123 FERC ¶ 61,284
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.

North American Electric Reliability Corporation Docket No. RR08-4-000

ORDER ON VIOLATION SEVERITY LEVELS PROPOSED BY THE ELECTRIC RELIABILITY ORGANIZATION

(Issued June 19, 2008)

1. On March 3, 2008, as amended on March 4, 2008, the North American Electric Reliability Corporation (NERC), the certified Electric Reliability Organization (ERO) responsible for developing and enforcing mandatory Reliability Standards, submitted a filing in compliance with the Commission's June 7, 2007 Order, which directed NERC to develop Violation Severity Levels for each requirement of every approved Reliability Standard.[1] In this order, the Commission approves the Violation Severity Level assignments filed by NERC for the 83 Commission-approved Reliability Standards.[2] While we approve the Violation Severity Levels for these Reliability Standards as filed, we direct NERC to file modifications to the proposed Violation Severity Levels relevant to five Reliability Standards, identified in the Appendix to this Order, within 30 days. We also describe a number of guidelines that the Commission has developed for use in evaluating the Violation Severity Levels, and order a number of reports and further compliance filings to bring the remainder of NERC's Violation Severity Levels into compliance with the Commission's guidelines.

I. Background

2. In the June 7, 2007 Order, the Commission responded to NERC's proposal to develop Violation Severity Levels over the next three years. The Commission directed NERC to "develop Violation Severity Levels for each requirement and sub-requirement

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[1] *North American Electric Reliability Corporation*, 119 FERC ¶ 61,248 (June 7, 2007 Order), *order on clarification*, 120 FERC ¶ 61,239 (2007).

[2] In Order No. 693, *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), the Commission approved 83 Reliability Standards.

of each Reliability Standard, either through the Reliability Standards development process or through another expedited process, and to submit them to the Commission by March 1, 2008, so that the Commission could act on them prior to the 2008 summer period."[3]

3. Violation Severity Levels will be used by NERC and the Regional Entities in the determination of a penalty for an individual violation of a requirement of a Reliability Standard. The ERO or the Regional Entity will establish an initial Base Penalty Amount range by finding the intersection of the applicable Violation Risk Factor and Violation Severity Level on the Base Penalty Amount Table in Appendix A to the NERC Sanction Guidelines. Each requirement that is assigned a Violation Risk Factor is also assigned at least one Violation Severity Level.[4] A Violation Risk Factor represents the potential reliability risk ("Lower," "Medium," or "High") a violation of a requirement presents to the Bulk-Power System. In contrast, a Violation Severity Level is a post-violation measurement of the degree ("Lower," "Moderate," "High," or "Severe") to which a requirement was violated. The higher the Violation Risk Factor and the higher the degree of the Violation Severity Level, the higher the Base Penalty Amount range. For example, given a "High" Violation Risk Factor requirement, a "Lower" Violation Severity Level will result in a Base Penalty Amount range of $4,000 – $125,000, while a "Severe" Violation Severity Level will result in a range of $20,000 - $1,000,000.

4. Finally, as described in NERC's Sanction Guidelines, the Violation Severity Level does not consider any adjustment factors, such as whether the violation is a repeat violation or whether there are extenuating or aggravating circumstances regarding the violation. Such adjustments are considered as a separate step in setting a penalty pursuant to NERC's Sanctions Guidelines.

II. <u>NERC's Compliance Filing</u>

5. On March 3, 2008, as amended on March 4, 2008, in compliance with the June 7, 2007 Order, NERC submitted proposed Violation Severity Levels for requirements and sub-requirements for the 83 Reliability Standards approved by the Commission in Order No. 693. In addition, NERC submitted new Violation Severity Levels for requirements for proposed Reliability Standard NUC-001-1, Nuclear Plant Interface Coordination, which is currently pending before the Commission, for a total of 84 Reliability Standards filed for Commission approval.

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[3] June 7, 2007 Order, 119 FERC ¶ 61,248 at P 80.

[4] *Id.* P 74.

6. NERC states that the proposed Violation Severity Levels associated with the 84 Reliability Standards have been developed using the framework established by NERC's Reliability Standards Development Procedure. The procedure requires, among other things, that a two-thirds majority of weighted segment votes cast be affirmative in order for a standard to receive industry approval. Standards with industry approval are then forwarded to the NERC Board of Trustees for adoption. The board may then file the standard with the appropriate regulatory authorities. NERC states that the Violation Severity Levels for all Reliability Standards except the eight Emergency Preparedness and Operations (EOP) Reliability Standards received the necessary two-thirds vote for industry approval. NERC adds that the Violation Severity Levels for the EOP Reliability Standards received an affirmative vote of only 60 percent. Nonetheless, NERC submitted those Violation Severity Levels for Commission approval for use in the compliance program until such time as NERC develops and obtains Commission approval of modified Violation Severity Levels for the EOP Reliability Standards. NERC further states that the NERC Board of Trustees directed the Standards Committee to take the steps needed to expedite the development of revised Violation Severity Levels for the EOP Reliability Standards.

