parent company, North American Energy Services Company, provides services to the power generation industry, including operations and maintenance (O&M) services at the Lincoln Generating Facility (Facility) located in Manhattan Township, approximately sixty miles southwest of Chicago, Illinois. NAES is working under a long-term O&M agreement for the owner of the Facility, Lincoln Generating Facility, LLC (LGF). NAES is headquartered in Issaquah, Washington and is the largest independent, third-party provider of power plant O&M services in the world, with an experience base of more than 18,500 MW of generation capacity. The Facility is a simple cycle peaking facility consisting of eight General Electric (GE) Frame 7EA dry low NOx combustion turbines fueled by natural gas that provides electric generating capacity for the Midwest region during peak demand period. The Facility is a 656 MW capacity facility. It has been in service since 2000, and was acquired by Tenaska Inc., one of the largest independent power producers in the United States, in 2007.**

<sup>1</sup> For purposes of this document and attachments hereto, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible, alleged or confirmed violation.

## **I. VIOLATION INFORMATION**

RELIABILITY STANDARD	REQUIREMENT(S)	SUB-REQUIREMENT(S)	VRF(S)	VSL(S)
<b>VAR-002-1<sup>2</sup></b>	<b>1</b>		<b>Medium</b>	<b>Severe</b>

PURPOSE OF THE RELIABILITY STANDARD AND TEXT OF RELIABILITY STANDARD AND REQUIREMENT(S)/SUB-REQUIREMENT(S)

**The purpose of 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 regulator in service and controlling voltage) unless the Generator Operator has notified the Transmission Operator."**

VIOLATION DESCRIPTION

**On March 10, 2009, NAES self-reported a violation of VAR-002-1 R1 indicating that its generator voltage regulators had been continuously operating in automatic Power Factor (PF) control instead of automatic voltage control. While performing a review of the Facility's standard operating procedures, a NAES engineer noticed that the Facility appeared to be running the voltage regulator in automatic PF control instead of automatic voltage control. NAES explained that on the GE HMI voltage control screen there are only 3 modes of control: "OFF," "PF," or "VAR." During commissioning in May 2000, the technicians were trained by the manufacturer to operate in "VAR" mode. NAES understood this to mean that the units were operating in automatic voltage control when in "VAR" mode. As a follow up to these concerns, NAES checked with GE and learned that in order to have the voltage regulator operate in automatic voltage control, the Generator mode had to be in the "OFF" position. The Facility has eight generators available for operation, all of which have identical GE HMI control interface computer screens and each was operated in the PF control mode instead of the "OFF" control mode without notifying the Transmission Operator.**

RELIABILITY IMPACT STATEMENT- POTENTIAL AND ACTUAL

---

<sup>2</sup> 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 interpretation and errata 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.

**ReliabilityFirst** concluded that this violation did not pose a serious or substantial risk to the reliability of the bulk power system (BPS) because while the generator may not have been operating in automatic voltage control mode as required by the Standard, it was controlling in the PF control mode. The Facility has only been dispatched 14 times since June 18, 2007 and there were no reported periods of instability during these operation periods. Therefore, the risk was minimized because the actual connection time to the grid was minimized.

IS THERE A SETTLEMENT AGREEMENT      YES ☒      NO ☐

WITH RESPECT TO THE VIOLATION(S), REGISTERED ENTITY

NEITHER ADMITS NOR DENIES IT (SETTLEMENT ONLY)      YES ☒  
 ADMITS TO IT      YES ☐  
 DOES NOT CONTEST IT (INCLUDING WITHIN 30 DAYS)      YES ☐

WITH RESPECT TO THE PROPOSED PENALTY OR SANCTION, REGISTERED ENTITY

ACCEPTS IT/ DOES NOT CONTEST IT      YES ☒

### **III. DISCOVERY INFORMATION**

METHOD OF DISCOVERY

SELF-REPORT	<input checked="" type="checkbox"/>
SELF-CERTIFICATION	<input type="checkbox"/>
COMPLIANCE AUDIT	<input type="checkbox"/>
COMPLIANCE VIOLATION INVESTIGATION	<input type="checkbox"/>
SPOT CHECK	<input type="checkbox"/>
COMPLAINT	<input type="checkbox"/>
PERIODIC DATA SUBMITTAL	<input type="checkbox"/>
EXCEPTION REPORTING	<input type="checkbox"/>

