

124 FERC ¶ 61,071
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 40

(Docket No. RM08-7-000; Order No. 713)

Modification of Interchange and Transmission Loading Relief Reliability Standards; and
Electric Reliability Organization Interpretation of Specific Requirements of Four
Reliability Standards

(Issued July 21, 2008)

AGENCY: Federal Energy Regulatory Commission.

ACTION: Final Rule.

SUMMARY: Pursuant to section 215 of the Federal Power Act, the Federal Energy Regulatory Commission (Commission) approves five of six modified Reliability Standards submitted to the Commission for approval by the North American Electric Reliability Corporation (NERC). The Commission directs NERC to submit a filing that provides an explanation regarding one aspect of the sixth modified Reliability Standard submitted by NERC. The Commission also approves NERC's proposed interpretations of five specific requirements of Commission-approved Reliability Standards.

EFFECTIVE DATE: This rule will become effective [**30 days after publication in the FEDERAL REGISTER**]

FOR FURTHER INFORMATION CONTACT:

Patrick Harwood (Technical Information)
Office of Electric Reliability
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

(202) 502-6125
patrick.harwood@ferc.gov

Christopher Daignault (Legal Information)
Office of the General Counsel
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426
(202) 502-8286
christopher.daignault@ferc.gov

SUPPLEMENTARY INFORMATION:

124 FERC ¶ 61,071
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Modification of Interchange and Transmission Loading Docket No. RM08-7-000
Relief Reliability Standards; and Electric Reliability
Organization Interpretation of Specific Requirements of
Four Reliability Standards

ORDER NO. 713

FINAL RULE

TABLE OF CONTENTS

	<u>Paragraph Numbers</u>
I. Background	<u>2.</u>
A. EPCRA 2005 and Mandatory Reliability Standards	<u>2.</u>
B. NERC Filings	<u>6.</u>
C. Notice of Proposed Rulemaking.....	<u>11.</u>
II. Discussion	<u>13.</u>
A. NERC’s December 19, 2007 Filing: Interpretations of Reliability Standards.....	<u>13.</u>
1. BAL-001-0 – Real Power Balancing Control Performance and BAL-003-0 – Frequency Response and Bias	<u>14.</u>
a. Proposed Interpretation	<u>16.</u>
b. Comments.....	<u>19.</u>
c. Commission Determination.....	<u>20.</u>
2. Requirement R17 of BAL-005-0 – Automatic Generation Control.....	<u>23.</u>
a. Proposed Interpretation	<u>23.</u>
b. Comments.....	<u>26.</u>
i. Whether interpretation could decrease accuracy of frequency and time error measurements.....	<u>26.</u>
ii. What conditions would preclude requirement to calibrate devices.....	<u>28.</u>
iii. Whether accuracy of devices is assured by other requirements.....	<u>30.</u>
c. Commission Determination.....	<u>32.</u>
3. Requirements R1 and R2 of VAR-002-1 Generator Operation for Maintaining Network Voltage Schedules	<u>35.</u>
a. Proposed Interpretations.....	<u>35.</u>
b. Comments.....	<u>39.</u>
c. Commission Determination.....	<u>40.</u>
B. NERC’s December 21, 2007 Filing: Modification of TLR Procedure	<u>41.</u>

1. Background.....	42.
2. ERO TLR Filing, Reliability Standard IRO-006-4	43.
3. NOPR.....	44.
4. Comments.....	45.
5. Commission Determination.....	46.
C. NERC’s December 26, 2007 Filing: Modification to Five “Interchange and Scheduling” Reliability Standards	51.
1. INT-001-3 – Interchange Information and INT-004-2 – Dynamic Interchange Transaction Modifications	52.
a. Comments.....	56.
b. Commission Determination	57.
2. INT-005-2 – Interchange Authority Distributes Arranged Interchange, INT-006-2 – Response to Interchange Authority, and INT-008-2 – Interchange Authority Distributes Status	58.
a. Comments.....	66.
b. Commission Determination	67.
III. Information Collection Statement	68.
IV. Environmental Analysis	71.
V. Regulatory Flexibility Act.....	72.
VI. Document Availability	73.
VII. Effective Date and Congressional Notification	76.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Suedeem G. Kelly, Marc Spitzer,
Philip D. Moeller, and Jon Wellinghoff.

Modification of Interchange and Transmission Loading Docket No. RM08-7-000
Relief Reliability Standards; and Electric Reliability
Organization Interpretation of Specific Requirements of
Four Reliability Standards

ORDER NO. 713

FINAL RULE

(Issued July 21, 2008)

1. Pursuant to section 215 of the Federal Power Act (FPA),¹ the Commission approves five of six modified Reliability Standards submitted to the Commission for review by the North American Electric Reliability Corporation (NERC). The five Reliability Standards pertain to interchange scheduling and coordination. The Commission directs NERC to submit a filing that provides an explanation regarding one aspect of the sixth modified Reliability Standard submitted by NERC, which pertains to transmission loading relief (TLR) procedures. The Final Rule also approves interpretations of five specific requirements of Commission-approved Reliability Standards.

¹ 16 U.S.C. 824o (2006).

I. Background**A. EPAct 2005 and Mandatory Reliability Standards**

2. Section 215 of the FPA requires a Commission-certified Electric Reliability Organization (ERO) to propose Reliability Standards for the Commission's review. Once approved by the Commission, the Reliability Standards may be enforced by the ERO, subject to Commission oversight, or by the Commission independently.²

3. Pursuant to section 215 of the FPA, the Commission established a process to select and certify an ERO³ and, subsequently, certified NERC as the ERO.⁴ On April 4, 2006, as modified on August 28, 2006, NERC submitted to the Commission a petition seeking approval of 107 proposed Reliability Standards. On March 16, 2007, the Commission issued a Final Rule, Order No. 693, approving 83 of these 107 Reliability Standards and directing other action related to these Reliability Standards.⁵ In addition, pursuant to

² See FPA 215(e)(3), 16 U.S.C. 824o(e)(3) (2006).

³ Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards, Order No. 672, FERC Stats. & Regs. ¶ 31,204, order on reh'g, Order No. 672-A, FERC Stats. & Regs. ¶ 31,212 (2006).

⁴ North American Electric Reliability Corp., 116 FERC ¶ 61,062 (ERO Certification Order), order on reh'g & compliance, 117 FERC ¶ 61,126 (ERO Rehearing Order) (2006), appeal docketed sub nom. Alcoa, Inc. v. FERC, No. 06-1426 (D.C. Cir. Dec. 29, 2006).

⁵ Mandatory Reliability Standards for the Bulk-Power System, Order No. 693, FERC Stats. & Regs. ¶ 31,242, order on reh'g, Order No. 693-A, 120 FERC ¶ 61,053 (2007).

section 215(d)(5) of the FPA, the Commission directed NERC to develop modifications to 56 of the 83 approved Reliability Standards.

4. In April 2007, the Commission approved delegation agreements between NERC and each of the eight Regional Entities, including the Western Electricity Coordinating Council (WECC).⁶ Pursuant to such agreements, the ERO delegated responsibility to the Regional Entities to carry out compliance monitoring and enforcement of the mandatory, Commission-approved Reliability Standards. In addition, the Commission approved as part of each delegation agreement a Regional Entity process for developing regional Reliability Standards.

5. NERC's Rules of Procedure provide that a person that is "directly and materially affected" by Bulk-Power System reliability may request an interpretation of a Reliability Standard.⁷ The ERO's "standards process manager" will assemble a team with relevant expertise to address the clarification and also form a ballot pool. NERC's Rules provide that, within 45 days, the team will draft an interpretation of the Reliability Standard, with subsequent balloting. If approved by ballot, the interpretation is appended to the

⁶ See North American Electric Reliability Corp., 119 FERC ¶ 61,060, order on reh'g, 120 FERC ¶ 61,260 (2007).

⁷ NERC Rules of Procedure, Appendix 3A (Reliability Standards Development Procedure), at 26-27.

Reliability Standard and filed with the applicable regulatory authority for regulatory approval.⁸

B. NERC Filings

6. As explained in the Notice of Proposed Rulemaking (NOPR),⁹ this rulemaking proceeding consolidates and addresses three NERC filings.

7. On December 19, 2007, NERC submitted for Commission approval five interpretations of requirements in four Commission-approved Reliability Standards: BAL-001-0 (Real Power Balancing Control Performance), Requirement R1; BAL-003-0 (Frequency Response and Bias), Requirement R3; BAL-005-0 (Automatic Generation Control), Requirement R17; and VAR-002-1 (Generator Operation for Maintaining Network Voltage Schedules), Requirements R1 and R2.¹⁰ On April 15, 2008, NERC submitted a petition to withdraw the earlier request for approval of NERC's interpretation

⁸ We note that the NERC board of trustees approved the interpretations of Reliability Standards submitted by NERC for approval in this proceeding. However, Appendix 3A of NERC's Rules of Procedure is silent on NERC board of trustees approval of interpretations before they are filed with the regulatory authority. The Commission is concerned that NERC's Rules of Procedure do not properly reflect this approval step.

⁹ Modification of Interchange and Transmission Loading Relief Reliability Standards; and Electric Reliability Organization Interpretation of Specific Requirements of Four Reliability Standards, Notice of Proposed Rulemaking, 73 FR 22,856 (Apr. 28, 2008), FERC Stats. & Regs. ¶ 32,632 (2008) (NOPR).

¹⁰ In its filing, NERC identifies the Reliability Standards together with NERC's proposed interpretations as BAL-001-0a, BAL-003-0a, BAL-005-0a, and VAR-002-1a.

of BAL-003-0, Requirement R17, and instead to approve a second interpretation of Requirement R17 submitted by NERC in the April 15 filing.

8. On December 21, 2007, NERC submitted for Commission approval modifications to Reliability Standard IRO-006-4 (Reliability Coordination – Transmission Loading Relief) that applies to balancing authorities, reliability coordinators, and transmission operators. According to NERC, the modifications “extract” from the Reliability Standard the business practices and commercial requirements from the current IRO-006-3 Reliability Standard. The business practices and commercial requirements have been transferred to a North American Energy Standards Board (NAESB) business practices document. The NAESB business practices and commercial requirements have been included in Version 001 of the NAESB Wholesale Electric Quadrant (WEQ) Standards which NAESB filed with the Commission on the same day, December 21, 2007.¹¹ Further, the modified Reliability Standard includes changes directed by the Commission in Order No. 693 related to the appropriateness of using the TLR procedure to mitigate violations of interconnection reliability operating limits (IROL).¹²

9. On December 26, 2007, NERC submitted for Commission approval modifications to five Reliability Standards from the “Interchange Scheduling” (INT) group of

¹¹ NAESB December 21, 2007 Filing, Docket No. RM05-5-005.

¹² An IROL is a system operating limit that, if violated, could lead to instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the Bulk-Power System.

Reliability Standards: INT-001-3 (Interchange Information); INT-004-2 (Dynamic Interchange Transaction Modifications); INT-005-2 (Interchange Authority Distributes Arranged Interchange); INT-006-2 (Response to Interchange Authority); and INT-008-2 (Interchange Authority Distributes Status). NERC stated that the modifications to INT-001-3 and INT-004-2 eliminate waivers requested in 2002 under the voluntary Reliability Standards regime for entities in the WECC region. According to NERC, modifications to INT-005-2, INT-006-2, and INT-008-2 adjust reliability assessment time frames for proposed transactions within WECC.¹³

10. Each Reliability Standard that the ERO proposed to interpret or modify in this proceeding was approved by the Commission in Order No. 693.

