

PRIVILEGED AND CONFIDENTIAL INFORMATION HAS BEEN REMOVED FROM THIS PUBLIC VERSION

December 30, 2011

Ms. Kimberly D. Bose

Secretary

Federal Energy Regulatory Commission

888 First Street, N.E.

Washington, DC 20426

Re: NERC Full Notice of Penalty regarding Unidentified Registered Entity,

FERC Docket No. NP12- -000

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty¹ regarding Unidentified Registered Entity (URE), NERC Registry ID# NCRXXXXX, 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)). ²

Reliability First Corporation (Reliability First) conducted a CIP Spot Check of URE (Spot Check) which resulted in Reliability First determining that URE had violated CIP-004-1 Requirement (R) 4 by failing to review its access lists to Critical Cyber Assets (CCAs) on a quarterly basis. After the Spot Check, URE submitted six Self-Reports of five additional unrelated violations relating to URE's Physical Scheduling System (PSS). URE self-reported two violations of BAL-005-0.1b R9 to Reliability First. The first Self-

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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 (2011). Mandatory Reliability Standards for the Bulk-Power System, FERC Stats. & Regs. ¶ 31,242 (2007) (Order No. 693), reh'g denied, 120 FERC ¶ 61,053 (2007) (Order No. 693-A). See 18 C.F.R § 39.7(c)(2).

² See 18 C.F.R § 39.7(c)(2).

³ The Spot Check originally identified three possible violations. Reliability *First* dismissed a violation and submitted another through the Find Fix and Track Report process. During the Spot Check, Reliability *First* also identified a violation of CIP-004-1 R4.2, which was initially an aspect of this violation. URE subsequently provided evidence demonstrating timely, sufficient access revocation. Reliability *First*, therefore, did not further pursue this aspect of the possible violation.

⁴ 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.

⁵ URE uses its PSS to approve and track all Interchange Schedules, which are submitted by third parties through the use of electronic tags (e-Tags), and to calculate Net Scheduled Interchange (NSI) for its BA Area. The PSS interfaces with URE's



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Report was submitted approximately nine months before the second, reporting URE's failure to include all Interchange Schedules with Adjacent BAs in the calculation of Net Scheduled Interchange (NSI) for the Area Control Error (ACE) equation. The second Self-Report also included a violation of BAL-006-1.1 R4 due to URE's failure to operate to a common NSI, a violation of INT-003-2 R1 for URE's failure to confirm Interchange Schedules with the sending BA prior to implementing the BA's ACE equation, and a violation of INT-006-2 R1 for URE's failure to respond to each Request for Interchange (RFI) prior to the expiration of the reliability assessment period.

This Notice of Penalty is being filed with the Commission because Reliability *First* and URE have entered into a Settlement Agreement to resolve all outstanding issues arising from Reliability *First*'s determination and findings of the violations of CIP-004-1 R4, BAL-005-0.1b R9 (two occurrences), BAL-006-1.1 R4, INT-003-2 R1 and INT-006-2 R1. According to the Settlement Agreement, URE agrees and stipulates to the Settlement Agreement in its entirety but neither admits nor denies that the facts, as stipulated therein, constitute violations of the above referenced NERC Reliability Standards. URE has agreed to the assessed penalty of sixty thousand dollars (\$60,000), in addition to other remedies and actions to mitigate the instant violations and facilitate future compliance under the terms and conditions of the Settlement Agreement. Accordingly, the violations identified as NERC Violation Tracking Identification Numbers RFC200900298, RFC201000285, RFC201000684, RFC201000685, RFC201000686 and RFC201000687 are being filed in accordance with the NERC Rules of Procedure and the CMEP.

Statement of Findings Underlying the Violations

This Notice of Penalty incorporates the findings and justifications set forth in the Settlement Agreement executed on September 23, 2011, by and between Reliability First and URE, which is included as Attachment a. The details of the findings and basis for the penalty are set forth in the Settlement Agreement and herein. This Notice of Penalty filing contains the basis for approval of the Settlement Agreement by the NERC Board of Trustees Compliance Committee (NERC BOTCC). In accordance with Section 39.7 of the Commission's regulations, 18 C.F.R. § 39.7 (2007), NERC provides the following summary table identifying each violation of a Reliability Standard resolved by the Settlement Agreement, discussed in greater detail below.

Automatic Generation Control software, which calculates URE's Area Control Error (ACE), to communicate the calculated NSI. The vendor's e-Tagging is a component of a third-party scheduling and transmission management software application, with which URE can manually monitor and modify Interchange Schedules. E-Tags are Interchange Schedules and scheduling adjustments that have been requested through the vendor's e-Tagging tool. URE self-reported several possible violations of BAL and INT Standards related to a series of outages and other problems with its PSS.

The Settlement Agreement incorrectly lists the Standard as BAL-005-1b.



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Region	Registered Entity	NOC ID	NERC Violation ID	Reliability Std.	Req. (R)	VRF	Total Penalty (\$)
Reliability <i>First</i> Corporation	Unidentified Registered Entity	NOC- 981	RFC200900298	CIP-004-1	4	Lower ⁷	- 60,000
			RFC201000285	BAL-005-0.1b	9	Lower	
			RFC201000684	BAL-005-0.1b ⁸	9	Lower	
			RFC201000685	BAL-006-1.1 ⁹	4	Lower	
			RFC201000686	INT-003-2	1	Medium ¹⁰	
			RFC201000687	INT-006-2	1	Lower	

RFC200900298 CIP-004-1 R4

The purpose statement of Reliability Standard CIP-004-1 provides in pertinent part: "Standard CIP-004 requires that personnel having authorized cyber or authorized unescorted physical access to Critical Cyber Assets, including contractors and service vendors, have an appropriate level of personnel risk assessment, training, and security awareness. Standard CIP-004 should be read as part of a group of standards numbered Standards CIP-002 through CIP-009."