DURATION DATE(S) **6/18/2007 through 3/10/2009**

DATE DISCOVERED BY OR REPORTED TO REGIONAL ENTITY **3/10/2009**

IS THE VIOLATION STILL OCCURRING

YES ☐      NO ☒

IF YES, EXPLAIN

REMEDIAL ACTION DIRECTIVE ISSUED	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
PRE TO POST JUNE 18, 2007 VIOLATION	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>

**IV. MITIGATION INFORMATION**MITIGATION PLAN NO. **MIT-07-1569**

DATE SUBMITTED TO REGIONAL ENTITY **3/10/2009<sup>3</sup>**  
 DATE ACCEPTED BY REGIONAL ENTITY **4/9/2009**  
 DATE APPROVED BY NERC **4/21/2009**  
 DATE PROVIDED TO FERC **4/21/2009**

IDENTIFY AND EXPLAIN VERSIONS THAT WERE REJECTED, IF  
 APPLICABLE

MITIGATION PLAN COMPLETED YES ☒ NO ☐

EXPECTED COMPLETION DATE **3/10/2009**  
 EXTENSIONS GRANTED **N/A**  
 ACTUAL COMPLETION DATE **3/10/2009**

DATE OF CERTIFICATION LETTER **11/17/2009**  
 CERTIFIED COMPLETE BY REGISTERED ENTITY AS OF **3/10/2009**

DATE OF VERIFICATION LETTER **1/4/2010**  
 VERIFIED COMPLETE BY REGIONAL ENTITY AS OF **3/10/2009**

ACTIONS TAKEN TO MITIGATE THE ISSUE AND PREVENT  
 RECURRENCE

- 1. meet with the entire NAES crew to explain the violation and how it is being mitigated;**
- 2. change the GE HMI generator control screen button for voltage control to read "Voltage Control" instead of "OFF;" and**
- 3. edit the CTG start up procedure to say "verify in Voltage Control" instead of "place in PF control."**

LIST OF EVIDENCE REVIEWED BY REGIONAL ENTITY TO EVALUATE  
 COMPLETION OF MITIGATION PLAN OR MILESTONES (FOR CASES IN  
 WHICH MITIGATION IS NOT YET COMPLETED)

- 1. NAES supplied a red-line version of its start-up revised procedure titled, *SOP:001A (Short Form) – Normal Plant Startup, Rev 14*, dated March 10, 2009 that was updated to ensure that during plant start-up the unit would be placed in automatic voltage control when started as required by**

<sup>3</sup> The Mitigation Plan was originally submitted to ReliabilityFirst on March 10, 2009, but was unsigned. A signed version of the Mitigation Plan was submitted on March 30, 2009.

**Standard VAR-002-1. A clean version of the same form, Revision 17 was provided on November 17, 2009 as the form currently being used by the NAES unit operators;**

- 2. NAES supplied a version of its start-up procedure titled, *SOP-001 Integrated Plant Operations, Revision 0*, that is undated, which is a support document to *SOP-001A* to ensure that during plant start-up the unit would be placed in automatic voltage control when started as required by Standard VAR-002-1;**
- 3. NAES supplied an e-mail that is a lessons learned document titled, *2009 LGF AVR Ops* dated March 10, 2009, as well as the red-line version and clean version of its start-up procedure, *SOP-001A Short Form– Normal Plant Startup, Rev 14*, dated March 10, 2009, and made sure that these documents were distributed to the appropriate personnel to ensure that its unit will be placed in automatic voltage control when started as required by Standard VAR-002-1;**
- 4. NAES supplied before and after screen shots of its operators' screens to show that proper labeling has been made to ensure that each unit is running in automatic voltage control as required by Standard VAR-002-1. To further show compliance, a screen shot titled *Unit\_Control.cim* for all eight units was provided; and**
- 5. NAES supplied *Black Start Completed Procedure 12\_09\_2009 Lincoln.pdf* to show that the new process is being used. Since LGF has not been dispatched this year, this was the only use of the process to date.**