7. NERC explains that its Violation Severity Level drafting team developed a guidance document to provide clarity and direction to the drafting teams and to ensure consistency among the standards during the process of assigning Violation Severity Levels. The guidance document classifies the requirements of Reliability Standards into seven categories for this purpose: (1) procedure/program requirements that direct the applicable entity (i.e., relevant user, owner, or operator of the Bulk-Power System) to have an executable program, procedure, protocol, or written guideline document; (2) implementation/execution requirements that direct the applicable entity to implement or execute a program, procedure requirement, or directives; (3) reporting requirements that direct the applicable entity to report operational information and/or data to another registered entity or regulatory authority; (4) coordination/communication requirements that direct the applicable entity to coordinate, with the expectation of a response, with other required entities; (5) numeric performance requirements that direct the applicable entity to meet a defined numeric performance level; (6) multi-component requirements that direct the applicable entity to comply with sub-requirements or requirements listed on an attachment; and (7) requirements without Violation Risk Factors assigned, "N/A."[5]

8. With the exception of category 7, NERC defined criteria for the severity levels ("Lower," "Moderate," "High," and "Severe") to be assigned to each category of

[5] NERC did not request Commission approval of its guidance document, and specifically states that the document is included in its filing for informational purposes only.

requirements. In assigning Violation Severity Levels to individual requirements, NERC first categorized the requirement, and then used that category's Violation Severity Level criteria to assign specific Violation Severity Levels for that requirement. NERC's filing contains nearly three thousand proposed Violation Severity Level assignments relevant to the 83 Reliability Standards the Commission approved in Order No. 693 and the NUC Reliability Standard.[6]

9. During the development of the proposed Violation Severity Levels, NERC advised that there was strong industry concern regarding the potential for "double jeopardy," i.e., whether a violation of a sub-requirement constitutes a violation of the main requirement as well. NERC states that this concern is compounded when one considers the multiple levels of sub-requirements and assignment combinations currently in place in existing Reliability Standards. NERC further states that the nature of the relationship between the main requirements and sub-requirements differs throughout the Reliability Standards and that the assessment of sanctions based on these varying relationships and instances of violations thereof is best handled through the compliance and enforcement program on a case-by-case basis.

III. Public Notice and Interventions

10. Notice of NERC's March 3, 2008 filing was published in the *Federal Register*, 73 Fed. Reg. 13,220 (2008), with comments due on or before March 24, 2008. Wisconsin Electric Power Company, Modesto Irrigation District, Transmission Agency of Northern California, and First Energy Service Company filed motions to intervene.

11. City of Santa Clara, California (Santa Clara), and MidAmerican Energy Electric Utilities (MidAmerican) filed timely motions to intervene and comments. Edison Electric Institute (EEI) filed a timely intervention and protest.

IV. Discussion

A. Procedural Matters

12. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2007), timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

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[6] There are 739 approved Reliability Standards requirements. Each requirement that is assigned a Violation Risk Factor must have a minimum of one, and a maximum of four, Violation Severity Level assignments. (739 x 4 = 2,956 potential Violation Severity Level assignments).

B. Commission Determination

13. In this proceeding, NERC submitted for Commission approval Violation Severity Level assignments corresponding to the requirements and sub-requirements of the 83 Reliability Standards approved by the Commission in Order No. 693.[7] Pursuant to the Commission's June 7, 2007 Order, NERC accelerated its initial timeline for developing Violation Severity Levels to meet the Commission's March 1, 2008 deadline. The Violation Severity Levels, together with the Violation Risk Factors, are the initial factors that the ERO and Regional Entities will apply when determining an appropriate penalty range for a violation of a Commission-approved Reliability Standard. In this order, the Commission approves, with some revisions, the Violations Severity Levels for the 83 mandatory Reliability Standards. The Appendix to this order identifies each Violation Severity Level assignment that the Commission directs NERC to revise. Further, as discussed below, the Commission directs NERC to submit a report and compliance filings regarding several aspects of and concerns with the Violation Severity Level assignments.

14. As mentioned above, NERC's compliance filing includes proposed Violation Severity Levels for requirements and sub-requirements of proposed Reliability Standard NUC-001-1 (Nuclear Plant Interface Coordination). The Commission is not acting on the Violation Severity Levels for the proposed Reliability Standard at this time. Rather, NERC should assess the Violation Severity Levels for proposed NUC-001-1 in accordance with the Commission's guidelines discussed below. NERC should resubmit these Violation Severity Levels, including appropriate revisions based on the application of the Commission's guidelines, as part of NERC's six-month compliance filing, described below.[8]

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[7] In addition, NERC submitted Violation Severity Level assignments for the requirements of Reliability Standard NUC-001-000 which, as noted above, will be addressed in the compliance phase of this proceeding.

[8] In Docket No. RM08-3-000, NERC submitted Reliability Standard NUC-001-1 for Commission approval. NERC's filing in that docket included "interim" Violation Severity Levels. These "interim" Violation Severity Levels describe the severity for groups of requirements in the Reliability Standard, rather than on a requirement and sub-requirement basis. In a March 2008 Notice of Proposed Rulemaking, the Commission proposed to approve NUC-001-1. The Commission also proposed to approve the "interim" Violation Severity Levels, to be effective until such time that they are superseded by Commission approval of the Violation Severity Levels corresponding to the requirements of NUC-001-1 submitted in the current docket, RR08-4-000. *See Mandatory Reliability Standard for Nuclear Plant Interface Coordination*, 73 Fed. Reg. 21,859 (April 23, 2008), FERC Stats & Regs ¶ 32,629 (2008).

