# 125 FERC ¶ 61,204 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

#### 18 CFR Part 40

#### Docket No. RM08-16-000

Electric Reliability Organization Interpretations of Specific Requirements of Frequency Response and Bias and Voltage and Reactive Control Reliability Standards

(Issued November 20, 2008)

AGENCY: Federal Energy Regulatory Commission.

**ACTION**: Notice of Proposed Rulemaking.

<u>SUMMARY</u>: Pursuant to section 215 of the Federal Power Act, the Federal Energy Regulatory Commission proposes to: approve NERC's proposed interpretation of certain specific requirements of one Commission-approved Reliability Standard, BAL-003-0, Frequency Response and Bias; and remand NERC's proposed interpretation of VAR-001-1, Voltage and Reactive Control, for reconsideration consistent with this rulemaking.

<u>DATES</u>: Comments are due [Insert\_Date that is 30 days after publication in the FEDERAL REGISTER].

<u>ADDRESSES</u>: You may submit comments, identified by docket number by any of the following methods:

- Agency Web Site: <a href="http://ferc.gov">http://ferc.gov</a>. Documents created electronically using word processing software should be filed in native applications or print-to-PDF format and not in a scanned format.
- Mail/Hand Delivery: Commenters unable to file comments electronically must

mail or hand deliver an original and 14 copies of their comments to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street, N.E., Washington, D.C. 20426.

### FOR FURTHER INFORMATION CONTACT:

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### SUPPLEMENTARY INFORMATION:

# 125 FERC ¶ 61,204 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;

Suedeen G. Kelly, Marc Spitzer,

Philip D. Moeller, and Jon Wellinghoff.

Electric Reliability Organization Interpretations of Specific Requirements of Frequency Response and Bias and Voltage and Reactive Control Reliability Standards Docket No. RM08-16-000

#### NOTICE OF PROPOSED RULEMAKING

(Issued November 20, 2008)

1. Pursuant to section 215 of the Federal Power Act, the Federal Energy Regulatory Commission proposes to approve the interpretation proposed by the North American Electric Reliability Corporation (NERC) of certain specific requirements of Commission-approved Reliability Standard BAL-003-0, Frequency Response and Bias, but remand NERC's proposed interpretation of Reliability Standard VAR-001-1, Voltage and Reactive Control, for additional clarification.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The Commission is not proposing any new or modified text to its regulations. As set forth in 18 CFR part 40, proposed Reliability Standards will not become effective until approved by the Commission, and the ERO must post on its website each effective Reliability Standard. The proposed interpretations would assist entities in complying with the Reliability Standards.

## I. Background

### A. EPAct 2005 and Mandatory Reliability Standards

- 2. Section 215 of the FPA requires a Commission-certified Electric Reliability
  Organization (ERO) to develop mandatory and enforceable Reliability Standards, which
  are subject to Commission review and approval. Once approved, the Reliability
  Standards may be enforced by the ERO, subject to Commission oversight, or by the
  Commission independently.<sup>2</sup>
- 3. Pursuant to section 215 of the FPA, the Commission established a process to select and certify an ERO<sup>3</sup> and, subsequently, certified NERC as the ERO.<sup>4</sup> 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.<sup>5</sup> In addition, pursuant to

<sup>&</sup>lt;sup>2</sup> <u>See</u> 16 U.S.C. 824o(e)(3).

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

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

<sup>&</sup>lt;sup>5</sup> 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.<sup>6</sup>

4. 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. The ERO's "standards process manager" will assemble a team with relevant expertise to address the requested interpretation 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 Reliability Standard and filed with the applicable regulatory authority for regulatory approval. §

### B. <u>NERC Filing</u>

5. On July 28, 2008, NERC submitted a Petition for Approval of Formal Interpretations to Reliability Standards (Petition), seeking Commission approval of interpretations of two Commission-approved Reliability Standards: BAL-003-0,

<sup>&</sup>lt;sup>6</sup> 16 U.S.C. 824o(d)(5). Section 215(d)(5) provides, "The Commission . . . may order the Electric Reliability Organization to submit to the Commission a proposed reliability standard or a modification to a reliability standard that addresses a specific matter if the Commission considers such a new or modified reliability standard appropriate to carry out this section."

<sup>&</sup>lt;sup>7</sup> NERC Rules of Procedure, Appendix 3A, Reliability Standards Development Procedure, Version 6.1, at 26-27 (2007).

<sup>&</sup>lt;sup>8</sup> We note that, while the NERC board of trustees approved the interpretations of the Reliability Standards submitted by NERC for approval in this proceeding, Appendix 3A of NERC's Rules of Procedures is silent on the need for NERC board of trustees' approval of interpretations before they are filed. NERC's Rules of Procedures should expressly require such approval.