#### **V. PENALTY INFORMATION**

**TOTAL ASSESSED PENALTY OR SANCTION OF \$9,000 FOR ONE VIOLATION.**

(1) DOCUMENTATION ☐ PERFORMANCE ☒ BOTH ☐

EXPLAIN (FOR DOCUMENTATION-TYPE VIOLATIONS, INCLUDE A DESCRIPTION OF HOW THE REGIONAL ENTITY VERIFIED THAT THE REGISTERED ENTITY HAD PERFORMED IN ACCORDANCE WITH THE RELIABILITY STANDARD(S)/REQUIREMENT(S))

(2) REGISTERED ENTITY'S COMPLIANCE HISTORY

PRIOR VIOLATIONS OF ANY OF THE INSTANT RELIABILITY STANDARD(S) OR REQUIREMENT(S) THEREUNDER

YES ☐ NO ☒

LIST ANY CONFIRMED OR SETTLED VIOLATIONS AND STATUS



ADDITIONAL COMMENTS

PRIOR VIOLATIONS OF OTHER RELIABILITY STANDARD(S) OR REQUIREMENTS THEREUNDER

YES ☐ NO ☒

LIST ANY PRIOR CONFIRMED OR SETTLED VIOLATIONS AND STATUS

ADDITIONAL COMMENTS

(3) THE DEGREE AND QUALITY OF COOPERATION BY THE REGISTERED ENTITY (IF THE RESPONSE TO FULL COOPERATION IS "NO," THE ABBREVIATED NOP FORM MAY NOT BE USED.)

FULL COOPERATION YES ☒ NO ☐  
IF NO, EXPLAIN

(4) THE PRESENCE AND QUALITY OF THE REGISTERED ENTITY'S COMPLIANCE PROGRAM

IS THERE A DOCUMENTED COMPLIANCE PROGRAM  
YES ☒ NO ☐  
EXPLAIN

**NAES's internal compliance program (ICP) is reviewed and approved semi-annually to ensure that the compliance program remains current with Standards development, and that the effectiveness of the program is optimized. The review includes the identification of any revisions to all applicable Reliability Standards, and the identification and implementation of program changes that may be deemed necessary to enhance the overall effectiveness of the program. In addition, internal compliance reviews are performed at all sites annually to verify compliance with all of the applicable NERC and Regional Reliability Standards.**

DOES SENIOR MANAGEMENT TAKE ACTIONS THAT SUPPORT THE COMPLIANCE PROGRAM, SUCH AS TRAINING, COMPLIANCE AS A FACTOR IN EMPLOYEE EVALUATIONS, OR OTHERWISE

YES ☒ NO ☐

EXPLAIN

**NAES does not have direct access to Tenaska's board of directors in the corporate context. Rather, LGF and NAES share best practices in compliance concerning the Lincoln Generating Facility, as both are responsible for separate compliance functions at the Facility. NAES has a NERC Reliability Compliance Policy that is supported by its management and used by its employees to ensure and verify compliance with Reliability Standards. NAES also performs annual independent assessments of its compliance program.**

EXPLAIN SENIOR MANAGEMENT'S ROLE AND INVOLVEMENT  
WITH RESPECT TO THE REGISTERED ENTITY'S COMPLIANCE  
PROGRAM

(5) ANY ATTEMPT BY THE REGISTERED ENTITY TO CONCEAL THE  
VIOLATION(S) OR INFORMATION NEEDED TO REVIEW, EVALUATE OR  
INVESTIGATE THE VIOLATION.