7

⁷ CIP-004-1 R4 and R4.1 each have a "Lower" VRF; CIP-004-1 R4.2 has a "Medium" VRF. When NERC filed VRFs, it originally assigned CIP-004-1 R4.2 a Lower VRF. The Commission approved the VRF as filed; however, it directed NERC to submit modifications. NERC submitted the modified "Medium" VRF and on January 27, 2009, the Commission approved the modified "Medium" VRF. Therefore, the "Lower" VRF for CIP-004-1 R4.2 was in effect from June 18, 2007 until January 27, 2009 when the "Medium" VRF became effective.

⁸ This violation spanned multiple versions of the Standard. BAL-005-0 was enforceable from June 18, 2007 through August 27, 2008. BAL-005-0b was approved by the Commission and became enforceable on August 28, 2008. BAL-005-0.1b 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 current NERC Reliability Standard, BAL-005-0.1b, is used throughout.

⁹ BAL-006-1 was enforceable from June 18, 2007 through May 12, 2009. BAL-006-1.1 was approved by the Commission and became enforceable on May 13, 2009. BAL-006-2 is the current enforceable Standard as of April 1, 2011. For consistency in this filing, the version of the NERC Reliability Standard when the violation was self-reported, BAL-006-1.1, is used throughout.

 $^{^{10}}$ INT-003-2 R1 and R1.2 each have a "Medium" VRF; INT-003-2 R1.1, R1.1.1 and R1.1.2 each have a "Lower" VRF.



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CIP-004-1 R4 provides:

R4. Access — The Responsible Entity [11] shall maintain list(s) of personnel with authorized cyber or authorized unescorted physical access to Critical Cyber Assets, including their specific electronic and physical access rights to Critical Cyber Assets.

R4.1. The Responsible Entity shall review the list(s) of its personnel who have such access to Critical Cyber Assets quarterly, and update the list(s) within seven calendar days of any change of personnel with such access to Critical Cyber Assets, or any change in the access rights of such personnel. The Responsible Entity shall ensure access list(s) for contractors and service vendors are properly maintained.

R4.2. The Responsible Entity shall revoke such access to Critical Cyber Assets within 24 hours for personnel terminated for cause and within seven calendar days for personnel who no longer require such access to Critical Cyber Assets.

(Footnote added.)

CIP-004-1 R1 has a "Lower" Violation Risk Factor (VRF). 12

During the Spot Check, URE provided Reliability *First* with lists of URE personnel with access to CCAs. ¹³ URE, however, failed to provide evidence of quarterly reviews for three total quarters, as required by CIP-004-1 R4.1. URE represented that, during these quarters, it focused its reviews on lists of individuals with access to applications, URE's predominant access type, rather than lists of individuals with access to particular devices. URE has since revised its quarterly review procedures to ensure an accurate review of all access types.

Reliability First determined that URE violated CIP-004-1 R4.1 by failing to review its access lists to CCAs on a quarterly basis.

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¹¹ Within the text of Standard CIP-004, "Responsible Entity" shall mean RC, BA, IA, TSP, Transmission Owner, Transmission Operator, Generator Owner, Generator Operator, Load Serving Entity, NERC, and Regional Reliability Organizations.

¹² At the time of the violations, no Violation Severity Levels (VSLs) were in effect for CIP-004-1. On June 30, 2009, NERC submitted VSLs for the CIP-002-1 through CIP-009-1 Reliability Standards. On March 18, 2010, the Commission approved the VSLs as filed, but directed NERC to submit modifications.

¹³ During the Spot Check, Reliability *First* also identified a possible violation of CIP-004-1 R4.2, which was initially an aspect of this violation. URE subsequently provided evidence demonstrating timely, sufficient access revocation. Reliability *First*, therefore, did not further pursue this aspect of the possible violation.



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Reliability First determined the duration of the violation to be from the end of the first quarter for which URE failed to review the personnel access lists, through the end of the last quarter for which URE failed to review the personnel access lists.

Reliability First determined that this violation posed a moderate risk to the reliability of the bulk power system (BPS), but did not pose a serious or substantial risk. Specifically, URE had implemented and maintained primary access controls regarding the provisioning and termination of access rights to all CCAs (including devices) and conducted quarterly access reviews on its applications. Although URE failed to conduct reviews at the device level, the review of access at the device level was a secondary control because application level access constitutes the predominant access type at URE.

RFC201000285 BAL-005-0.1b R9

The purpose statement of Reliability Standard BAL-005-0.1b provides:

This standard establishes requirements for Balancing Authority Automatic Generation Control (AGC) necessary to calculate Area Control Error (ACE) and to routinely deploy the Regulating Reserve. The standard also ensures that all facilities and load electrically synchronized to the Interconnection are included within the metered boundary of a Balancing Area so that balancing of resources and demand can be achieved.

BAL-005-0.1b R9 provides:

R9. The Balancing Authority shall include all Interchange Schedules with Adjacent Balancing Authorities in the calculation of Net Scheduled Interchange for the ACE equation.

R9.1. Balancing Authorities with a high voltage direct current (HVDC) link to another Balancing Authority connected asynchronously to their Interconnection may choose to omit the Interchange Schedule related to the HVDC link from the ACE equation if it is modeled as internal generation or load.

BAL-005-0.1b R9 has a "Lower" VRF and a "Severe" Violation Severity Level (VSL).