Frequency Response and Bias, Requirements R2 and R5; and VAR-001-1, Voltage and Reactive Control, Requirement R4.

- 6. For BAL-003-0, Electric Reliability Council of Texas (ERCOT) requested clarification that the provision in BAL-003-0, Requirement R2, permitting use of a variable bias setting, did not conflict with BAL-003-0, Requirement R5, which states that the frequency bias setting for Balancing Authorities serving native load should be at least one percent of yearly peak demand. For VAR-001-1, Dynegy, Inc. (Dynegy) requested clarification whether there are implicit requirements that the voltage schedule and associated tolerance band to be provided by the transmission operator under Requirement R4 be technically based, reasonable and practical for a generator to maintain.
- 7. Consistent with the NERC Rules of Procedure, NERC assembled a team to respond to the requests for interpretation and presented the proposed interpretations to industry ballot, using a process similar to the process it uses for the development of Reliability Standards. According to NERC, the interpretations were developed and approved by industry stakeholders using the NERC Reliability Standards Development Procedure and approved by the NERC Board of Trustees (Board). The interpretations do not modify the language contained in the requirements under review. NERC requests that the Commission approve the interpretations and make them effective immediately after approval, consistent with the Commission's procedures.

<sup>&</sup>lt;sup>9</sup> <u>Id</u>.

<sup>&</sup>lt;sup>10</sup> NERC Petition at 3.

### II. Discussion

### A. <u>BAL-003-0</u>

- 8. Order No. 693 explains that the purpose of BAL-003-0 is to ensure that a balancing authority's frequency bias setting is accurately calculated to match its actual frequency response. A frequency bias setting is a value expressed in MW/0.1 Hz, set into a balancing authority area control error (ACE) algorithm, which allows the balancing authority to contribute its frequency response to the Interconnection. The actual frequency response is the change in output or consumption from generators and nongeneration resources, respectively, after the loss of a generator and determines the frequency at which electric supply and demand return to balance.
- 9. Requirement R2.2 states that a Balancing Authority may use a variable frequency bias value, which is calculated by analyzing frequency response taking into account factors such as load, generation, governor characteristics, and frequency. Requirement R5 states that balancing authorities that serve native load shall have a monthly average frequency bias setting that is at least one percent of estimated yearly peak demand per 0.1 Hz change. The BAL-003-0 Requirements at issue state:

Requirement R2: Each Balancing Authority shall establish and maintain a Frequency Bias Setting that is as close as practical to, or greater than, the

<sup>&</sup>lt;sup>11</sup> Order No. 693 at P 357.

<sup>&</sup>lt;sup>12</sup> NERC's glossary, which provides definitions of the relevant terms, defines ACE as "The instantaneous difference between a balancing authority's net actual and scheduled interchange, taking into account the effects of frequency bias and correction for meter error."

Balancing Authority's Frequency Response. Frequency Bias may be calculated several ways:

R2.2. The Balancing Authority may use a variable (linear or non-linear) bias value, which is based on a variable function of Tie Line deviation to Frequency Deviation. The Balancing Authority shall determine the variable frequency bias value by analyzing Frequency Response as it varies with factors such as load, generation, governor characteristics, and frequency.

Requirement R5: Balancing Authorities that serve native load shall have a monthly average Frequency Bias Setting that is at least 1% of the Balancing Authority's estimated yearly peak demand per 0.1 Hz change.

R5.1. Balancing Authorities that do not serve native load shall have a monthly average Frequency Bias Setting that is at least 1% of its estimated maximum generation level in the coming year per 0.1 Hz change.

### 1. ERCOT Request

10. ERCOT requested clarification from NERC that a balancing authority may use a variable bias value as authorized under Requirement R2.2, despite the fact that doing so could, according to ERCOT, cause a violation of Requirement R5.<sup>13</sup> According to ERCOT, if a balancing authority uses a variable bias in conformance with Requirement R2.2, it would violate Requirement R5 if its analysis resulted in a value less than one percent of its yearly peak demand (or maximum generation). ERCOT states that Requirement R2.2 is only viable if Requirement R5 is interpreted to apply only to

<sup>&</sup>lt;sup>13</sup> On July 21, 2008, the Commission approved a previous interpretation of BAL-003-0, Requirement R3, which requires each balancing authority to operate its automatic generation control on tie line frequency basis, unless such operation would diminish system interconnection reliability. See Modification of Interchange and Transmission Loading Relief Reliability Standards; and Electric Reliability Organization Interpretation of Specific Requirements of Four Reliability Standards, Order No. 713, 73 FR 43613 (July 28, 2008), 124 FERC ¶ 61,071 (2008).