15. Similar to Violation Risk Factors, the Commission finds that Violation Severity Levels are not part of the Reliability Standard.[9] Reliability Standards set forth requirements with which applicable entities must comply. Violation Severity Levels do not set forth requirements, but instead are post-violation measurements of the degree to which a requirement was violated. Further, Violation Severity Levels are integral to using the Base Penalty Amount Table.[10] The intersection of the Violation Risk Factor and Violation Severity Level on the Base Penalty Amount Table of NERC's Sanction Guidelines is the first step in the determination of a penalty for a violation of a Reliability Standard. In the January 18, 2007 Order on Compliance Filing, the Commission found that, because NERC proposed to employ Violation Risk Factors solely in determining penalties for violations of Reliability Standards, like the Sanction Guidelines, Violation Risk Factors may be appropriately treated as an appendix to NERC's Rules of Procedure.[11] Similarly, we find Violation Severity Levels, as a factor in the determination of penalty assessments, are also appropriately treated as an appendix to NERC's Rules of Procedure.

16. As discussed above, NERC developed a document to assist the NERC drafting teams in developing Violation Severity Levels. For purposes of developing Violation Severity Levels, the NERC document identifies different categories of requirements within Reliability Standards and provides criteria for developing Violation Severity Levels for requirements that correspond to each category. The Commission believes that the categories NERC developed to classify the Reliability Standards requirements and NERC's approach to developing requirement-specific Violation Severity Levels are generally appropriate. NERC's guidance document provides a systematic method to help ensure that requirements of the same category are assigned similar, but requirement-specific, Violation Severity Levels.

17. For purposes of Commission review, and as a useful tool in the future development of new, or revision of current Violation Severity Levels, the Commission has developed four guidelines for evaluating the validity of Violation Severity Level assignments: (1) Violation Severity Level assignments should not have the unintended consequence of lowering the current level of compliance; (2) Violation Severity Level assignments should ensure uniformity and consistency among all approved Reliability Standards in the determination of penalties; (3) Violation Severity Level assignments

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[9] *North American Electric Reliability Corp.*, 119 FERC ¶ 61,145 at P 17, *order on reh'g and compliance filing*, 120 FERC ¶ 61,145 (2007).

[10] *North American Electric Reliability Corp.*, 118 FERC ¶ 61,030 at P 92, *order on clarification and reh'g*, 119 FERC ¶ 61,046 (2007).

[11] *Id.* P 91.

should be consistent with the corresponding requirement; and (4) Violation Severity Level assignments should be based on a single violation, not on a cumulative number of violations. These guidelines will provide a consistent and objective means for assessing, *inter alia*, the consistency, fairness and potential consequences of Violation Severity Level assignments.[12]

18. The Commission's guidelines for reviewing Violation Severity Level assignments are not intended to replace NERC's seven classifications or related criteria, but rather, provide an additional level of analysis to determine the validity of Violation Severity Level assignments.

1. Commission Guidelines for the Review of Violation Severity Level Assignments

19. The Commission developed the following four guidelines that it will apply when reviewing proposed Violation Severity Level assignments:

Guideline 1: Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance

20. The Commission believes that the application of Guideline 1 will help to maintain at least the current level of compliance and reliability and ensure that ultimately Violation Severity Levels are not arbitrarily assigned. Guideline 1 seeks to ensure that proposed Violation Severity Level assignments will not signal to applicable entities that less compliance than that which has been historically achieved is condoned. NERC Compliance Enforcement Program Summary Reports from 2003 – 2006 indicate, on average, that entity compliance with the subset of actively monitored reliability standards has been the rule and not the exception.[13] The Commission expects that a Violation Severity Level assignment should not encourage a reduction of industry performance but

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[12] The Commission retains the flexibility to consider the development of additional Violation Severity Level guidelines as appropriate.

[13] NERC, with input from the Regional Entities, stakeholders, and regulators, annually selects a subset of the NERC Reliability Standards and requirements to be actively monitored and audited in the NERC annual compliance program. NERC Rules of Procedure, § 401.6 NERC's Compliance Enforcement Program Summary Reports from 2003 – 2006 indicate that, on average, 95 percent of applicable entities have been 100 percent compliant with reliability standards NERC has actively monitored during that time. NERC Compliance Enforcement Program Summary Reports are *available at* www.nerc.com/~comply/annual.html.

should reflect the industry's compliance achievements for a particular requirement of a Reliability Standard, as indicated by historical performance data.

21. It is not apparent from NERC's filing whether the proposed Violation Severity Level assignments, in fact, fully reflect industry's historical compliance. For example, for certain requirements, NERC assigns Violation Severity Levels based on "quartiles." Using this approach, an entity that violates a requirement of a Reliability Standard may be in a range from one percent to 25 percent non-compliant with the requirement and, yet, the violation would fit the "Lower" Violation Severity Level assignment. Without further support from NERC, the Commission is concerned that assigning up to 25 percent non-compliance at the "Lower" Violation Severity Level may have the unintended consequence of signaling that a greater level of non-compliance than historically evident is condoned. While the above example is based on NERC's application of a "quartile" approach, the Commission's concern pertains to any requirement where the Violation Severity Level assignment does not reflect the industry's historical compliance levels. At this time, we leave it to NERC's discretion to determine the appropriate historical data and the timeframe of the data used to ensure that the Violation Severity Level assignments do not reduce or compromise current levels of reliability. As described further below, NERC should use the levels of compliance for which it has historical data when setting the Violation Severity Levels.