URE submitted a Self-Report to Reliability *First* identifying a violation of BAL-005-0.1b R9. On a certain day, at approximately 9:00 a.m. EST, a URE server that controls access to the PSS experienced an outage. As a result of the outage, URE personnel could not view future Interchange Schedules with adjacent BAs listed in the PSS. The lack of access to the PSS led to a series of communications between



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URE and an adjacent BA. Even though the communications were made, some changes in Interchange Schedules for the Hour Ending (HE) 12 were not reflected in URE's PSS or ACE equation for HE12, which had already commenced. As a result, URE did not include these Interchange Schedule changes in its ACE equation for HE12, but such changes were transferred to URE's ACE equation before the beginning of the following hour, HE13.

Reliability First determined that URE violated BAL-005-0.1b R9 by failing to include all Interchange Schedules with Adjacent BAs in the calculation of NSI for the ACE equation.

Reliability First determined the duration of the violation was one hour on a single day, the time during which URE did not implement Interchange Schedules into its calculation of NSI.

Reliability *First* determined that this violation posed a moderate risk to the reliability of the BPS, but did not pose a serious or substantial risk. Specifically, the risk was mitigated by the maintenance of frequency within the appropriate range, *i.e.*, within the range set by NERC via certain thresholds, during normal operation as considered acceptable during time error corrections. Furthermore, although the server outage restricted access to the PSS, URE operators had continuous access to e-Tags, allowing URE operators to manually monitor and act on Interchange Schedules.

RFC201000684 BAL-005-0.1b R9

URE submitted a Self-Report to Reliability *First* identifying an additional violation of BAL-005-0.1b R9. A defect in URE's PSS software resulted in URE operators' inability to act upon schedule adjustments when multiple adjustments to the same e-Tag were issued concurrently or successively. The result of this software error was that the operator's action on the later, still-visible adjustment was recorded for all adjustments for that e-Tag, but the PSS would only account for the schedule adjustment actually performed by the operator. In response, URE developed manual workarounds to address this software coding and other procedural defects; except as noted below, these workarounds allowed URE operators to see multiple schedule adjustments on a single e-Tag.

On a certain day, multiple reliability curtailments were issued for the same e-Tag. Although URE approved these schedules in the e-Tag system, these schedules were not reflected in URE's PSS or calculated NSI. During its investigation of the scheduling issues, URE identified that its manual workarounds were not consistently effective because not all adjustments to the same e-Tag were reflected in the PSS. URE also discovered that the PSS was coded to require certain approvals prior to implementation of a schedule or schedule adjustment, which delayed the processing of schedules in the PSS.



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Due to the above problems, where the manual workarounds were not effective or schedule approvals were delayed, some required Interchange Schedule and schedule adjustments were not reflected in URE's NSI, which is used by AGC. Therefore, URE did not include all Interchange Schedules in calculating the ACE. Additionally, the violation may have contributed to a deviation in frequency to 59.979, observed on that day. Reliability First confirmed that this frequency deviation did not result in the violation of a threshold. Reliability First determined that URE violated BAL-005-0.1b R9 by failing to include all Interchange Schedules with Adjacent BAs in the calculation of NSI for the ACE equation.

Reliability First determined the duration of the violation to be from the date URE registered as a BA and became subject to the Reliability Standard, through the time at which URE completed its immediate corrective actions, which ensure that all schedules are implemented into its NSI and ACE when appropriate.

Reliability First determined that this violation posed a moderate risk to the reliability of the BPS, but did not pose a serious or substantial risk. Specifically, during periods in which multiple schedule adjustments were issued to the same e-Tag, URE did not observe any significant adverse impacts to the BPS as a result of this issue; URE often granted relief through subsequent curtailment or adjustment requests; and URE achieved frequency within the range of a normal operating day, *i.e.*, within the range set by NERC via certain thresholds, and as considered acceptable during time error corrections.

RFC201000685 BAL-006-1.1 R4

The purpose statement of Reliability Standard BAL-006-1.1 provides: "This standard defines a process for monitoring Balancing Authorities to ensure that, over the long term, Balancing Authority Areas do not excessively depend on other Balancing Authority Areas in the Interconnection for meeting their demand or Interchange obligations."

BAL-006-1.1 R4 provides:

- R4. Adjacent Balancing Authority Areas shall operate to a common Net Interchange Schedule and Actual Net Interchange value and shall record these hourly quantities, with like values but opposite sign. Each Balancing Authority shall compute its Inadvertent Interchange based on the following:
 - R4.1. Each Balancing Authority, by the end of the next business day, shall agree with its Adjacent Balancing Authorities to:
 - R4.1.1. The hourly values of Net Interchange Schedule.



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- R4.1.2. The hourly integrated megawatt-hour values of Net Actual Interchange.
- R4.2. Each Balancing Authority shall use the agreed-to daily and monthly accounting data to compile its monthly accumulated Inadvertent Interchange for the On-Peak and Off-Peak hours of the month.
- R4.3. A Balancing Authority shall make after-the-fact corrections to the agreed-to daily and monthly accounting data only as needed to reflect actual operating conditions (e.g. a meter being used for control was sending bad data). Changes or corrections based on non-reliability considerations shall not be reflected in the Balancing Authority's Inadvertent Interchange. After-the-fact corrections to scheduled or actual values will not be accepted without agreement of the Adjacent Balancing Authority(ies).

BAL-006-1.1 R4 has a "Lower" VRF and a "High" VSL.

URE submitted a Self-Report to Reliability *First* identifying a violation of BAL-006-1.1 R4. In the Self-Report, URE described an additional violation that arose out of the facts and circumstances of the violation designated as RFC201000684, described above. That violation involved software errors in the PSS that contributed to instances in which URE failed to effectively handle some Interchange Schedule adjustments. Because some schedule adjustments were not approved in the PSS, URE's NSI differed from the NSI utilized by its adjacent BAs. Therefore, URE was not operating to a common NSI. Reliability *First* determined that URE violated BAL-006-1.1 R4 by failing to operate to a common NSI.