C. Notice of Proposed Rulemaking

11. On April 21, 2008, the Commission issued a NOPR that proposed to approve the six modified Reliability Standards submitted to the Commission for approval by NERC and to approve NERC's proposed interpretations of five specific requirements of Commission-approved Reliability Standards. On May 16, 2008, the Commission supplemented the NOPR,¹⁴ proposing to approve NERC's modified interpretation of Reliability Standard BAL-005-0, Requirement R17.

¹³ The Reliability Standards and interpretations addressed in this Final Rule are available on the Commission's eLibrary document retrieval system in Docket No. RM08-7-000 and also on NERC's website, <http://www.nerc.com>.

¹⁴ Modification of Interchange and Transmission Loading Relief Reliability Standards; and Electric Reliability Organization Interpretation of Specific Requirements
(continued)

12. In response to the NOPR, comments were filed by the following eight interested persons: Alcoa Inc. (Alcoa); Independent Electricity System Operator of Ontario (IESO); ISO/RTO Council; International Transmission Company, Michigan Electric Transmission Company, LLC and Midwest LLC (collectively, ITC); Lafayette Utilities and the Louisiana Energy and Power Authority (Lafayette and LEPA); NERC; NRG Companies;¹⁵ and Southern Company Services, Inc. (Southern).

II. Discussion

A. NERC's December 19, 2007 Filing: Interpretations of Reliability Standards

13. As mentioned above, NERC submitted for Commission approval interpretations of five specific requirements in four Commission-approved Reliability Standards.

1. BAL-001-0 – Real Power Balancing Control Performance and BAL-003-0 – Frequency Response and Bias

14. The purpose of Reliability Standard BAL-001-0 is to maintain interconnection steady-state frequency within defined limits by balancing real power demand and supply in real-time.¹⁶ It uses two averages, covering the one-minute and ten-minute area control

of Four Reliability Standards, Supplemental Notice of Proposed Rulemaking, 73 FR 30,326 (May 27, 2008), FERC Stats. & Regs. ¶ 32,635 (2008) (Supplemental NOPR).

¹⁵ NRG Companies includes Louisiana Generating LLC, Bayou Cove Peaking Power LLC, Big Cajun I Peaking Power LLC, NRG Sterlington Power LLC, and NRG Power Marketing, LLC.

¹⁶ See Reliability Standard BAL-001-0. Each Reliability Standard developed by the ERO includes a “Purpose” statement.

error (ACE) performance (CPS1 and CPS2, respectively), as measures for determining compliance with its four Requirements. Requirement R1 of BAL-001-0 obligates each balancing authority, on a rolling twelve-month basis, to maintain its clock-minute averages of ACE, modified by its frequency bias and the interconnection frequency, within a specific limit based on historic performance.¹⁷

15. The purpose of Reliability Standard BAL-003-0 is to ensure that a balancing authority's frequency bias setting is accurately calculated to match its actual frequency response. Frequency bias may be calculated in a number of ways provided that the frequency bias is as close as practical to the frequency response. Requirement R3 of BAL-003-0 requires each balancing authority to operate its automatic generation control on "tie line frequency bias," unless such operation is adverse to system interconnection reliability.¹⁸

¹⁷ Frequency bias is an approximation, expressed in megawatts per 0.1 Hertz, of the frequency response of a balancing authority area which estimates the net change in power from the generators that is expected to occur with a change in interconnection frequency from the scheduled frequency (which is normally 60 Hertz).

¹⁸ Automatic generation control refers to an automatic process whereby a balancing authority's mix and output of its generation and demand-side management is varied to offset the extent of supply and demand imbalances reflected in its ACE. North American Electric Reliability Corporation, 121 FERC ¶ 61,179, at P 19 n.14 (2007). "Tie line frequency bias" is defined in the NERC Glossary of Terms Used in Reliability Standards as "[a] mode of Automatic Generation Control that allows the Balancing Authority to 1.) maintain its Interchange Schedule and 2.) respond to Interconnection frequency error."

a. **Proposed Interpretation**

16. In its December 19, 2007 filing, NERC explained that WECC requested the ERO to provide a formal interpretation whether the use of WECC's existing automatic time error correction factor that is applied to the net interchange portion of the ACE equation violates Requirement R1 of BAL-001-0 or Requirement R3 of BAL-003-0.

17. In response, the ERO interpreted of BAL-001-0 Requirement R1 as follows:

- The [WECC automatic time error correction or WATEC] procedural documents ask Balancing Authorities to maintain raw ACE for [control performance standard or CPS] reporting and to control via WATEC-adjusted ACE.
- As long as Balancing Authorities use raw (unadjusted for WATEC) ACE for CPS reporting purposes, the use of WATEC for control is not in violation of BAL-001 Requirement 1.

The ERO interpreted BAL-003-0 Requirement R3 as follows:

- Tie-Line Frequency Bias is one of the three foundational control modes available in a Balancing Authority's energy management system. (The other two are flat-tie and flat-frequency.) Many Balancing Authorities layer other control objectives on top of their basic control mode, such as automatic inadvertent payback, [control performance standard] optimization, [and] time control (in single [balancing authority] interconnections).^[19]
- As long as Tie-Line Frequency Bias is the underlying control mode and CPS1 is measured and reported on the associated ACE

¹⁹ The "flat frequency" control mode would increase or decrease generation solely based on the interconnection frequency. The "flat tie" mode would increase or decrease generation within a balancing authority area depending solely on that balancing authority's total interchange. The "tie-line frequency bias" mode combines the flat frequency and flat tie modes and adjusts generation based on the balancing authority's net interchange and the interconnection frequency.

equation,²⁰] there is no violation of BAL-003-0 Requirement 3:

$$ACE = (NI_A - NI_S) - 10B (F_A - F_S) - I_{ME}$$

(NERC December 19, 2007 Filing, Ex. A-3.)