Guideline 2: Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties

22. The Commission expects the ERO to implement a uniform process for exercising the enforcement authority to be carried out by the Regional Entities.[14] Guideline 2 addresses uniformity and consistency in the determination of penalties.

23. In its review of NERC's proposed Violation Severity Levels, the Commission identified two specific types of concerns regarding the uniformity and consistency of Violation Severity Level assignments: (a) the single Violation Severity Level assignment category for "binary" requirements is not consistent; and (b) the Violation Severity Level assignments contain ambiguous language. While we discuss below these two specific concerns, this discussion is not intended to limit consideration of other valid consistency issues, or preclude other means of ensuring that Violation Severity Level assignments promote uniformity and consistency in the determination of penalties.

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[14] *Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards*, Order No. 672, at P 486 and P 561, FERC Stats. & Regs. ¶ 31,204, *order on reh'g*, Order No. 672-A, FERC Stats. & Regs. ¶ 31,212 (2006).

a. The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent

24. Requirements of Reliability Standards where compliance is defined in terms of "pass" or "fail" are referred to by NERC as "binary" requirements.[15] NERC assigns to identified binary requirements a single Violation Severity Level. The Commission generally agrees that the binary approach is appropriate for certain Violation Severity Level assignments. However, in its review, the Commission observed some inconsistent assignments where the binary approach is used. In some instances, the single ("fail") assignment for a requirement is a "Lower" Violation Severity Level and, in other instances, a "High" Violation Severity Level is assigned. For example, NERC proposes the single Violation Severity Level of "Lower" for violations of Reliability Standard COM-001-1, Requirements R1.1 – R1.4. In contrast, Reliability Standard PER-002-0, Requirement R2 violations are assigned the single Violation Severity Level of "High."

25. NERC explains that it plans to provide stronger differentiation between "importance" and "severity" in developing Violation Severity Levels for "binary" requirements as current and new Reliability Standards undergo development or refinement within the Reliability Standards development process as part of NERC's Reliability Standards development three-year work plan.[16] However, NERC provides no justification in its filing that a single Violation Severity Level assigned to binary requirements can or should be different from one requirement or one Reliability Standard to another. Without such justification from NERC, the Commission believes that for requirements where an applicable entity either complies or does not, there is no basis to have more than one Violation Severity Level. Additionally, the single level of non-compliance in these instances would be expected to be the same regardless of the requirement since Violation Severity Levels "define the degree to which compliance with a requirement or sub-requirement was not achieved," as opposed to measuring the risk to the Bulk-Power System or actual impact on the Bulk-Power System of non-compliance.[17]

26. In addition, the Commission does not agree with all instances in which NERC designates a requirement as binary. For example, Reliability Standard BAL-005-0, Requirement R12 requires that an applicable entity is to include all tie line flows in a calculation. NERC designates that requirement as a binary requirement. According to NERC, if the applicable entity did not include *all* tie line flows, the entity is deemed to have failed in terms of compliance. In this instance, the Commission believes it is more

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[15] NERC March 3, 2008 filing at 17.

[16] *Id*.

[17] *Id*. at 1.

appropriate to employ a gradation approach to determine levels of non-compliance with Violation Severity Levels based on a percentage of the total tie line flows that were not included in the calculation. In other instances, the Commission believes a range of Violation Severity Levels could be developed by applying, if not a quartile, another percentile approach more congruent with historical data or compliance with a defined number of a requirement's sub-components or elements.[18]

27. In sum, although the Commission agrees that the binary approach is appropriate for certain requirements, the Commission notes that, as a general rule, gradated Violation Severity Levels, wherever possible, would be preferable to binary Violation Severity Levels since the application of any penalty for a violation could be more consistently and fairly applied commensurate with the degree of the violation.

b. Violation Severity Level Assignments that Contain Ambiguous Language

28. Some Violation Severity Level assignments contain general, relative, or subjective language such as "missing minor details," "missing minor elements," or "partially compliant." NERC explains in its filing that general language is used in the following circumstances: (1) the requirements did not lend themselves to specific Violation Severity Levels; (2) the requirements and sub-requirements, as originally written, do not have clear measurements to allow specific Violation Severity Levels to be derived; and (3) the Violation Severity Level drafting team was not able to complete revisions from general to specific language within the timeframe for filing.[19]

29. For example, Reliability Standard EOP-001-0, (Emergency Operations Planning) requires that each transmission operator and balancing authority "shall develop, maintain and implement a set of plans to mitigate operating emergencies for insufficient generating capacity." NERC proposes the following "Lower" Violation Severity Level assignment for Requirement R3.1: "[t]he transmission operator or balancing authority's emergency plans to mitigate insufficient generating capacity are missing *minor details* or *minor program/procedural elements*." (Italics added) As another example, Requirement R3.3 of Reliability Standard EOP-001-1 requires each transmission operator and balancing authority to "develop, maintain and implement a set of plans for load shedding." NERC proposes a "High" Violation Severity Level assignment for Requirement R3.3 when

[18] That being said, there may be instances where some requirements are not written to facilitate a gradated approach and compliance is truly binary. The Appendix to this order contains two such examples, Reliability Standard EOP-003-1 Requirement R2 and Requirement R4.