balancing authorities using a fixed bias setting. ERCOT proposes that an alternate method be used to calculate a floor setting for balancing authorities that utilize a variable bias setting. Under ERCOT's proposal, the correct corresponding minimum setting for a balancing authority using a variable bias setting would be no less than one percent of estimated peak (or maximum generation) for the period in which the variable bias setting is active. ERCOT supported its interpretation as being consistent with a January 2003 NERC Resources Subcommittee analysis, which stated "for Control Areas utilizing variable bias, the Control Area's average Bias Setting for a month must be at least one percent of the Control Area's estimated peak load for that month (or one percent of peak generation for a generation only Control Area forecast for that month)."14 ERCOT suggested that the failure to provide for a variable-bias option in Requirement R5 appears to be an oversight. Furthermore, according to ERCOT, failure to adopt its interpretation would force ERCOT to abandon its longstanding practice of using a variable bias setting, without any corresponding improvement in reliability.

### 2. NERC Proposed Interpretation

11. NERC rejected ERCOT's proposal, finding that the variable bias setting under Requirement R2 does not conflict with the minimum setting required under Requirement R5. NERC found that its interpretation provides clarity and supports the reliability purpose of BAL-003-0, which it describes as providing a consistent

<sup>&</sup>lt;sup>14</sup> NERC Petition at 6 (citing ERCOT request for interpretation at 1-2, available at http://www.nerc.com/docs/standards/sar/Request\_Interpretation\_BAL-003\_ERCOT\_27Jul07.pdf).

methodology for calculating the frequency bias component of ACE. According to NERC, Requirement R2 requires a balancing authority to analyze its system as a first step in determining its frequency bias setting, which may be a fixed or variable bias setting. Requirement R5 establishes a minimum reliability threshold for an Interconnection and also a minimum contribution for all balancing authorities within an Interconnection.

NERC states that the one percent minimum bias setting provides a minimum level of automatic generation control to stabilize frequency in response to a disturbance. As a second justification for the minimum setting, NERC states that the one percent minimum also helps ensure a consistent measure of control performance among balancing authorities within a multi-balancing authority Interconnection.

12. NERC points out that ERCOT is a single balancing authority Interconnection.

NERC supports its proposed interpretation stating:

The bias settings ERCOT uses do produce, on average, the best level of automatic generation control action to meet control performance metrics. The bias value in a single Balancing Authority interconnection does not impact the measure of control performance.

13. NERC notes that ERCOT is subject to a Regional Difference exempting it from certain requirements of a related Reliability Standard. ERCOT's Regional Difference addresses Requirement R2 of the related BAL-001-0 Reliability Standard, Real Power Balancing Control Performance, which adopts one of NERC's historical balancing

control performance standards, known CPS2. 15 The purpose of Reliability Standard BAL-001-0 is to maintain interconnection steady-state frequency within defined limits by balancing power demand and supply in real-time. BAL-001-0 uses two averages as compliance measures: Requirement R1 covers the one-minute ACE performance (CPS1) and Requirement R2 covers the 10-minute ACE performance (CPS2). Requirement R1 obligates each balancing authority, on a rolling 12-month basis, to maintain its clockminute averages of ACE, modified by its frequency bias and the interconnection frequency, within a specific limit based on historic performance. Requirement R2 obligates each balancing authority, on a monthly basis, to maintain an average ACE within a specific limit based on historical performance for at least 90 percent of 10-minute periods within an hour. NERC presents two reasons supporting ERCOT's Regional Difference for BAL-001-0, namely (1) to accommodate ERCOT's asynchronous connections with other Interconnections; and (2) to recognize the fact that ERCOT employs a more stringent methodology to identify the frequency controls necessary to maintain reliable operations. <sup>16</sup>

14. During the ballot process, NERC responded to comments raising two issues.NERC indicated that it was sympathetic to comments that Requirement R5 is vague,

<sup>&</sup>lt;sup>15</sup> <u>See</u> NERC, Approval of ERCOT Waiver Request – Control Performance Standard 2 (Nov. 21, 2002), available at <a href="http://www.nerc.com/commondocs.php?cd=2">http://www.nerc.com/commondocs.php?cd=2</a> (under "Links to Regional Differences" tab), which was approved in Order No. 693 at P 314.