18. In the NOPR, the Commission proposed to approve the ERO's formal interpretations of Requirement R1 of BAL-001-0 and Requirement R3 of BAL-003-0.

b. Comments

19. NERC and IESO support the Commission's proposal to approve these interpretations.

c. Commission Determination

20. The Commission approves the ERO's formal interpretations of Requirement R1 of BAL-001-0 and Requirement R3 of BAL-003-0. The ERO's interpretation of BAL-001-0, Requirement R1, is reasonable in that it requires all balancing authorities in WECC to calculate CPS1 and CPS2 as defined in the Requirements. Thus, the interpretation upholds the reliability goal to minimize the frequency deviation of the interconnection by constantly balancing supply and demand.

21. The ERO's interpretation of BAL-003-0, Requirement R3 is appropriate because it maintains the goal of Requirement R3 by obligating a balancing authority to operate automatic generation control on tie-line frequency bias as its underlying control mode, unless to do so is adverse to system or interconnection reliability. Further, the

²⁰ "CPS1" refers to Requirement R1 of BAL-001-0.

interpretation fosters the purpose of Requirement R3 as it allows that a balancing authority may go beyond Requirement R3 and “layer other control objectives on top of their basic control modes, such as automatic inadvertent payback, [control performance standard] optimization, [and] time control (in single [balancing authority] interconnections),”²¹ although such layering is not required by the Reliability Standard.

22. For the reasons stated above, the Commission finds that the ERO’s interpretations of Requirement R1 of BAL-001-0 and Requirement R3 of BAL-003-0 are just, reasonable, not unduly discriminatory or preferential, and in the public interest. Accordingly, the Commission approves the ERO’s interpretations.

2. Requirement R17 of BAL-005-0 – Automatic Generation Control

a. Proposed Interpretation

23. Requirement R17 of Reliability Standard BAL-005-0 is intended to annually check and calibrate the time error and frequency devices under the control of the balancing authority that feed data into automatic generation control necessary to calculate ACE. Requirement R17 mandates that the balancing authority must adhere to an annual calibration program for time error and frequency devices. The requirement states that a balancing authority must adhere to minimum accuracies in terms of ranges specified in Hertz, volts, amps, etc., for various listed devices, such as digital frequency transducers,

²¹ NERC interpretation of BAL-003-0, Requirement R3.

voltage transducers, remote terminal unit, potential transformers, and current transformers.

24. On April 15, 2008, NERC submitted an interpretation of Requirement R17 regarding the type and location of the equipment to which Requirement R17 applies.²²

The interpretation provides that BAL-005-0, Requirement R17

applies only to the time error and frequency devices that provide, or in the case of back-up equipment may provide, input into the reporting or compliance ACE equation or provide real-time time error or frequency information to the system operator. Frequency inputs from other sources that are for reference only are excluded. The time error and frequency measurement devices may not necessarily be located in the system operations control room or owned by the Balancing Authority; however the Balancing Authority has the responsibility for the accuracy of the frequency and time error devices....

New or replacement equipment that provides the same functions noted above requires the same calibrations. Some devices used for time error and frequency measurement cannot be calibrated as such. In this case, these devices should be cross-checked against other properly calibrated equipment and replaced if the devices do not meet the required level of accuracy.

25. In a supplemental NOPR issued May 16, 2008, the Commission proposed to approve NERC's interpretation of BAL-005-0, Requirement R17. In addition, the Commission noted that tie-line megawatt metering data is an important aspect of ensuring the accurate calculation of ACE, and the interpretation limits the specific accuracy requirements of Requirement R17 to frequency and time error measurement devices. The

²² As mentioned earlier, in April 2008, NERC submitted a petition seeking to withdraw an earlier interpretation of Requirement R17 and substituting a new interpretation for Commission approval.

Commission asked for comment on (1) whether the interpretation could decrease the accuracy of frequency and time error measurements by not requiring calibration of tie-line megawatt metering devices; (2) what conditions would preclude the requirement to calibrate these devices; and (3) whether the accuracy of these devices is assured by other requirements within BAL-005-0 in the absence of calibration.

b. Comments

i. Whether interpretation could decrease accuracy of frequency and time error measurements

26. Southern, ITC, ISO/RTO Council, and NERC claim that the interpretation could not decrease the accuracy of frequency and time error measurements by not requiring calibration of tie-line megawatt metering devices because tie-line metering data is not an input to either time error or frequency measurements and has no impact on the accuracy of these devices. NERC further suggests that the Commission may have intended to ask whether the interpretation adversely affects the accuracy of the balancing authority ACE calculation. NERC provides that it does not, because calibration of tie-line metering historically was included in the guide section of NERC Operating Policy 1 and was not intended to be translated into a requirement. NERC asserts that calibration of tie-line metering remains a sound practice and there are safeguards, checks, and balances to ensure inadvertent flows in the interconnection equal zero, thus ensuring that errors in ACE are bounded to protect the interconnections.

27. As a general comment on the proposed interpretation of Requirement R17, Southern suggests that the metering specifications table in Requirement R17 may be

creating some confusion because the NERC committee that developed this Reliability Standard intended to include the frequency metering specifications from this table but inadvertently included other metering specifications that are not required to fulfill Requirement R17. Southern claims that Requirement R17 is intended to only address time error and frequency devices, and this table was added in error and should have been limited to specifications for those devices.

ii. **What conditions would preclude requirement to calibrate devices**

28. NERC, ISO/RTO Council, and Southern claim that there are no conditions which would preclude the requirement to calibrate tie-line megawatt metering devices. NERC suggests that, if the question relates to a possible new requirement to calibrate all tie-line metering equipment on a given schedule, a new standards authorization request should be submitted through the Reliability Standards Development Process. NERC believes that the industry may not want to divert resources away from other important tasks unless a case can be made that calibration of these devices presents a risk to reliability. Similarly, ITC comments that, if the Commission believes it is necessary to annually calibrate the tie-line megawatt metering devices, such a requirement belongs in BAL-005-0 and not in Requirement R17. ISO/RTO Council claims such a requirement is unnecessary because it is redundant, not needed for reliability, and poses the possibility of financial sanctions for no good reason.