Reliability First determined the duration of the violation to be from the date that URE was subject to the Standard, through when URE completed its immediate corrective actions, which ensure that all schedules are implemented into its NSI when appropriate.

Reliability First determined that this violation posed a moderate risk to the reliability of the BPS, but did not pose a serious or substantial risk. Specifically, during periods in which multiple schedule adjustment requests were issued to the same e-Tag, although URE failed to grant certain requests, it was able to ultimately correct this issue through successfully-approved subsequent curtailment or adjustment requests. Furthermore, Inadvertent Interchange, which is the direct result of failure to operate to a common NSI "do[es] not normally affect the real-time operations of the Bulk-Power



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System and pose[s] no immediate threat to reliability."¹⁴ These principles are supported by the absence of any observed adverse impacts to the BPS as a result of this issue and URE's achieved frequency within the range of a normal operating day, *i.e.*, within the range set by NERC via certain thresholds, and as considered acceptable during time error corrections.

RFC201000686 INT-003-2 R1

The purpose statement of Reliability Standard INT-003-2 provides: "To ensure Balancing Authorities confirm Interchange Schedules with Adjacent Balancing Authorities prior to implementing the schedules in their Area Control Error (ACE) equations."

INT-003-2 R1 provides:

R1. Each Receiving Balancing Authority shall confirm Interchange Schedules with the Sending Balancing Authority prior to implementation in the Balancing Authority's ACE equation.

R1.1. The Sending Balancing Authority and Receiving Balancing Authority shall agree on Interchange as received from the Interchange Authority, including:

R1.1.1. Interchange Schedule start and end time.

R1.1.2. Energy profile.

R1.2. If a high voltage direct current (HVDC) tie is on the Scheduling Path, then the Sending Balancing Authorities and Receiving Balancing Authorities shall coordinate the Interchange Schedule with the Transmission Operator of the HVDC tie.

INT-003-2 R1 has a "Medium" VRF and a "Severe" VSL.

URE submitted a Self-Report to Reliability First identifying a violation of INT-003-2 R1. In the Self-Report, URE described how problems with URE's PSS resulted in some Interchange Schedules and adjustments not being confirmed. Specifically, on a certain date, during maintenance of the RSA database, which authenticates users for URE's PSS, connectivity to the RSA database was lost and user access to the PSS was terminated. These PSS connectivity issues rendered schedule adjustment

¹⁴ See "Mandatory Reliability Standards for the Bulk-Power System," FERC Order No. 693 at P 428.

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request approvals impossible because URE operators could not access the PSS and the e-Tag system. If schedule adjustment requests are not acted upon in a timely manner, they are passively denied in accordance with industry e-Tag standards.

During the PSS connectivity outage on that date, the URE operator performing the BA function made a manual adjustment to the NSI component of AGC based on a scheduler's intention to approve curtailment schedule adjustment requests. Within nine minutes, the scheduler notified the URE operator that he was unable to re-connect to the PSS and that the schedule adjustments had not been confirmed. The URE operator immediately reversed the manual adjustment to the NSI that had been entered. Reliability First determined that URE violated INT-003-2 R1 by failing to confirm Interchange Schedules with the Sending BA prior to implementation in the BA's ACE equation.

Reliability *First* determined the duration of the violation to be only on a single day, from 18:00 to 18:09 EST, when URE failed to confirm Interchange Schedules prior to implementation into its ACE.

Reliability First determined that this violation posed a moderate risk to the reliability of the BPS, but did not pose a serious or substantial risk. Specifically, the violation lasted only nine minutes; URE promptly recognized and corrected the error. In addition, URE did not observe any adverse impact to the BPS.

RFC201000687 INT-006-2 R1

The purpose statement of Reliability Standard INT-006-2 provides: "To ensure that each Arranged Interchange is checked for reliability before it is implemented."

INT-006-2 R1 provides:

- R1. Prior to the expiration of the reliability assessment period defined in the Timing Table, Column B, the Balancing Authority and Transmission Service Provider shall respond to a request from an Interchange Authority to transition an Arranged Interchange to a Confirmed Interchange.
 - R1.1. Each involved Balancing Authority shall evaluate the Arranged Interchange with respect to:
 - R1.1.1. Energy profile (ability to support the magnitude of the Interchange).
 - R1.1.2. Ramp (ability of generation maneuverability to accommodate).



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R1.1.3. Scheduling path (proper connectivity of Adjacent Balancing Authorities).

R1.2. Each involved Transmission Service Provider shall confirm that the transmission service arrangements associated with the Arranged Interchange have adjacent Transmission Service Provider connectivity, are valid and prevailing transmission system limits will not be violated.

INT-006-2 R1 has a "Lower" VRF and a "Moderate" VSL.

URE submitted a Self-Report to Reliability *First* identifying a violation of INT-006-2 R1. In the Self-Report, URE described how problems with URE's PSS resulted in some reliability adjustment RFIs not being confirmed prior to the expiration of the prescribed assessment period. On two dates 46 days apart, URE's PSS experienced problems with software, networking, and e-Tag interfacing that rendered reliability adjustment RFI confirmations impossible. URE operators performing the BA function were not able to approve the RFIs by other means before they were passively denied in accordance with industry e-Tag standards. Reliability *First* determined that URE violated INT-006-2 R1 by failing to respond to each RFI prior to the expiration of the reliability assessment period.

Reliability First determined the duration of the violation to be from the date that URE was subject to the Standard, through the time at which URE completed its immediate corrective actions, which ensure that all schedules are acted upon prior to the expiration of the prescribed assessment period.