<sup>&</sup>lt;sup>16</sup> NERC Petition at 8.

finding that the requirement that each balancing authority have a monthly average bias greater than or equal to one percent of its projected annual peak load (or generation if it does not serve load), could be better drafted. However, NERC found that revising the requirement is beyond the scope of the interpretation process. Also, NERC states that it addressed a second comment by indicating that a balancing authority that is the sole balancing authority for an Interconnection must comply with Requirement R5 and also that a balancing authority that uses a variable bias setting must comply with Requirement R5 in BAL-003-0.

15. The formal interpretation was approved by the ballot pool in September 2007 and by the NERC Board in February 2008.

### 3. Commission Proposal

- 16. The Commission proposes to approve the ERO's formal interpretation of Requirements R2 and R5 of BAL-003-0 and requests comment on its proposal. The ERO's interpretation is reasonable in that it provides for consistent determination of frequency bias settings, used in calculating ACE. In addition, the one percent minimum set aside established by Requirement R5 ensures that an adequate level of generation will be set aside to provide frequency response in the event of system disturbances due to imbalances.
- 17. Furthermore, the ERO's interpretation is consistent with the Commission's discussion in Order No. 693, which reviewed a similar objection, and found that the

requirements of BAL-003-0 do not conflict with one another. Order No. 693 addressed the suggestion that Requirement R5 should be required in lieu of Requirement R2 for certain balancing authorities and found that Requirements R2 and R5 do not conflict. While, in this case, ERCOT is arguing the reverse, namely, that balancing authorities that meet the requirement of Requirement R2 should not have to meet Requirement R5, similar reasoning suggests no conflict in the two requirements. According to Order No. 693, Requirement R2 states that the frequency bias setting should be as close as practical to, or greater than, the balancing authority's frequency response, while Requirement R5 and R5.1 provide minimum frequency bias values for specific types of balancing authorities. <sup>18</sup>

18. As noted above, NERC's interpretation states that ERCOT's bias settings produce, on average, the best level of automatic generation control action to meet control performance metrics and the bias value in a single balancing authority interconnection does not impact the measure of control performance. We interpret this statement as providing that the second goal of the one percent minimum setting, to establish a consistent measure of control performance among balancing authorities, is not implicated by this interpretation. Nevertheless, the other justifications for the BAL-003-0, Requirement R5 minimum bias setting still apply namely, to establish a consistent

<sup>&</sup>lt;sup>17</sup> Order No. 693 at P 370.

<sup>&</sup>lt;sup>18</sup> See id. at P 362, 370.

methodology for one of the inputs into the ACE determination and to provide for a minimum threshold of reliability from frequency response.<sup>19</sup>

19. The Commission invites comment on its proposal.

### B. <u>VAR-001-1</u>

20. VAR-001-1, Requirement R4 directs each transmission operator to provide each generator with a voltage and reactive power output schedule, within a tolerance band. A second Reliability Standard, VAR-002-1, Requirement R2, requires that each generator must meet the schedule (typically via automatic control) or provide an explanation why it cannot do so. Dynegy asked whether the voltage schedule, and associated tolerance band, provided by the transmission operator must be technically based, and reasonable and practical. In addition, Dynegy asked how a transmission operator would demonstrate compliance with such requirements.

<sup>19</sup> The Commission notes that NERC's statement above could arguably be interpreted to suggest that the ERCOT methodology, by using a methodology that results in "the best level of automatic generation control action to meet control performance metrics," may be a preferable methodology. That question is not before us, and thus we need not and do not address it. Should ERCOT wish to demonstrate that its alternate methodology under its Regional Difference is a superior alternate measure to that established under BAL-003-0, Requirement R5, ERCOT should pursue a Regional Difference supporting a departure from the requirement. While ERCOT is a single-balancing-authority Interconnection and does not need to allocate automatic generation control responsibility among balancing authorities, the other justifications for Requirement R5, supporting a consistent ACE calculation methodology and providing a minimum standard for reliability, remain valid justifications for the minimum setting.

21. VAR-001-1, Requirement R4 and VAR-002-1, Requirement R2, which are at issue in this proceeding, state:

VAR-001-1 – Voltage and Reactive Control.

Requirement R4. Each Transmission Operator shall specify a voltage or Reactive Power schedule<sup>20</sup> at the interconnection between the generator facility and the Transmission Owner's facilities to be maintained by each generator. The Transmission Operator shall provide the voltage or Reactive Power schedule to the associated Generator Operator and direct the Generator Operator to comply with the schedule in automatic voltage control mode (AVR [automatic voltage regulation] in service and controlling voltage). . . .

VAR-002-1 – Generator Operation for Maintaining Network Voltage Schedules.

Requirement R2. Unless exempted by the Transmission Operator, each Generator Operator shall maintain the generator voltage or Reactive Power output (within applicable Facility Ratings)<sup>21</sup> as directed by the Transmission Operator.