29. ITC states that tie-line meters would be precluded from calibration requirements if they are digital devices that the equipment vendor has indicated do not require

calibration. They claim that there are no field calibration procedures which can be performed by end-users for such devices. According to ITC, Requirement R17 of BAL-005-0 should recognize that there are modern digital devices that do not require calibration as analog devices do.

iii. Whether accuracy of devices is assured by other requirements

30. NERC, ITC, ISO/RTO Council, and Southern state that tie-line metering accuracy is addressed by Requirement R13 of BAL-005-0, which requires each balancing authority to perform hourly error checks using tie-line megawatt-hour meters with common time synchronization to determine the accuracy of its control equipment and make adjustments accordingly. ITC claims that Requirement R13 of BAL-005-0 provides a more timely identification of errors than a requirement for annual calibration.

31. NERC comments that tie-line metering accuracy is not assured by any other requirement. According to NERC, requirements relating to Reliability Standards BAL-005-0 and BAL-006-1, along with the associated NERC processes, provide several layers of overlapping protection to address tie-line accuracy. NERC further claims that BAL-005-0 requires balancing authorities to operate in conformance with common metering equipment in comparison to that of their neighbors, so there is no net balancing authority error in the interconnection as a whole. In addition, NERC claims that many balancing authorities have secondary or backup metering on critical tie lines and have access to the NERC Resource Adequacy application, which can provide alerts to the balancing authority of tie-line metering errors.

c. **Commission Determination**

32. The Commission approves the ERO's formal interpretation of Requirement R17 of BAL-005-0 as set forth in the ERO's April 2008 filing. Based on the comments, we find that this interpretation will not decrease the accuracy of frequency and time error measurements by not requiring calibration of tie-line megawatt metering devices. In addition, we are persuaded by the commenters that the need to calibrate tie-line megawatt metering devices is addressed by other requirements such as Requirement R13 that require hourly checks to ensure continuous accuracy. The Commission notes that the applicable requirement for the accuracy of calibration of tie-line megawatt metering devices is identified in Requirement R17. While Southern has stated that the metering specifications table in Requirement R17 was added in error, an interpretation cannot change the substance of a Reliability Standard. Notwithstanding the question of relevancy of particular components of the metering specifications table, the accuracy requirements of this table remain part of Reliability Standard BAL-005-0 as reference for mandatory reliability practices. The Commission encourages further clarification of tie-line metering device calibration requirements through the ERO standards development process.

33. ITC comments that digital devices are precluded from the calibration requirement. We note that the interpretation provides that "[s]ome devices used for time error and frequency measurement cannot be calibrated as such. In this case, these devices should be cross-checked against other properly calibrated equipment and replaced if the devices

do not meet the required level of accuracy.” Thus, while ITC’s comment is accurate, the ERO’s interpretation acknowledges the concern and provides a response, i.e., modern digital devices that cannot be calibrated must be cross-checked against other equipment and replaced if they do not meet the required level of accuracy.

34. The ERO’s interpretation of BAL-005-0, Requirement R17 provides that “frequency inputs from other sources that are for reference only are excluded.” The Commission notes that this Reliability Standard establishes requirements concerning the inputs to the ACE equation to correctly operate automatic generation control. Frequency inputs used for other purposes are not covered by this Reliability Standard. Therefore, we understand the ERO’s interpretation to exclude frequency devices that do not provide input into the reporting or compliance with the ACE equation or provide real-time time error or frequency information to the system operator. Any devices that provide reference input from which a balancing authority calibrates other time error and frequency devices, however, do provide real-time time error and frequency information to the system operator and therefore must be calibrated under this requirement.

3. Requirements R1 and R2 of VAR-002-1 Generator Operation for Maintaining Network Voltage Schedules

a. Proposed Interpretations

35. The stated purpose of Reliability Standard VAR-002-1 is to ensure that generators provide reactive and voltage control necessary to ensure that voltage levels, reactive flows, and reactive resources are maintained within applicable facility ratings to protect

equipment and the reliable operation of the interconnection. Requirement R1 of VAR-002-1 provides:

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.

Requirement R2 provides:

Unless exempted by the Transmission Operator, each Generator Operator shall maintain the generator voltage or Reactive Power output (within applicable Facility Ratings) as directed by the Transmission Operator.

36. The ERO received a request to provide a formal interpretation of Requirements R1 and R2. The request first asked whether automatic voltage regulator operation in the constant power factor or constant Mvar modes complies with Requirement R1. Second, the request asked the ERO whether Requirement R2 gives the transmission operator the option of directing the generation owner to operate the automatic voltage regulator in the constant power factor or constant Mvar modes rather than the constant voltage mode.

37. NERC's formal interpretation provides that a generator operator that is operating its automatic voltage regulator in the constant power factor or constant Mvar modes does not comply with Requirement R1.²³ The interpretation rests on the assumptions that the generator has the physical equipment that will allow such operation and that the

²³ NERC's interpretation of VAR-002-1, Requirement R1 is quoted in full in the NOPR, FERC Stats. & Regs. ¶ 32,632 at P 32, n.27.

transmission operator has not directed the generator to run in a mode other than constant voltage. The interpretation also provides that Requirement R2 gives the transmission operator the option of directing the generation operator to operate the automatic voltage regulator in the constant power factor or constant Mvar modes rather than the constant voltage mode.

38. In the NOPR, the Commission proposed to approve the ERO's interpretation of Requirement R1 and Requirement R2 of VAR-002-1.

b. Comments

39. NERC and IESO support the Commission's proposal to approve the interpretation.

c. Commission Determination

40. The Commission concludes that the interpretation is just, reasonable, not unduly discriminatory or preferential, and in the public interest. Therefore, the Commission approves the ERO's interpretation of Requirements R1 and R2 of VAR-002-1.