Reliability First determined that this violation posed a moderate risk to the reliability of the BPS, but did not pose a serious or substantial risk. Specifically, URE operators made efforts to approve the requested curtailments despite the outages and the passive denials of curtailments that occurred are a failsafe to protect system reliability. Furthermore, although URE failed to confirm RFIs in the required time period, it was often able to provide relief through successfully-approved subsequent curtailment or adjustment requests.

Regional Entity's Basis for Penalty

According to the Settlement Agreement, Reliability First has assessed a penalty of sixty thousand dollars (\$60,000) for the referenced violations. In reaching this determination, Reliability First considered the following factors:

1. Reliability First considered certain aspects of URE's compliance program as mitigating factors in penalty determination.;



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- Reliability First also favorably considered additional efforts that URE is undertaking in the
 interest of reliability. URE is also applying significant updates to software it uses to ensure
 effective access management to Cyber Assets. Reliability First considered these efforts as
 mitigating factors because they reflect positively on URE's compliance program and
 commitment to reliability; and
- 3. When assessing the penalty for the violations, Reliability First considered whether the facts of these violations evidenced any (a) repeated or continuing conduct similar to that underlying a prior violation of the same or a closely-related Reliability Standard Requirement; (b) conduct addressed in any previously submitted mitigation plan for a prior violation of the same or a closely-related Reliability Standard Requirement; or (c) multiple violations of the same Standard and Requirement.

After consideration of the above factors, Reliability *First* determined that, in this instance, the penalty amount of sixty thousand dollars (\$60,000) is appropriate and bears a reasonable relation to the seriousness and duration of the violations.

Status of Mitigation Plans¹⁵

RFC200900298 CIP-004-1 R4

URE's Mitigation Plan to address its violation of CIP-004-1 R4 was submitted to Reliability First on April 19, 2011 stating it had been completed on January 31, 2011. The Mitigation Plan was accepted by Reliability First on May 13, 2011 and approved by NERC on June 9, 2011. The Mitigation Plan for this violation was submitted as non-public information to FERC on June 9, 2011 in accordance with FERC orders.

URE's Mitigation Plan stated:

- 1. URE centralized its access control efforts and conducted a broad review and evaluation of its existing access management structures and processes in order to continue to improve accountability;
- 2. URE upgraded software in order to increase the accuracy of quarterly entitlement reviews; and
- URE also revised the process for developing its CCA list and moved its quarterly review schedule to an earlier point in the quarter to provide additional time for quality-checking the results of the review.

¹⁵ See 18 C.F.R § 39.7(d)(7).



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URE certified on April 19, 2011 that the above Mitigation Plan requirements were completed on January 31, 2011. As evidence of completion of its Mitigation Plan, URE submitted the following:

- 1. Executed scope of work document (redacted). With this evidence, URE demonstrated the amount of work necessary to increase the scope and accuracy of its entitlement reviews. URE hired an independent external consultant to perform this work, which included a broad review of the URE's access management practices.
- 2. IT operations organizational chart (redacted). With this evidence, URE demonstrated the changes it made to its management structure in order to support new management within URE's access management department.
- 3. Meeting invitations and emails to Cyber Asset owners requesting review and approval of entitlement reviews. With this evidence, URE demonstrated that its CCA owners reviewed and approved access lists for their CCAs.
- 4. Screen-shots and entitlement reviews. With this evidence, URE demonstrated that it implemented upgraded software in order to increase the accuracy of quarterly entitlement reviews.
- 5. Entitlement process review and spreadsheet. With this evidence, URE demonstrated it conducted training for the review process and completion of the review process related to its access lists.

On June 20, 2011, after reviewing URE's submitted evidence, Reliability First verified that URE's Mitigation Plan was completed on January 21, 2011.

RFC201000285 BAL-005-0.1b R9

URE's Mitigation Plan to address its violation of BAL-005-0.1b R9 was submitted to Reliability First on February 25, 2011 stating it had been completed on April 1, 2010. The Mitigation Plan was accepted by Reliability First on March 9, 2011 and approved by NERC on March 25, 2011. The Mitigation Plan for this violation was submitted as non-public information to FERC on March 25, 2011 in accordance with FERC orders.

URE's Mitigation Plan required URE to:

- 1. Conduct a comprehensive review of its policies and procedures applicable to continued reliable operations in the event of an outage of the PSS; and
- 2. Conduct targeted training that will better inform and prepare operators regarding the appropriate response to an outage such as that which occurred on the identified date.



PRIVILEGED AND CONFIDENTIAL INFORMATION HAS BEEN REMOVED FROM THIS PUBLIC VERSION

URE certified on February 25, 2011 that the above Mitigation Plan requirements were completed on April 1, 2010. As evidence of completion of its Mitigation Plan, URE submitted the following:

- 1. Incident training attendance sheet;
- 2. URE's scheduling and transmission analyst affidavit;
- 3. URE's PSS back-up procedures document; and
- 4. URE's program-specific back-up procedures document.

On May 24, 2011, after reviewing URE's submitted evidence, Reliability First verified that URE's Mitigation Plan was completed on April 1, 2010.

RFC201000684 BAL-005-0.1b R9

URE's Mitigation Plan to address its violation of BAL-005-0.1b R9 was submitted to Reliability First on December 20, 2010 with a proposed completion date of August 30, 2011. The Mitigation Plan was accepted by Reliability First on January 18, 2011 and approved by NERC on February 18, 2011. The Mitigation Plan for this violation was submitted as non-public information to FERC on February 18, 2011 in accordance with FERC orders.