- R2.1. When a generator's automatic voltage regulator is out of service, the Generator Operator shall use an alternative method to control the generator voltage and reactive output to meet the voltage or Reactive Power schedule directed by the Transmission Operator.
- R2.2. When directed to modify voltage, the Generator Operator shall comply or provide an explanation of why the schedule cannot be met.

#### 1. Dynegy Request

22. Dynegy requested clarification whether there are implicit requirements for the voltage schedule, and associated tolerance band, provided by the transmission operator to

<sup>&</sup>lt;sup>20</sup> The voltage schedule is a target voltage to be maintained within a tolerance band during a specified period. [Footnote in original.]

<sup>&</sup>lt;sup>21</sup> When a Generator is operating in manual control, reactive power capability may change based on stability considerations and this will lead to a change in the associated Facility Ratings. [Footnote in original.]

be technically based, reasonable and practical for a generator to maintain.<sup>22</sup> According to Dynegy, the NERC Rules of Procedure require that each Reliability Standard be based on "sound engineering and operating judgment, analysis, or experience[.]" Dynegy asserts that Reliability Standards must be implemented to meet such a standard and that transmission owners must have a technical basis for the specified voltage or reactive power schedule and associated tolerance band. Dynegy predicts that generator operator compliance with the schedule and tolerance band will be improved if the generator understands the technical basis for the instructions.

23. Dynegy argues that the lack of a technical basis could result in arbitrary target values or overly narrow or overly wide tolerance bands and that such flaws could reduce system reliability. For instance, Dynegy hypothesizes that overly narrow tolerance bands could cause a generator to make numerous short term responses to voltage fluctuations that do not improve system reliability, while overly broad tolerance bands could result in voltage fluctuations that jeopardize system reliability during system disturbances.

Dynegy states that voltage schedules must be reasonable and that a tolerance band that fails to account for measurement error is unreasonable. Dynegy states that, if the voltages or reactive power schedule and associated tolerance band are to have a technical

<sup>&</sup>lt;sup>22</sup> Dynegy's request is provided in the NERC Petition, Exhibit B-3, along with the VAR-001-1 interpretation development record.

<sup>&</sup>lt;sup>23</sup> Dynegy request at 2 (citing NERC Rules of Procedure, section 302.5, "Each reliability standard shall be based upon sound engineering and operating judgment, analysis, or experience, as determined by expert practitioners in that particular field.").

basis and be reasonable, then NERC must develop measures to objectively evaluate compliance with the requirement.<sup>24</sup> According to Dynegy, such a measure should state that the voltage schedule and tolerance band should either be (1) consistent with the historical variation of system voltage, normalized to eliminate abnormal voltage fluctuations such as those caused by system disturbances; or (2) consistent with the historical variation of system voltage when the plant/unit is not operating, which variation would be normalized to eliminate abnormal voltage fluctuations such as those caused by system disturbances. According to Dynegy, if either of these conditions is not met, a transmission operator should be required to have a technical study or analysis that justifies a different voltage or reactive power schedule and associated tolerance band.

### 2. NERC Proposed Interpretation

24. NERC's proposed interpretation rejects the suggestion that there are implicit requirements within VAR-001-1, and finds, as well, that there are no requirements in VAR-001-1 to issue a technically based, reasonable and practical to maintain voltage or reactive power schedule and associated tolerance band, and, consequently, the Reliability Standard needs no measures to implement such requirements. According to NERC:

Since there are no requirements in VAR-001-1 to issue a "technically based, reasonable and practical to maintain voltage or reactive power schedule and associated tolerance band", there are no measures or associated compliance elements in the standard.<sup>25</sup>

<sup>&</sup>lt;sup>24</sup> Id. at 4 (citing NERC Rules of Procedure, section 302.4).

<sup>&</sup>lt;sup>25</sup> NERC proposed Interpretation of NERC Standard VAR-001-1 at 1.

The interpretation concludes by citing VAR-002-1, Requirement 2, which provides that a generator must meet the voltage schedule or provide an explanation why it cannot do so.

- 25. The NERC Board requested additional information to address a concern whether a generator operator could be in violation of VAR-001-1 if it deviated from its schedule in order to protect its equipment. NERC provided supplemental information, which is not part of the formal interpretation, pointing out that VAR-002-1 requires a generator to maintain the voltage directed by the transmission operator "within applicable Facility Ratings" and permits a generator to deviate from the voltage schedule with an explanation. NERC also cited VAR-002-1, section A(3), stating that the purpose of the Reliability Standard is "To ensure generators provide reactive and voltage control necessary to ensure voltage levels, reactive flows, and reactive resources are maintained within applicable Facility Ratings to protect equipment and the reliable operation of the Interconnection."
- 26. Finally, NERC's transmittal letter also provides additional instructive information, which is not part of the interpretation, noting that VAR-001-1, Requirement R2 states, "Each Transmission Operator shall acquire sufficient reactive resources within its area to protect the voltage levels under normal and Contingency conditions." NERC states that, in order to fulfill Requirement R2, the transmission operator must perform a valid analysis of the system, using models that accurately represent equipment capabilities.