B. NERC's December 21, 2007 Filing: Modification of TLR Procedure

41. NERC submitted for Commission approval proposed Reliability Standard IRO-006-4, which modifies the Commission-approved Reliability Standard, IRO-006-3.

1. Background

42. In Order No. 693, the Commission approved an earlier version of this Reliability Standard, IRO-006-3. This Reliability Standard ensures that a reliability coordinator has a coordinated transmission service curtailment and reconfiguration method that can be used along with other alternatives, such as redispatch or demand-side management, to

avoid transmission limit violations when the transmission system is congested.

Reliability Standard IRO-006-3 established a detailed TLR procedure for use in the Eastern Interconnection to alleviate loadings on the system by curtailing or changing transactions based on their priorities and the severity of the transmission congestion. The Reliability Standard referenced other procedures for WECC and Electric Reliability Council of Texas (ERCOT).²⁴

2. ERO TLR Filing, Reliability Standard IRO-006-4

43. In its December 2007 filing, NERC submitted for Commission approval a modified TLR procedure, Reliability Standard IRO-006-4, which contains five requirements. Requirement R1 obligates a reliability coordinator experiencing a potential or actual system operating limit (SOL) or IROL violation within its reliability coordinator area to select one or more procedures to provide transmission loading relief. The requirement also identifies the regional TLR procedures in WECC and ERCOT.

3. NOPR

44. In the NOPR, the Commission proposed to approve IRO-006-4 as just, reasonable, not unduly discriminatory or preferential, and in the public interest.²⁵ The Commission also proposed to approve the Reliability Standard based on the interpretation that using a

²⁴ The equivalent interconnection-wide TLR procedures for use in WECC and ERCOT are known as “WSCC Unscheduled Flow Mitigation Plan” and section 7 of the “ERCOT Protocols,” respectively.

²⁵ NOPR, FERC Stats. & Regs. ¶ 32,632 at P 48.

TLR procedure to mitigate an IROL violation is a violation of the Reliability Standard.

The Commission asked for comments on whether any compromise in the reliability of the Bulk-Power System may result from the removal and transfer to NAESB of the business-related issues formerly contained in Reliability Standard IRO-006-3. In addition, the Commission proposed to direct the ERO to modify the violation risk factors assigned to Requirements R1 through R4 by raising them to “high.”

4. Comments

45. The Commission received comments on the NOPR proposal. Because the Final Rule does not approve or remand the proposed Reliability Standard and, rather, directs the ERO to submit a filing that provides an explanation regarding specific language of one requirement of IRO-006-4, the Commission will address the comments in a future issuance in this proceeding.

5. Commission Determination

46. Because the Commission has concern regarding the understanding of certain language of Requirements R1 and R1.1 of IRO-006-4, the Commission is not approving or remanding the proposed Reliability Standard at this time. Rather, the Commission directs that the ERO, within 15 days of the effective date of this Final Rule, submit a filing that provides an explanation regarding specific language of Requirements R1 and R1.1 of IRO-006-4. The Commission will then issue a notice allowing public comment on the ERO’s filing, and will act on the proposed Reliability Standard in a future issuance in this proceeding.

47. In the Final Blackout Report, an international team of experts studying the causes of the August 2003 blackout in North America recommended that NERC “[c]larify that the transmission loading relief (TLR) process should not be used in situations involving an actual violation of an Operation Security Limit.”²⁶ Based on the Final Blackout Report recommendation, the Commission, in Order No. 693, directed NERC to develop a modification to the TLR procedure (IRO-006-3) that “(1) includes a clear warning that the TLR procedure is an inappropriate and ineffective tool to mitigate actual IROL violations and (2) identifies in a Requirement the available alternatives to mitigate an IROL violation other than use of the TLR procedure.”²⁷

48. In response to this directive, NERC proposed in Requirement R1.1 of IRO-006-4 that “[t]he TLR procedure [for the Eastern Interconnection] alone is an inappropriate and ineffective tool to mitigate an IROL violation due to the time required to implement the procedure.” (Emphasis added.) The Commission is concerned whether this language is adequate to satisfy the concern of the Final Blackout Report and Order No. 693.

Specifically, we note that the use of the term “alone” seems to imply that a TLR procedure could be used in response to an actual violation of an IROL whereas the Final Blackout Report recommendation would prevent the use of the TLR procedure in such

²⁶ See U.S.-Canada Power System Outage Task Force, Final Report on the August 14, 2003 Blackout in the United States and Canada: Causes and Recommendations, at 163 (April 2004) (Final Blackout Report) (Recommendation 31).

²⁷ See Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 577, 964.

situations. Moreover, Requirement R1 of IRO-006-4 further appears to contradict the Final Blackout Report recommendation by allowing a reliability coordinator to implement transmission loading relief procedures to mitigate not only potential SOL or IROL violations but also actual SOL or IROL violations.²⁸ The Commission is concerned that Recommendation 31 of the Final Blackout Report and the directive in Order No. 693, both of which state the TLR procedures should not be used in situations involving an actual violation of an IROL, may not be clearly addressed in the proposed Reliability Standard.

49. The Commission notes that an entity is not prevented from using the TLR procedure to avoid a potential IROL violation before a violation occurs. If, while a TLR procedure is in progress, an IROL violation occurs, it is not necessary for the entity to terminate the TLR procedure. However, the Commission believes that it is inappropriate and ineffective to rely on the TLR procedure, even in conjunction with another tool, to address an actual IROL violation.

²⁸ Requirement R1 provides that “[a] reliability Coordinator experiencing a potential or actual SOL or IROL violation within its Reliability Coordinator Area shall, with its authority and at its discretion, select one or more procedures to provide transmission loading relief. This procedure can be a “local” . . . transmission loading relief procedure or one of the following Interconnection-wide procedures. . . .” Sub-requirement R1.1 provides that “[t]he TLR procedure alone is an inappropriate and ineffective tool to mitigate an IROL violation due to the time required to implement the procedure. Other acceptable and more effective procedures to mitigate actual IROL violations include: reconfiguration, redispatch, or load shedding.”