YES ☐ NO ☒  
IF YES, EXPLAIN

(6) ANY EVIDENCE THE VIOLATION(S) WERE INTENTIONAL (IF THE  
RESPONSE IS "YES," THE ABBREVIATED NOP FORM MAY NOT BE USED.)

YES ☐ NO ☒  
IF YES, EXPLAIN

(7) ANY OTHER MITIGATING FACTORS FOR CONSIDERATION

YES ☐ NO ☒  
IF YES, EXPLAIN

(8) ANY OTHER AGGRAVATING FACTORS FOR CONSIDERATION (IF THE  
RESPONSE IS "YES," THE ABBREVIATED NOP FORM MAY NOT BE USED.)

YES ☐ NO ☒  
IF YES, EXPLAIN

## (9) ANY OTHER EXTENUATING CIRCUMSTANCES

YES ☒ NO ☐

IF YES, EXPLAIN

**NAES stated in its Self-Report that on the GE HMI voltage control screen, there are only 3 modes of control: "OFF," "PF," or "VAR." During commissioning in May 2000, the technicians were trained by GE to operate in "VAR" mode. NAES understood this to mean that the units were operating in automatic voltage control when in "VAR" mode. As a follow up to these concerns, NAES checked with other entities with the same GE control systems and found that they had experienced this same confusion. It checked with GE and learned that in order to have the voltage regulator operate in automatic voltage control the Generator mode had to be in the "OFF" position. NAES then began operating in automatic voltage control and proceeded to remove the word "OFF" from the HMI control panel and replaced it with "Voltage Control" to avoid confusion. The Facility has eight generators available for operation, all of which have identical GE HMI control interface computer screens and therefore each one was operated in the PF control mode instead of the "OFF" control mode without notifying the Transmission Operator.**

## (10) ADDITIONAL SUPPORT FOR PROPOSED PENALTY OR SANCTION

**Although NAES's non-compliance extended to all of the eight generators, the generators were all functioning as peaking units, with total capacity of approximately 650 MW. NAES indicated that the Facility has averaged sixty-six service hours per unit since June 2007. The Facility has only been dispatched fourteen times since June 18, 2007 and although each dispatch ranges between two and eight hours, the average dispatch lasts about five and a half hours. The last dispatch was on July 30, 2008. NAES performed a review of the 345 kV voltage for these dispatch periods, and did not identify any periods of instability. NAES was within its voltage schedule and there were no unexpected unit trips during the enforceable period when the units were operating in PF mode.**

EXHIBITS (SEE ATTACHMENTS TO THE NOTICE OF PENALTY):

SOURCE DOCUMENT

**NAES' Self-Report dated March 10, 2009**

MITIGATION PLAN

**NAES' Mitigation Plan for VAR-002-1 R1 submitted March 10, 2009**

CERTIFICATION BY REGISTERED ENTITY

**NAES' Certification of Completion of the Mitigation Plan for VAR-002-1 R1 dated November 17, 2009**

OTHER RELEVANT INFORMATION:

NOTICE OF ALLEGED VIOLATION AND PROPOSED PENALTY OR  
SANCTION ISSUED

DATE: OR N/A ☒

SETTLEMENT DISCUSSIONS COMMENCED

DATE: **11/6/2009** OR N/A ☐

NOTICE OF CONFIRMED VIOLATION ISSUED

DATE: OR N/A ☒

SUPPLEMENTAL RECORD INFORMATION

DATE(S) **2/1/2010** OR N/A ☐

REGISTERED ENTITY RESPONSE CONTESTED

FINDINGS ☐ PENALTY ☐ BOTH ☐ NO CONTEST ☒

HEARING REQUESTED

YES ☐ NO ☒

DATE

OUTCOME

APPEAL REQUESTED

**Attachment d**

**Notice of Filing**

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

NAES Corporation - Lincoln Generating Facility

Docket No. NP10-\_\_\_\_-000

NOTICE OF FILING  
July 6, 2010

Take notice that on July 6, 2010, the North American Electric Reliability Corporation (NERC) filed a Notice of Penalty regarding NAES Corporation - Lincoln Generating Facility 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