<sup>&</sup>lt;sup>26</sup> NERC Petition at 12-13.

<sup>&</sup>lt;sup>27</sup> Id. at 12 (emphasis in original).

Therefore, according to NERC, while it supports the formal interpretation of Requirement R4 including the finding that a requirement cannot establish implicit obligations, the issue on which Dynegy seeks clarification is better resolved through an examination of Requirement R2.<sup>28</sup>

- 27. According to NERC, the interpretation supports the intent of the requirement and the goal of VAR-001-1, because it reinforces that the transmission operator is responsible for identifying voltage schedules and associated bandwidth necessary to meet the objectives of the Reliability Standard.
- 28. In the ballot process, NERC responded to a negative comment arguing that the requirements of VAR-001-1 do imply that there will be a technical justification for a reactive power schedule. According to NERC, the drafting team responded that an implied requirement is not a stated requirement that can be objectively measured.
- 29. The interpretation was approved by ballot in January 2008 and by the Board, upon receipt of the additional information, in March 2008.

#### 3. Commission Proposal

30. The Commission proposes to remand NERC's interpretation of VAR-001-1, Requirement R4. The Commission disagrees with the interpretation's suggestion that there is no requirement that a voltage schedule have a sound technical basis. On the contrary, in Order No. 693, the Commission stated that all Reliability Standards must be designed to achieve a specified reliability goal and must contain a technically sound

<sup>&</sup>lt;sup>28</sup> <u>Id</u>. at 14.

means to achieve this goal.<sup>29</sup> Therefore, the Commission disagrees with NERC's proposed interpretation insofar as it suggests that a transmission operator could deliver a voltage schedule that lacked any technical basis. A voltage schedule should reflect technical analysis, i.e., sound engineering, as well as operating judgment and experience.<sup>30</sup>

31. In Order No. 693, moreover, the Commission reviewed each Reliability Standard and approved those containing Requirements that are sufficiently clear as to be enforceable and that do not create due process concerns.<sup>31</sup> In approving VAR-001-1 in

Operation of Bulk-Power System facilities and may impose a requirement on any user, owner or operator of such facilities. It must be designed to achieve a specified reliability goal and must contain a technically sound means to achieve this goal. The Reliability Standard should be clear and unambiguous regarding what is required and who is required to comply. The possible consequences for violating a Reliability Standard should be clear and understandable to those who must comply. There should be clear criteria for whether an entity is in compliance with a Reliability Standard. While a Reliability Standard does not necessarily need to reflect the optimal method for achieving its reliability goal, a Reliability Standard should achieve its reliability goal effectively and efficiently."); see also Order No. 672 at P 324.

<sup>&</sup>lt;sup>30</sup> <u>Id.</u>; <u>accord</u> NERC Rules of Procedure, section 302.5.

See Order No. 693 at P 274. In reviewing specific Reliability Standards, the Commission identified for certain Reliability Standards implicit obligations that should be incorporated into those Reliability Standards and directed NERC to revise the standards to explicitly incorporate the obligations; see Mandatory Reliability Standards for Critical Infrastructure Protection, Order No. 706, 73 FR 7368 (Feb. 7, 2008), 122 FERC ¶ 61,040, at P 75 (2008) (directing the ERO to modify the CIP Reliability Standards to incorporate an obligation to implement plans, policies and procedures); Order No. 693 at P 1787 ("In the NOPR, the Commission identified an implicit assumption in the TPL Reliability Standards that all generators are required to ride through the same types of voltage disturbances and remain in service after the fault is cleared. This implicit assumption should be made explicit."); Facilities Design, (continued)

Order No. 693, the Commission included VAR-001-1 as among the Reliability Standards that are sufficiently clear to inform transmission operators what is required of them. 32 While the Commission has elsewhere declined to specify in detail how a registered entity should implement a Reliability Standard, this does not mean that an entity seeking to comply with a Reliability Standard may act in a manner that is not technically sound, i.e., in a manner that is not grounded in sound engineering, and thus, not reasonable and practical. 33 NERC's proposed interpretation, however, implies that the voltage schedules provided under VAR-001-1, Requirement R4 need not have any technical basis, and thus need not be reasonable and practical.