50. Therefore, the Commission does not approve or remand IRO-006-4. Rather, the Commission directs the ERO to submit a filing, within 15 days of the effective date of this Final Rule, that provides an explanation regarding Requirements R1 and R1.1 of IRO-006-4. Specifically, in light of the above discussion, the Commission directs the ERO to provide an explanation regarding the phrase “[t]he TLR procedure alone is an inappropriate and ineffective tool to mitigate an IROL violation . . .” Further, the ERO should explain whether Requirements R1 and R1.1 only allow the TLR procedure to be continued when already deployed prior to an actual IROL violation or, alternatively, whether Requirements R1 and R1.1 allow use of the TLR procedure as a tool to address actual violations after they occur. If the latter, the ERO is directed to explain why this application is not contrary to both Blackout Report Recommendation 31 and the Commission’s determination in Order No. 693. The ERO’s filing should include an explanation of those actions that are acceptable, and those that are unacceptable, pursuant to Requirement R1 and R1.1.

C. **NERC’s December 26, 2007 Filing: Modification to Five “Interchange and Scheduling” Reliability Standards**

51. NERC submitted for Commission approval proposed modifications to five Reliability Standards from the INT group of Reliability Standards.

1. **INT-001-3 – Interchange Information and INT-004-2 – Dynamic Interchange Transaction Modifications**

52. The Interchange Scheduling and Coordination or “INT” group of Reliability Standards address interchange transactions, which occur when electricity is transmitted

from a seller to a buyer across the Bulk-Power System. Reliability Standard INT-001 applies to purchasing-selling entities and balancing authorities. The stated purpose of the Reliability Standard is to “ensure that Interchange Information is submitted to the NERC-identified reliability analysis service.” Reliability Standard INT-004 is intended to “ensure Dynamic Transfers are adequately tagged to be able to determine their reliability impacts.”

53. In Order No. 693, the Commission approved earlier versions of these Reliability Standards, INT-001-2 and INT-004-1.²⁹ Further, when NERC initially (in April 2006) submitted these two Reliability Standards for Commission approval, NERC also asked the Commission to approve a “regional difference” that would exempt WECC from requirements related to tagging dynamic schedules and inadvertent payback provisions of INT-001-2 and INT-004-1. The Commission, in Order No. 693, stated that it did not have sufficient information to address the ERO’s proposed regional difference and directed the ERO to submit a filing either withdrawing the regional difference or providing additional information needed for the Commission to make a determination on the matter.³⁰ The effect of NERC’s December 26, 2007 filing is to withdraw the regional difference with respect to WECC.

²⁹ Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 821, 843. In addition, the Commission directed that the ERO develop modifications to INT-001-2 and INT-004-1 that address the Commission’s concerns.

³⁰ Id. P 825.

54. In its December 26, 2007 filing, NERC stated that, by rescinding the e-tagging waivers, NERC maintains uniformity and makes no structural changes to the requirements in the current Commission-approved version of the Reliability Standards.

55. In the NOPR, the Commission proposed to approve INT-001-3 and INT-004-2.

a. Comments

56. NERC and the IESO support the Commissions proposal to approve these Reliability Standards.

b. Commission Determination

57. Pursuant to section 215(d) of the FPA, the Commission approves Reliability Standards INT-001-3 and INT-004-2 as mandatory and enforceable.

2. INT-005-2 – Interchange Authority Distributes Arranged Interchange, INT-006-2 – Response to Interchange Authority, and INT-008-2 – Interchange Authority Distributes Status

58. Reliability Standard INT-005-1 applies to the interchange authority. The stated purpose of proposed Reliability Standard INT-005-1 is to “ensure that the implementation of Interchange between Source and Sink Balancing Authorities is distributed by an Interchange Authority such that Interchange information is available for reliability assessments.”

59. Reliability Standard INT-006-1 applies to balancing authorities and transmission service providers. The stated purpose of the Reliability Standard is to “ensure that each Arranged Interchange is checked for reliability before it is implemented.”

60. Reliability Standard INT-008-1 applies to the interchange authority. The stated purpose of the Reliability Standard is to “ensure that the implementation of Interchange between Source and Sink Balancing Authorities is coordinated by an Interchange Authority.” This means that it is an interchange authorities’ responsibility to oversee and coordinate the interchange from one balancing authority to another.

61. In its December 26, 2007 filing, NERC addressed a reliability need identified by WECC in its urgent action request. Specifically, Requirement R1.4 of INT-007-1 requires that each balancing authority and transmission service provider provide confirmation to the interchange authority that it has approved the transactions for implementation. NERC stated that for WECC the timeframe allotted for this assessment is five minutes in the original version of the Commission-approved Reliability Standards.

62. Reliability Standards for INT-005-2, INT-006-2, and INT-008-2 increase the timeframe for applicable WECC entities to perform the reliability assessment from five to ten minutes for next hour interchange tags submitted in the first thirty minutes of the hour before. According to NERC, this modification is needed because the majority of next-hour tags in WECC are submitted between xx:00 and xx:30. The existing five minute assessment window makes it nearly impossible for balancing authorities and transmission service providers to review each tag before the five minute assessment time expires. According to NERC, when the time expires, the tags are denied and must be resubmitted.

63. In its December 26, 2007 filing, NERC stated that WECC has experienced numerous instances of transactions being denied because one or more applicable

reliability entities did not actively approve the tag. In NERC's view, the current structure causes frustration and inefficiencies for entities involved in this process, as requestors are required to re-create tags that are denied. Further, NERC stated that there is no reliability basis for a five minute assessment period for tags submitted at least thirty minutes ahead of the ramp-in period.

64. NERC noted that, prior to January 1, 2007, when the new INT group of Reliability Standards was implemented WECC had a ten-minute reliability assessment period for next-hour tags. NERC states that the urgent action request restores assessment times back to ten minutes.