[19] NERC March 3, 2008 filing at 15–16.

"[t]he transmission operator or balancing authority's load shedding plans are *partially compliant with the requirement* but are not maintained nor implemented." (Italics added)

30. Requirement R1 of Reliability Standard FAC-009-1 (Establish and Communicate Facility Ratings), requires that each transmission owner and generation owner establish facility ratings "for its solely and jointly owned facilities that are consistent with the associated Facility Rating Methodology." NERC proposes that a violation of Requirement R1 receive a "Lower" Violation Severity Level when the transmission owner or generation owner has developed the required facility ratings "but the ratings weren't consistent with the associated Facility Rating Methodology in one *minor area*." (italics added) Likewise, according to NERC, a "Moderate" Violation Severity Level assignment is appropriate when the transmission owner or generation owner has developed the required facility ratings "but failed to follow the associated Facility Rating Methodology in one *significant area*." (Italics added) The Commission is concerned that distinctions among Violation Severity Level assignments based on ambiguous terms such as "minor" and "significant," as used in Requirement R1 of FAC-009-1, do not provide the clarity needed for Regional Entities to consistently and objectively apply the Violations Severity Levels.

31. The Commission believes that, in general, relative and subjective language is subject to multiple interpretations that could result in inconsistent application of the Violation Severity Levels when determining penalties. While we recognize that inconsistencies in outcome can be reduced with case-by-case review, we believe that the ambiguity in the Violation Severity Level assignments should be reduced to the extent that it can be reduced.

Guideline 3: Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement

32. The Commission believes Violation Severity Levels assignments should provide reasonable parameters of the degree of compliance with a Reliability Standard requirement but should not appear to redefine or undermine the requirement.

33. The Commission notes instances where the Violation Severity Level appears to redefine the requirement. For example, the text of Reliability Standard IRO-002-1, Requirement R2 states that, "[e]ach Reliability Coordinator shall determine the data requirements to support its reliability coordination tasks and shall request such data from its Transmission Operator, Balancing Authorities, Transmission Owners, Generation Owners, Generation Operators, and Load-Serving Entities, or adjacent Reliability Coordinators." The "Lower" Violation Severity Level for Reliability Standard IRO-002-1, Requirement R2, uses the phrase "material impact" as a qualifier for the type of data requirements that the Reliability Coordinator shall determine and request. However, the phrase "material impact" is not included in the text of the requirement to define the type of data. The Commission is concerned that the subject Violation Severity Level would

have the effect of redefining the requirement by unnecessarily stipulating the significance of the type of data, when the approved text of the requirement does not.

34. Likewise, Reliability Standard FAC-003-1, Requirement R2, requires the creation of an annual plan for vegetation management with certain required elements. Requirement R2 also requires the implementation of that plan. However, NERC's proposed Violation Severity Levels only address the absence of required elements from a vegetation management plan, and not the failure to implement the plan. The Commission is concerned that the Violation Severity Levels for this requirement do not consider the scenario where an applicable entity may have all the required elements of a vegetation management plan but fails to implement the plan.

Guideline 4: Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations

35. The application of Guideline 4 is intended to ensure that Violation Severity Level assignments are based on a single violation of a Reliability Standard and not based on a cumulative number of violations of the same requirement over a period of time. For example, Reliability Standard IRO-004-1, Requirement R6, requires a Reliability Coordinator to direct entities to address potential system operating limit violations. NERC's proposed Violation Severity Level assignments for that requirement are based on the number of occasions during a calendar month that a Reliability Coordinator did not direct its required entities to address those potential violations. NERC assigns a "Lower" Violation Severity Level if the Reliability Coordinator did not direct action one time during a calendar month; and "Moderate," if action is not directed two to three times in a calendar month. In this example, NERC's Violation Severity Level assignment is based on a cumulative number of violations over the period of a calendar month. However, the compliance measurement period of a calendar month is not stated in the text of the requirement.

36. The Commission believes the application of Guideline 4 is appropriate because, unless otherwise stated in the requirement, each instance of non-compliance with a requirement is a separate violation. Section 4 of the Sanction Guidelines states that assessing penalties on a per violation per day basis is the "default" for penalty calculations.[20] Guideline 4 is also consistent with section 316A of the Federal Power Act

[20] Section 4.0 of the NERC Sanction Guidelines states that, "[u]nless NERC or the regional entity deems alternative frequency or duration is warranted, penalties shall be assessed on a per violation per day basis."

(FPA), which establishes the statutory maximum penalty amount of $1 million per day, per violation. [21]

2. Commission Application of Guidelines

a. Approval and Revision of Violation Severity Level Assignments

37. The Commission approves, with some revisions, the proposed Violation Severity Level assignments, subject to future compliance filings. The Commission believes that, given the imposed deadline and the enormity of the task, the Violation Severity Levels approved in this order are a good foundation on which further refinement can be developed over time.