URE's Mitigation Plan required URE to:

- Implement new, redundant manual checks to identify mismatches between NSI calculated by the PSS and NSI calculated by the vendor's e-Tag system, including development and implementation of corrective actions to address mismatches;
- Implement automation in the vendor's e-Tag system that will provide an affirmative response
 on behalf of URE to schedule adjustments if they have not been processed prior to thirty
 seconds before the expiration of the required response time defined in the NERC Reliability
 Standards;
- 3. Implement an additional daily after the fact management review to confirm that all schedules were processed correctly the preceding day;
- 4. Implement additional operator training to identify PSS issues in real-time;
- 5. Implement automated alarming to alert operators of mismatches between NSI calculated by the PSS and NSI calculated by the vendor's e-Tag system and implementation of enhancements to the automated alarming;
- 6. Implement currently identified software changes to address the identified defects in URE's PSS; and
- 7. Complete a subsequent review of the PSS and its functional requirements to ensure future compliance.



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URE certified on September 29, 2011 that the above Mitigation Plan requirements were completed on August 30, 2011. As evidence of completion of its Mitigation Plan, URE submitted the following:

- 1. Email;
- 2. Random samples of manual NSI check worksheets;
- 3. Documentation of management approval to implement automation to provide an affirmative response to schedules and schedule adjustments prior to the deadline imposed in INT-006-2 R1;
- 4. Affidavit of a manager regarding implementation of the automation;
- 5. Random samples of emails confirming the implementation of an after-the-fact management review of scheduling;
- 6. Presentation describing the specific process performed;
- 7. Email with attached training documentation;
- 8. Documentation from URE's training and education center providing additional training for an extended period;
- Email from Information Technology staff confirming deployment of the alarm to the real-time production display;
- 10. Emails from Information Technology staff confirming the application of software patches for the PSS;
- 11. Release notes for the software patches referenced in the above emails;
- 12. Schedule for the performance of the review and a list of staff responsible for performing the review; and
- 13. Document summarizing the findings of the review of the PSS.

On December 20, 2011, after reviewing URE's submitted evidence, Reliability First verified that URE's Mitigation Plan was completed on August 30, 2011.

RFC201000685 BAL-006-1.1 R4

URE's Mitigation Plan to address its violation of BAL-006-1.1 R4 was submitted to Reliability First on December 20, 2010 with a proposed completion date of August 30, 2011. The Mitigation Plan was accepted by Reliability First on January 18, 2011 and approved by NERC on February 18, 2011. The Mitigation Plan for this violation was submitted as non-public information to FERC on February 18, 2011 in accordance with FERC orders.

URE's Mitigation Plan required URE to:

 Implement new, redundant manual checks to identify mismatches between NSI calculated by the PSS and NSI calculated by the vendor's e-Tag system, including development and implementation of corrective actions to address mismatches;



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- Implement automation in the vendor's e-Tag system that will provide an affirmative response
 on behalf of URE to adjustments if they have not been processed prior to thirty seconds before
 the expiration of the required response time defined in the NERC Reliability Standards;
- 3. Implement an additional daily after the fact management review to confirm that all schedules were processed correctly the preceding day;
- 4. Implement additional operator training to identify PSS issues in real-time;
- 5. Implement automated alarming to alert operators of mismatches between NSI calculated by the PSS and NSI calculated by the vendor's e-Tag system and implementation of enhancements to the automated alarming;
- 6. Implement currently identified software changes to address the identified defects in URE's PSS; and
- 7. Complete a subsequent review of the PSS and its functional requirements to ensure future compliance.

URE certified on September 29, 2011 that the above Mitigation Plan requirements were completed on August 30, 2011. As evidence of completion of its Mitigation Plan, URE submitted the following:

- 1. Email;
- 2. Random samples of manual NSI check worksheets;
- 3. Documentation of management approval to implement automation to provide an affirmative response to schedules and schedule adjustments prior to the deadline imposed in INT-006-2 R1;
- 4. Affidavit of a manager regarding implementation of the automation;
- 5. Random samples of emails confirming the implementation of an after-the-fact management review of scheduling;
- 6. Presentation describing the specific process performed;
- 7. Email with attached training documentation;
- 8. Documentation from URE's training and education center providing additional training for an extended period;
- 9. Email from Information Technology staff confirming deployment of the alarm to the real-time production display;
- Emails from Information Technology staff confirming the application of software patches for the PSS;
- 11. Release notes for the software patches referenced in the above emails;
- 12. Schedule for the performance of the review and a list of staff responsible for performing the review; and
- 13. Document summarizing the findings of the review of the PSS.



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On December 20, 2011, after reviewing URE's submitted evidence, Reliability First verified that URE's Mitigation Plan was completed on August 30, 2011.

RFC201000686 INT-003-2 R1

URE's Mitigation Plan to address its violation of INT-003-2 R1 was submitted to Reliability First on December 20, 2010 with a proposed completion date of August 30, 2011. The Mitigation Plan was accepted by Reliability First on January 18, 2011 and approved by NERC on February 18, 2011. The Mitigation Plan for this violation was submitted as non-public information to FERC on February 18, 2011 in accordance with FERC orders.

URE's Mitigation Plan required URE to:

- Implement new, redundant manual checks to identify mismatches between NSI calculated by the PSS and NSI calculated by the vendor's e-Tag system, including development and implementation of corrective actions to address mismatches;
- Implement automation in the vendor's e-Tag system that will provide an affirmative response on behalf of URE to schedule adjustments if they have not been processed prior to thirty seconds before the expiration of the required response time defined in the NERC Reliability Standards;
- 3. Implement an additional daily after the fact management review to confirm that all schedules were processed correctly the preceding day;
- 4. Implement additional operator training to identify PSS issues in real-time;
- 5. Implement automated alarming to alert operators of mismatches between NSI calculated by the PSS and NSI calculated by the vendor's e-Tag system and implementation of enhancements to the automated alarming;
- 6. Implement currently identified software changes to address the identified defects in URE's PSS; and
- 7. Complete a subsequent review of the PSS and its functional requirements to ensure future compliance.