65. In the NOPR, the Commission proposed to approve INT-005-2, INT-006-2, and INT-008-2.

a. Comments

66. NERC and IESO support the Commissions proposal to approve these Reliability Standards.

b. Commission Determination

67. Pursuant to section 215(d) of the FPA, the Commission approves Reliability Standards INT-005-2, INT-006-2, and INT-008-2 as mandatory and enforceable.³¹

³¹ The Commission notes that NERC's compliance with Order No. 693, with respect to Reliability Standard INT-006-1, is ongoing. See Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 866.

III. Information Collection Statement

68. The Office of Management and Budget (OMB) regulations require that OMB approve certain reporting and recordkeeping (collections of information) imposed by an agency.³² The information contained here is also subject to review under section 3507(d) of the Paperwork Reduction Act of 1995.³³ As stated above, the Commission previously approved, in Order No. 693, each of the Reliability Standards that are the subject of the current rulemaking. In the NOPR, the Commission explained that the modifications to the Reliability Standards are minor and the interpretations relate to existing Reliability Standards; therefore, they do not add to or increase entities' reporting burden. Thus, in the NOPR, the Commission stated that the modified Reliability Standards and interpretations of Reliability Standards do not materially affect the burden estimates relating to the earlier version of the Reliability Standards presented in Order No. 693.³⁴

69. In response to the NOPR, the Commission received no comments concerning its estimate for the burden and costs and therefore uses the same estimate here.

³² 5 CFR 1320.11.

³³ 44 U.S.C. 3507(d).

³⁴ See Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 1905-07. The NOPR, FERC Stats. & Regs. ¶ 32,632 at P 76-78, provided a detailed explanation why each modification and interpretation has a negligible, if any, affect on the reporting burden.

Title: Modification of Interchange and Transmission Loading Relief Reliability Standards; and Electric Reliability Organization Interpretation of Specific Requirements of Four Reliability Standards.

Action: Proposed Collection.

OMB Control No.: 1902-0244.

Respondents: Businesses or other for-profit institutions; not-for-profit institutions.

Frequency of Responses: On Occasion.

Necessity of the Information: This Final Rule approves five modified Reliability Standards that pertain to interchange scheduling and coordination. It directs NERC to make a filing with the Commission regarding one modified Reliability Standard that pertains to transmission loading relief procedures. In addition, the Final Rule approves interpretations of five specific requirements of Commission-approved Reliability Standards. The Final Rule finds the Reliability Standards and interpretations just, reasonable, not unduly discriminatory or preferential, and in the public interest.

70. Interested persons may obtain information on the reporting requirements by contacting: Federal Energy Regulatory Commission, Attn: Michael Miller, Office of the Executive Director, 888 First Street, N.E. Washington, D.C. 20426, Tel: (202) 502-8415, Fax: (202) 273-0873, E-mail: michael.miller@ferc.gov, or by contacting: Office of Information and Regulatory Affairs, Attn: Desk Officer for the Federal Energy Regulatory Commission (Re: OMB Control No. 1902-0244), Washington, D.C. 20503, Tel: (202) 395-4650, Fax: (202) 395-7285, E-mail: <oir_submission@omb.eop.gov>.

IV. Environmental Analysis

71. The Commission is required to prepare an Environmental Assessment or an Environmental Impact Statement for any action that may have a significant adverse effect on the human environment.³⁵ The Commission has categorically excluded certain actions from this requirement as not having a significant effect on the human environment. Included in the exclusion are rules that are clarifying, corrective, or procedural or that do not substantially change the effect of the regulations being amended.³⁶ The actions proposed herein fall within this categorical exclusion in the Commission's regulations.

V. Regulatory Flexibility Act

72. The Regulatory Flexibility Act of 1980 (RFA)³⁷ generally requires a description and analysis of final rules that will have significant economic impact on a substantial number of small entities. The RFA mandates consideration of regulatory alternatives that accomplish the stated objectives of a proposed rule and that minimize any significant economic impact on a substantial number of small entities. The Small Business Administration's Office of Size Standards develops the numerical definition of a small business. (See 13 CFR 121.201.) For electric utilities, a firm is small if, including its affiliates, it is primarily engaged in the transmission, generation and/or distribution of

³⁵ Regulations Implementing the National Environmental Policy Act of 1969, Order No. 486, FERC Stats. & Regs. ¶ 30,783 (1987).

³⁶ 18 CFR 380.4(a)(2)(ii).

³⁷ 5 U.S.C. 601-12.

electric energy for sale and its total electric output for the preceding twelve months did not exceed four million megawatt hours. The RFA is not implicated by this Final Rule because the minor modifications and interpretations discussed herein will not have a significant economic impact on a substantial number of small entities.

VI. Document Availability

73. In addition to publishing the full text of this document in the Federal Register, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through FERC's Home Page (<http://www.ferc.gov>) and in FERC's Public Reference Room during normal business hours (8:30 a.m. to 5:00 p.m. Eastern time) at 888 First Street, N.E., Room 2A, Washington D.C. 20426.

74. From FERC's Home Page on the Internet, this information is available on eLibrary. The full text of this document is available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.

75. User assistance is available for eLibrary and the FERC's website during normal business hours from FERC Online Support at (202) 502-6652 (toll free at 1-866-208-3676) or e-mail at ferconlinesupport@ferc.gov, or the Public Reference Room at (202) 502-8371, TTY (202) 502-8659. E-mail the Public Reference Room at public.referenceroom@ferc.gov.

VII. Effective Date and Congressional Notification

76. These regulations are effective [insert date 30 days from publication in **FEDERAL REGISTER**]. The Commission has determined, with the concurrence of the Administrator of the Office of Information and Regulatory Affairs of OMB, that this rule is not a “major rule” as defined in section 351 of the Small Business Regulatory Enforcement Fairness Act of 1996.

List of subjects in 18 CFR Part 40

Electric power, Electric utilities, Reporting and recordkeeping requirements.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.