38. The Commission's revisions focus on the Violation Severity Levels that both (a) correspond to requirements of Reliability Standards for which a violation presents the highest reliability risk to the Bulk-Power System, i.e., requirements assigned a "High" Violation Risk Factor and (b) correspond to the requirements of Reliability Standards that implement a recommendation of the U.S. – Canada Power System Outage Task Force (Task Force) that studied the causes of the August 2003 cascading outage across central and eastern North America.[22] While the Commission approves the proposed Violation Severity Level assignments, the Commission believes it is unacceptable to delay

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[21] 16 U.S.C. § 825o-1(b) (Supp. V 2005). *See also North American Electric Reliability Corp*., 116 FERC ¶ 61,062 at P 412 (Certification Order), *order on reh'g and compliance*, 117 FERC ¶ 61,126 (2006).

[22] In September 2006, Natural Resources Canada and the U.S. Department of Energy, with contributions from the Commission, issued the *Final Report on the Implementation of the Task Force Recommendation* (Final Implementation Report). The Final Implementation Report documents the progress made by the industry and government agencies on the implementation of the actions required to fully implement each recommendation of the *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* (April 2004) (Final Blackout Report). The Final Blackout Report is *available at* www.https://reports.energy.gov/. The Final Implementation Report is *available at* www.ferc.gov/industries/electric/indus-act/blackout/09-06-final-report.pdf.

refinement of the Violation Severity Levels that pertain to the recommendations of the Task Force intended to address the causes of previous blackouts.[23]

39. Further, the Commission's revision of these Violation Severity Levels is based on an analysis utilizing Guidelines 2b, 3, and 4. As discussed below, the Commission does not have the comprehensive historical compliance data to fully analyze the Violation Severity Levels based on Guideline 1. Additionally, the Commission's revisions are not based on Guideline 2a (consistency among Violation Severity Levels for "binary" requirements) because the Commission is directing NERC separately to analyze all the binary requirements and to submit a compliance filing.

40. The Commission directs the revision within 30 days of Violation Severity Level assignments corresponding to 20 requirements relative to five Reliability Standards. The Appendix to this order identifies the Violation Severity Level assignments for which the Commission directs revision as the result of its review, as well as the Commission's revised assignments. The Appendix indicates the Commission's concern with the specific Violation Severity Level assignments by identifying one or more of the guidelines discussed above. The Commission's revision was developed to address the specified concerns. The Commission approves as filed the proposed Violation Severity Levels indicated in the Appendix but directs NERC to submit a compliance filing containing these modifications within 30 days of the date of this order.

41. While the Commission has primarily focused its revisions on a specific subset of the Reliability Standards requirements, the remaining requirements, in some instances, also raise concerns. Thus, while the Commission approves the proposed Violation Severity Levels not specifically identified in the Appendix to this order, the Commission believes that those assignments could benefit from further refinement based on the guidelines set forth in this order. Accordingly, the Commission directs NERC to conduct a review of the approved Violation Severity Levels utilizing Guidelines 2b, 3, and 4.

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[23] For example, the Commission focuses on the following Final Blackout Report recommendations and related requirements in its revision of the Violation Severity Levels: Recommendation No. 8: Shield operators who initiate load shedding pursuant to approved guidelines from liability or retaliation; Recommendation No. 16: Establish enforceable standards for maintenance of electrical clearances in right-or-way areas; Recommendation No. 19: Improve near-term and long-term training and certification requirements for operators, reliability coordinator, and operator support staff; Recommendation No. 23: Strengthen reactive power and voltage control practices in all NERC regions; and Recommendation No. 31: Clarify that the transmission loading relief (TLR) process should not be used in situations involving an actual violation of an Operating Security Limit. Streamline the TLR process.

NERC is further directed to submit a compliance filing, within six months of the date of this order, where NERC certifies that it has reviewed each of the Violation Severity Level assignments for consistency with the Guidelines by providing a description of how it performed its review and, either validating the existing Violation Severity Level designations or proposing revisions to specific approved Violation Severity Level assignments where NERC determines that such assignments do not meet these Guidelines.

42. In summary, the Commission: (1) approves the Violation Severity Levels, (2) directs revisions as set forth in the Appendix of this order and directs NERC to submit a compliance filing within 30 days that contains the identified revisions; and (3) directs that NERC, within six months, conduct a review of the approved Violation Severity Levels pursuant to the Commission guidelines discussed herein, and submit a compliance filing that either validates the current Violation Severity Levels under the guidelines contained in this order or proposes revisions to the approved Violation Severity Levels.

b. Report on Historical Performance Data

43. The Commission is not evaluating NERC's filing utilizing Guideline 1 at this time. In the absence of a compliance record for approved Reliability Standards in this proceeding, the Commission does not have the necessary data to perform an analysis of the Violation Severity Level assignments based on Guideline 1. Rather, the Commission directs NERC to submit a report within six months on compliance data that would serve as a basis for applying Guideline 1, as discussed below.

44. The Commission directs NERC to submit the report within six months of the date of this order identifying Reliability Standards approved in Order No. 693 for which NERC has historical performance data.[24] Using that data, NERC is to compare the historical compliance with each identified Reliability Standard requirement to its assigned Violation Severity Levels utilizing Guideline 1. The report should include a description of how NERC performed this analysis. NERC must identify (i) the requirement and its current Violation Severity Level assignments and (ii) summarize the requirement's historical performance data. Where NERC determines that its Violation Severity Level assignments are not consistent with a requirement's historical performance data, NERC should submit either (i) revised assignments that accurately reflect historical levels of compliance or (ii) provide a justification of the current Violation Severity Level assignment.