32. Based on this analysis, the Commission proposes to remand NERC's proposed VAR-001-1, Requirement R4 interpretation, in order that NERC may reconsider its interpretation consistent with this order. With regard to Dynegy's assertion that NERC needs to develop evaluation measures to review the technical basis for voltage schedules, in the Commission's view, this proposal is beyond the scope of the interpretation process and would be better discussed pursuant to a standards authorization request under the NERC Reliability Standards Development Procedures.

Connections and Maintenance Reliability Standards, Order No. 705, 73 FR 1770 (Jan. 9, 2008), 121 FERC ¶ 61,296, at P 54 (2007) ("although the TPL Reliability Standards implicitly require the loss of a shunt device to be addressed, they do not do so explicitly").

<sup>&</sup>lt;sup>32</sup> Order No. 693 at P 275.

<sup>&</sup>lt;sup>33</sup> As noted above, Reliability Standards should reflect sound engineering. <u>See id.</u> at P 5; Order No. 672 at P 324; <u>accord NERC Rules of Procedure</u>, section 302.5.

33. The Commission invites comment on its proposal.

# III. <u>Information Collection Statement</u>

- 34. The Office of Management and Budget (OMB) regulations require that OMB approve certain reporting and recordkeeping (collections of information) imposed by an agency.<sup>34</sup> The information contained here is also subject to review under section 3507(d) of the Paperwork Reduction Act of 1995.<sup>35</sup>
- 35. As stated above, the Commission previously approved, in Order No. 693, each of the Reliability Standards that are the subject of the current rulemaking. This NOPR proposes to approve one interpretation to a previously approved Reliability Standard developed by NERC as the ERO, and to remand another interpretation. The proffered interpretations relate to existing Reliability Standards and do not change these standards; therefore, they do not add to or otherwise increase entities' current reporting burden.

  Thus, the current proposal would not materially and adversely affect the burden estimates relating to the currently effective version of the Reliability Standards presented in Order No. 693. The BAL-003-0 Reliability Standard that is the subject of the approved interpretation was approved in Order No. 693, and the related information collection requirements were reviewed and approved, accordingly. 36
- 36. For example, the proposed interpretation of BAL-003-0 does not modify or otherwise affect the collection of information already in place. With respect to

<sup>&</sup>lt;sup>34</sup> 5 CFR 1320.11.

<sup>&</sup>lt;sup>35</sup> 44 U.S.C. 3507(d).

<sup>&</sup>lt;sup>36</sup> See Order No. 693 at P 1901-07.

BAL-003-0, the interpretation clarifies that the minimum frequency bias setting applies to systems that employ a variable bias methodology. Incorporating a minimum frequency bias setting into the determination of frequency response under automatic generation control does not change the information that a balancing authority reports because the same logs, data, or measurements would be maintained. The Commission is proposing to remand the interpretation of VAR-001-1. As a result, information collection requirements for that Reliability Standard will not change at this time. Thus, the proposed interpretations of the current Reliability Standards at issue in this proposed rule will not increase the reporting burden nor impose any additional information collection requirements.

37. However, we will submit this proposed rule to OMB for informational purposes.

<u>Title</u>: Electric Reliability Organization Interpretations of Frequency Response and Bias and Voltage and Reactive Control 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

<u>Necessity of the Information</u>: This proposed rule would approve an interpretation of the specific requirements of one Commission-approved Reliability Standard. The proposed rule would find the interpretation just, reasonable, not unduly discriminatory or preferential, and in the public interest. In addition, this proposed rule would remand an additional proposed interpretation for further consideration.

<u>Internal Review</u>: The Commission has reviewed the proposed Reliability Standard interpretations and made a determination that the proposed BAL-003-1 interpretation is necessary to implement section 215 of the FPA. The interpretation conforms to the

Commission's policy for frequency response and bias within the energy industry as reflected in BAL-003-1.

- 38. Interested persons may obtain information on the reporting requirements by contacting the following: Federal Energy Regulatory Commission, 888 First Street, N.E. Washington, D.C. 20426 [Attention: Michael Miller, Office of the Executive Director, Phone: (202) 502-8415, fax: (202) 273-0873, e-mail: <a href="michael.miller@ferc.gov">michael.miller@ferc.gov</a>].
- 39. For submitting comments concerning the collection(s) of information and the associated burden estimate(s), please send your comments to the contact listed above and to the Office of Information and Regulatory Affairs, Office of Information and Regulatory Affairs, Washington, D.C. 20503 [Attention: Desk Officer for the Federal Energy Regulatory Commission, phone (202) 395-7345, fax: (202) 395-7285, e-mail: oira submission@omb.eop.gov].