URE certified on September 29, 2011 that the above Mitigation Plan requirements were completed on August 30, 2011. As evidence of completion of its Mitigation Plan, URE submitted the following:

- 1. Email;
- 2. Random samples of manual NSI check worksheets;
- 3. Documentation of management approval to implement automation to provide an affirmative response to schedules and schedule adjustments prior to the deadline imposed in INT-006-2 R1;
- 4. Affidavit of a manager regarding implementation of the automation;



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- 5. Random samples of emails confirming the implementation of an after-the-fact management review of scheduling;
- 6. Presentation describing the specific process performed;
- 7. Email with attached training documentation;
- 8. Documentation from URE's training and education center providing additional training for an extended period;
- 9. Email from Information Technology staff confirming deployment of the alarm to the real-time production display;
- 10. Emails from Information Technology staff confirming the application of software patches for the PSS;
- 11. Release notes for the software patches referenced in the above emails;
- 12. Schedule for the performance of the review and a list of staff responsible for performing the review; and
- 13. Document summarizing the findings of the review of the PSS.

On December 20, 2011, after reviewing URE's submitted evidence, Reliability First verified that URE's Mitigation Plan was completed on August 30, 2011.

RFC201000687 INT-006-2 R1

URE's Mitigation Plan to address its violation of INT-006-2 R1 was submitted to Reliability First on December 20, 2010 with a proposed completion date of August 30, 2011. The Mitigation Plan was accepted by Reliability First on January 18, 2011 and approved by NERC on February 18, 2011. The Mitigation Plan for this violation was submitted as non-public information to FERC on February 18, 2011 in accordance with FERC orders.

URE's Mitigation Plan required URE to:

- Implement new, redundant manual checks to identify mismatches between NSI calculated by the PSS and NSI calculated by the vendor's e-Tag system, including development and implementation of corrective actions to address mismatches;
- Implement automation in the vendor's e-Tag system that will provide an affirmative response on behalf of URE to schedule adjustments if they have not been processed prior to thirty seconds before the expiration of the required response time defined in the NERC Reliability Standards;
- 3. Implement an additional daily after the fact management review to confirm that all schedules were processed correctly the preceding day;
- 4. Implement additional operator training to identify PSS issues in real-time;



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- Implement automated alarming to alert operators of mismatches between NSI calculated by the PSS and NSI calculated by the vendor's e-Tag system and implementation of enhancements to the automated alarming;
- 6. Implement currently identified software changes to address the identified defects in URE's PSS; and
- 7. Complete a subsequent review of the PSS and its functional requirements to ensure future compliance.

URE certified on September 29, 2011 that the above Mitigation Plan requirements were completed on August 30, 2011. As evidence of completion of its Mitigation Plan, URE submitted the following:

- 1. Email;
- 2. Random samples of manual NSI check worksheets;
- 3. Documentation of management approval to implement automation to provide an affirmative response to schedules and schedule adjustments prior to the deadline imposed in INT-006-2 R1;
- 4. Affidavit of a manager regarding implementation of the automation;
- 5. Random samples of emails confirming the implementation of an after-the-fact management review of scheduling;
- 6. Presentation describing the specific process performed;
- 7. Email with attached training documentation;
- 8. Documentation from URE's training and education center providing additional training for an extended period;
- 9. Emails and associated remedy ticket from Information Technology staff confirming deployment of the enhanced alarming to the real-time production display;
- 10. Emails from Information Technology staff confirming the application of software patches for the PSS;
- 11. Release notes for the software patches referenced in the above emails;
- 12. Schedule for the performance of the review and a list of staff responsible for performing the review; and
- 13. Document summarizing the findings of the review of the PSS.

On December 20, 2011, after reviewing URE's submitted evidence, Reliability First verified that URE's Mitigation Plan was completed on August 30, 2011.



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Statement Describing the Assessed Penalty, Sanction or Enforcement Action Imposed 16

Basis for Determination

Taking into consideration the Commission's direction in Order No. 693, the NERC Sanction Guidelines and the Commission's July 3, 2008, October 26, 2009 and August 27, 2010 Guidance Orders, ¹⁷ the NERC BOTCC reviewed the Settlement Agreement and supporting documentation on December 12, 2011. The NERC BOTCC approved the Settlement Agreement, including Reliability *First*'s assessment of a sixty thousand dollar (\$60,000) financial penalty against URE 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 violations at issue.

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

- 1. URE self-reported the BAL-005-0.1b R9 (two occurrences), BAL-006-1.1 R4, INT-003-2 R1 and INT-006-2 R1 violations;
- 2. Reliability First reported that URE was cooperative throughout the compliance enforcement process;
- 3. URE had a compliance program at the time of the violation which Reliability First considered a mitigating factor, as discussed above;
- 4. there was no evidence of any attempt to conceal a violation nor evidence of intent to do so;
- 5. URE is undertaking additional activities above and beyond those required in the Mitigation Plans in the interest of reliability, as discussed above;
- 6. Reliability First determined that the violations did not pose a serious or substantial risk to the reliability of the BPS, as discussed above; and
- 7. Reliability First reported that there were no other mitigating or aggravating factors or extenuating circumstances that would affect the assessed penalty.

¹⁶ See 18 C.F.R. § 39.7(d)(4).

¹⁷ North American Electric Reliability Corporation, "Guidance Order on Reliability Notices of Penalty," 124 FERC ¶ 61,015 (2008); North American Electric Reliability Corporation, "Further Guidance Order on Reliability Notices of Penalty," 129 FERC ¶ 61,069 (2009); North American Electric Reliability Corporation, "Notice of No Further Review and Guidance Order," 132 FERC ¶ 61,182 (2010).