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[24] Since the NERC Compliance Enforcement Program Summary Reports from 2003 – 2006 pre-date Order No. 693, the Commission expects NERC to associate the pre-Order No. 693 requirement and/or reliability standard with its corresponding requirement and/or Reliability Standard approved in Order No. 693.

c. Compliance Filing Regarding Violation Severity Level Assignments for "Binary" Requirements

45. As discussed above with regard to Guideline 2a, NERC has identified certain requirements of Reliability Standards where compliance is defined in terms of "pass" or "fail." NERC refers to such requirements as "binary" and assigns a single Violation Severity Level. The Commission believes that this is an appropriate characterization of certain requirements and a reasonable means of determining Violation Severity Levels for them. Accordingly, the Commission approves the Violation Severity Levels assigned to binary requirements subject to a further compliance filing as discussed below.

46. NERC does not explain why there is not a consistent designation of the Violation Severity Levels in the case of binary requirements. In most cases, NERC has designated them as "Severe" which we find to be consistent with the application of a basic pass/fail test; however, other designations are assigned without justification.

47. Accordingly, the Commission directs NERC to submit a compliance filing within six months that provides a justification for the inconsistencies in the single Violation Severity Level assigned to binary requirements. Alternatively, NERC may either (1) modify the single Violation Severity Level by consistently applying the same severity level or (2) modify the Violation Severity Level assignment by changing from a binary approach to an approach using gradation, as explained in Guideline 2.

3. Intervenor Concerns

a. Commission Review of EOP Violation Severity Level Assignments

48. MidAmerican and Santa Clara are concerned that the proposed EOP Violation Severity Levels were presented to the Commission for approval without the two-thirds affirmative vote of the industry ballot body as required by NERC's Reliability Standards Development Procedure. MidAmerican states that Commission approval of the EOP Violation Severity Levels without industry approval could undermine the integrity of the NERC Reliability Standards development process and establish an ill-advised precedent of enabling or even encouraging difficult or unresolved issues raised in the Reliability Standards development process to be deferred to the compliance enforcement program. Santa Clara states that EOP Violation Severity Levels, as with all Violation Severity Levels, should be extremely clear so that the Regional Entities are not permitted to assess penalties based on a vague level for violation severity. Santa Clara urges the Commission to allow NERC additional time to develop the EOP Violation Severity Levels by either rejecting them or only conditionally accepting them with an order that NERC re-submit them once they are vetted through the NERC processes.

49. EEI states that it supports the NERC filing and requests that the Commission conditionally approve the complete set of Violation Severity Levels as proposed. EEI further states that it appreciates the urgency of putting in place a full-featured compliance enforcement program, which includes the Sanctions Guidelines of which the Violation Severity Levels form a basic component. EEI also states its understanding that the NERC Board of Trustees has directed the NERC Standards Committee to expedite the revisions to the EOP Violation Severity Levels. EEI requests that the Commission direct NERC to address these Violation Severity Levels expeditiously and then to re-submit them to the Commission for approval.

Commission Determination

50. As stated previously in this order, the Commission finds that Violation Severity Levels, like the Violation Risk Factors, are not part of the Reliability Standards. As such, the Commission is not limited to the options of "approve" or "remand" as with a Reliability Standard. Further, since the Violation Severity Levels are appropriately treated as an appendix to NERC's Rules of Procedure, NERC may, but need not develop, or revise, Violation Severity Levels through its Reliability Standards Development Procedure. Thus, the Commission will not reject the EOP Violation Severity Levels based on the fact that they received 60 percent approval of the industry ballot body, which is less than the two-thirds approval required for stakeholder approval in the Reliability Standards Development Procedure.

51. In the June 7, 2007 Order, the Commission approved use of the levels of non-compliance on an interim basis as a substitute for the Violation Severity Levels in determining Base Penalty Amount ranges, but rejected NERC's proposal to develop Violation Severity Levels over the next three years, stating that NERC itself acknowledges that the levels of non-compliance are not sufficient going forward in an ERO environment.[25] The Commission believes it is important to have a comprehensive reliability enforcement program in place that includes the Violation Severity Level assignments for the EOP Reliability Standard requirements, many of which are assigned high Violation Risk Factors indicating that a violation of these requirements poses a high risk to the reliability of the Bulk-Power System. Accordingly, the Commission approves the EOP Violation Severity Levels.

52. Santa Clara's concern regarding vagueness or ambiguity within the EOP Violation Severity Levels is shared by the Commission. As addressed above, the Commission directs revision to certain EOP Violation Severity Levels, while others must be reviewed by NERC and appropriate changes made as part of its six month compliance filing.