### IV. Environmental Analysis

40. 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.<sup>37</sup> 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

<sup>&</sup>lt;sup>37</sup> <u>Regulations Implementing the National Environmental Policy Act</u>, Order No. 486, FERC Stats. & Regs. ¶ 30,783 (1987).

amended.<sup>38</sup> The actions proposed herein fall within this categorical exclusion in the Commission's regulations.

## V. Regulatory Flexibility Act Analysis

- 41. The Regulatory Flexibility Act of 1980 (RFA)<sup>39</sup> 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 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 proposed rule because the interpretations discussed herein will not have a significant economic impact on a substantial number of small entities.
- 42. In Order No. 693, the Commission adopted policies to minimize the burden on small entities, including approving the ERO compliance registry process to identify those entities responsible for complying with mandatory and enforceable Reliability Standards. The ERO registers only those distribution providers or load serving entities that have a

<sup>&</sup>lt;sup>38</sup> 18 CFR 380.4(a)(2)(ii).

<sup>&</sup>lt;sup>39</sup> 5 U.S.C. 601-12.

peak load of 25 MW or greater and are directly connected to the bulk electric system or are designated as a responsible entity as part of a required under-frequency load shedding program or a required under-voltage load shedding program. Similarly, for generators, the ERO registers only individual units of 20 MVA or greater that are directly connected to the bulk electric system, generating plants with an aggregate rating of 75 MVA or greater, any blackstart unit material to a restoration plan, or any generator that is material to the reliability of the Bulk-Power System. Further, the ERO will not register an entity that meets the above criteria if it has transferred responsibility for compliance with mandatory Reliability Standards to a joint action agency or other organization. The Commission estimated that the Reliability Standards approved in Order No. 693 would apply to approximately 682 small entities (excluding entities in Alaska and Hawaii), but also pointed out that the ERO's Compliance Registry Criteria allow for a joint action agency, generation and transmission (G&T) cooperative or similar organization to accept compliance responsibility on behalf of its members. Once these organizations register with the ERO, the number of small entities registered with the ERO will diminish and, thus, significantly reduce the impact on small entities.<sup>40</sup>

<sup>&</sup>lt;sup>40</sup> To be included in the compliance registry, the ERO determines whether a specific small entity has a material impact on the Bulk-Power System. If these small entities should have such an impact then their compliance is justifiable as necessary for Bulk-Power System reliability.

43. Finally, as noted above, this proposed rule addresses an interpretation of the BAL-003-0 Reliability Standard, which was already approved in Order No. 693, and, therefore, does not create an additional regulatory impact on small entities.<sup>41</sup>

#### **VI.** Comment Procedures

- 44. The Commission invites interested persons to submit comments on the matters and issues proposed in this notice to be adopted, including any related matters or alternative proposals that commenters may wish to discuss. Comments are due [Insert Date that is 30 days after publication in the **FEDERAL REGISTER**]. Comments must refer to Docket No. RM08-16-000, and must include the commenters' name, the organization they represent, if applicable, and their address in their comments.
- 45. The Commission encourages comments to be filed electronically via the eFiling link on the Commission's web site at <a href="http://www.ferc.gov">http://www.ferc.gov</a>. The Commission accepts most standard word processing formats. Documents created electronically using word processing software should be filed in native applications or print-to-PDF format and not in a scanned format. Commenters filing electronically do not need to make a paper filing.
- 46. Commenters that are not able to file comments electronically must send an original and 14 copies of their comments to: Federal Energy Regulatory Commission, Secretary of the Commission; 888 First Street, N.E.; Washington, D.C. 20426.

<sup>&</sup>lt;sup>41</sup> The Commission proposes to remand the interpretation of the VAR-001-1 Reliability Standard,

47. All comments will be placed in the Commission's public files and may be viewed, printed, or downloaded remotely as described in the Document Availability section below. Commenters on this proposal are not required to serve copies of their comments on other commenters.

## VII. <u>Document Availability</u>

- 48. In addition to publishing the full text of this document in the <u>Federal Register</u>, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through the Commission's Home Page (<a href="http://www.ferc.gov">http://www.ferc.gov</a>) and in the Commission'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.
- 49. From the Commission'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.
- 50. User assistance is available for eLibrary and the Commission'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 <a href="mailto:ferc.gov">ferc.gov</a>, or the Public Reference Room at (202) 502-8371, TTY (202) 502-8659. E-mail the Public Reference Room at <a href="mailto:public.referenceroom@ferc.gov">public.referenceroom@ferc.gov</a>.

By direction of the Commission.

Kimberly D. Bose, Secretary.