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For the foregoing reasons, the NERC BOTCC approved the Settlement Agreement and believes that the assessed penalty of sixty thousand dollars (\$60,000) is appropriate for the violations and circumstances at issue, and is consistent with NERC's goal to promote and ensure reliability of the BPS.

Pursuant to 18 C.F.R. § 39.7(e), the penalty will be effective upon expiration of the 30 day period following the filing of this Notice of Penalty with FERC, or, if FERC decides to review the penalty, upon final determination by FERC.

Attachments to be Included as Part of this Notice of Penalty

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

- a) Settlement Agreement by and between Reliability First and URE executed September 23, 2011, included as Attachment a;
 - a. URE's Mitigation Plan for CIP-004-1 R4 (RFC200900298)included as Attachment A to the Settlement Agreement;
 - URE's Certification of Mitigation Plan Completion for CIP-004-1 R4 (RFC200900298), included as Attachment B to the Settlement Agreement;
 - c. URE's Self-Report for BAL-005-0.1b R9 (RFC201000285), included as Attachment C to the Settlement Agreement;
 - d. URE's Mitigation Plan for BAL-005-0.1b R9 (RFC201000285), included as Attachment D to the Settlement Agreement;
 - e. URE's Certification of Mitigation Plan Completion for BAL-005-0.1b R9 (RFC201000285), included as Attachment E to the Settlement Agreement;
 - f. Reliability First's Verification of Mitigation Plan Completion for BAL-005-0.1b R9 (RFC201000285), included as Attachment F to the Settlement Agreement;
 - g. URE's Self-Report for BAL-005-0.1b R9 (RFC201000684), included as Attachment G to the Settlement Agreement;
 - h. URE's Mitigation Plan for BAL-005-0.1b R9 (RFC201000684), included as Attachment H to the Settlement Agreement;
 - i. URE's Self-Report for BAL-006-1.1 R4 (RFC201000685), included as Attachment I to the Settlement Agreement;



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- j. URE's Mitigation Plan for BAL-006-1.1 R4 (RFC201000685), included as Attachment J to the Settlement Agreement;
- k. URE's Self-Report for INT-003-2 R1 (RFC201000686), included as Attachment K to the Settlement Agreement;
- I. URE's Mitigation Plan for INT-003-2 R1 (RFC201000686), included as Attachment L to the Settlement Agreement;
- m. URE's Self-Report for INT-006-2 R1 (RFC201000687), included as Attachment M to the Settlement Agreement; and
- n. URE's Mitigation Plan for INT-006-2 R1 (RFC201000687), included as Attachment N to the Settlement Agreement.
- b) Reliability First's Source Document for CIP-004-1 R4 (RFC200900298), included as Attachment b;
- c) Reliability First's Verification of Mitigation Plan Completion for CIP-004-1 R4 (RFC200900298), included as Attachment c;
- d) URE's Certification of Mitigation Plan Completion for BAL-005-0.1b R9 (RFC201000684), BAL-006-1.1 R4 (RFC201000685), INT-003-2 R1 (RFC201000686) and INT-006-2 R1 (RFC201000687), included as Attachment d; and
- e) Reliability First's Verification of Mitigation Plan Completion for BAL-005-0.1b R9 (RFC201000684), BAL-006-1.1 R4 (RFC201000685), INT-003-2 R1 (RFC201000686) and INT-006-2 R1 (RFC201000687), included as Attachment e.

A Form of Notice Suitable for Publication¹⁸

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

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¹⁸ See 18 C.F.R § 39.7(d)(6).



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Notices and Communications

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

Gerald W. Cauley

President and Chief Executive Officer North American Electric Reliability

Corporation

3353 Peachtree Road NE Suite 600, North Tower Atlanta, GA 30326-1001 (404) 446-2560

David N. Cook

Senior Vice President and General Counsel

North American Electric Reliability

Corporation

1325 G Street, N.W., Suite 600 Washington, DC 20005-3801

(202) 400-3000

david.cook@nerc.net

Michael D. Austin*
Associate Attorney
ReliabilityFirst Corporation
320 Springside Drive, Suite 300
Akron, OH 44333
(330) 456-2488
mike.austin@rfirst.org

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

Rebecca J. Michael*

Associate General Counsel for Corporate and

Regulatory Matters

Sonia C. Mendonça

Attorney

North American Electric Reliability Corporation

1325 G Street, N.W.

Suite 600

Washington, DC 20005-3801

(202) 400-3000

rebecca.michael@nerc.net sonia.mendonca@nerc.net

Robert K. Wargo*

Director of Enforcement and Regulatory Affairs

ReliabilityFirst Corporation

320 Springside Drive, Suite 300

Akron, OH 44333

(330) 456-2488

bob.wargo@rfirst.org

L. Jason Blake*

Corporate Counsel

ReliabilityFirst Corporation

320 Springside Drive, Suite 300

Akron, OH 44333

(330) 456-2488

jason.blake@rfirst.org



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Conclusion

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

Gerald W. Cauley
President and Chief Executive Officer
North American Electric Reliability
Corporation
3353 Peachtree Road NE
Suite 600, North Tower
Atlanta, GA 30326-1001
(404) 446-2560

David N. Cook
Senior Vice President and General Counsel
North American Electric Reliability
Corporation
1325 G Street, N.W., Suite 600
Washington, DC 20005
(202) 400-3000
david.cook@nerc.net

cc: Unidentified Registered Entity ReliabilityFirst Corporation

Attachments

Respectfully submitted,

/s/ Rebecca J. Michael
Rebecca J. Michael
Associate General Counsel for Corporate and Regulatory Matters
Sonia C. Mendonça
Attorney
North American Electric Reliability
Corporation
1325 G Street, N.W.
Suite 600
Washington, DC 20005
(202) 400-3000
rebecca.michael@nerc.net

sonia.mendonca@nerc.net