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[25] June 7, 2007 Order, 119 FERC ¶ 61,248 at P 80.

b. Violation of Multiple Sub-Parts of One Requirement

53. EEI also addresses concerns raised by stakeholders during the development of the Violation Severity Levels regarding application of Violation Severity Levels to violations of requirements and sub-requirements of Reliability Standards. EEI states that some stakeholders have questioned whether a violation of a sub-requirement is tantamount to a violation of the requirement itself and thus raise the potential of "double jeopardy," i.e., receiving multiple sanctions for violation of multiple parts of a single requirement. EEI disagrees with NERC's stated intention to address this issue through the compliance enforcement program and believes that issues that arise during the Reliability Standards development process should be addressed through that process. EEI believes that deferring difficult or unresolved issues raised in the Reliability Standards development process to the compliance program is inconsistent with fair notice, undermines the likelihood that the compliance and enforcement processes will be implemented in a consistent manner, and reduces the integrity of the Reliability Standards development process. EEI states that stakeholders should be allowed sufficient time to address such complex issues in the Reliability Standards development process to prevent such occurrences. EEI requests that the Commission direct NERC to incorporate the consideration of the requirement/sub-requirement issue into its Reliability Standards development work plan

Commission Determination

54. With respect to EEI's concern regarding whether a violation of a sub-requirement is also a violation of the requirement itself, we agree with NERC that this is a compliance issue. Given the varied nature of the relationship between the main requirements and sub-requirements throughout the Reliability Standards, this issue is best addressed on a case-by-case basis in the context of a compliance proceeding. Further, we note that section 3.10 of NERC's Sanction Guidelines addresses multiple violations related to a single act or common incidence of noncompliance and states that in these instances "NERC or the regional entity will generally determine and issue a single aggregate penalty. . . bearing reasonable relationship to the aggregate of the related violations."[26]

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[26] Section 3.10 of the NERC Sanction Guidelines states in part, "NERC or the regional entity can determine and levy a separate penalty or sanction, or direct remedial action, upon a violator for each individual violator for each individual violation. However, in instances of multiple violations related to a single act or common incidence of noncompliance, NERC or the regional entity will generally determine and issue a single aggregate penalty, sanction, or remedial action directive bearing reasonable relationship to the aggregate of the related violations."

55. EEI's request for the Commission to direct NERC to incorporate the consideration of the requirement/sub-requirement issue into its Reliability Standards development work plan is beyond the scope of this proceeding. If EEI believes that stakeholders should be allowed sufficient time to address the requirement/sub-requirement issue in the Reliability Standards development process by incorporating that issue into the process, it should raise the matter directly with NERC.

4. Summary

56. In summary, the Commission approves the Violation Severity Level assignments submitted by NERC, subject to the following filings. We direct NERC to (1) file the modified Violation Severity Levels as indicated in the Appendix within 30 days of this order; (2) to submit a report to the Commission within six months documenting whether the Violation Severity Level assignments allow for a level of compliance lower than the historical performance; (3) file a compliance filing within six months either justifying the inconsistency in the single Violation Severity Level assigned to binary requirements, or revising those assignments to reflect a consistent approach; and (4) review all Violation Severity Level assignments, with the exception of those for which the Commission directs modification in this order, for compliance with Guidelines 2b, 3, and 4 and submit a compliance filing either validating the current Violation Severity Level assignments or proposing revision within six months.

The Commission orders:

(A) NERC's March 3, 2008 compliance filing, as amended, is hereby approved as filed effective as of the date of this order, as discussed in the body of this order.

(B) NERC is hereby directed to file the modified Violation Severity Levels as identified in the Appendix within 30 days of this order, as discussed in the body of this order.

(C) NERC is directed to submit a report on its analysis with regard to Guideline 1 within six months of this order, as discussed in the body of this order.

(D) NERC is directed to submit a compliance filing within six months of this order, justifying or modifying the Violation Severity Levels with regard to Guideline 2a, as discussed in the body of this order.

(E) NERC is directed to submit a compliance filing within six months certifying that it has reviewed each of the Violation Severity Level Assignments for consistency with Guidelines 2b, 3 and 4, validating the assignments that meet Guidelines 2b, 3, and 4, and proposing revisions to those that fail to meet Guidelines 2b, 3, and 4, as discussed in the body of this order.

(F) NERC is directed to submit a compliance filing within six months submitting Violation Severity Levels for Reliability Standard NUC-001-1, as discussed in the body of this order.

By the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.

Appendix

Commission Directed Modifications to Violation Severity Levels

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
8	EOP-003-1	R2.	Each Transmission Operator and Balancing Authority shall establish plans for automatic load shedding for underfrequency or undervoltage conditions.	~~The Transmission Operator and Balancing Authority's automatic load shedding plans are missing minor details or minor program/procedural elements.~~ N/A	N/A	~~The Transmission Operator or Balancing Authority has an automatic load shedding plan but it only addresses one of the two required conditions (underfrequency or undervoltage).~~ N/A	~~The Transmission Operator and Balancing Authority has failed to demonstrate the existence of the automatic load shedding plan required.~~ The applicable entity did not establish plans for automatic load-shedding, as directed by the requirement.	3
8	EOP-003-1	R3.	Each Transmission Operator and Balancing Authority shall coordinate load shedding plans among other interconnected Transmission Operators and Balancing	~~The Transmission Operator and Balancing Authority has demonstrated coordination / communication with required entities with minor exception and is~~	~~The Transmission Operator and Balancing Authority has demonstrated coordination / communication with all but one of it's TOPs or Bas.~~ The applicable entity	~~The Transmission Operator and Balancing Authority has demonstrated coordination / communication with some of it's TOPs and BAs but was deficient in~~	~~The Transmission Operator and Balancing Authority failed to coordinate load shedding plans among Interconnected Transmission Operators and Balancing~~	2b

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
			Authorities.	~~substantially compliant with the directives of the requirement.~~ The applicable entity did not coordinate load shedding plans, as directed by the requirement, affecting 5% or less of its required entities.	did not coordinate load shedding plans, as directed by the requirement, affecting between 5-10% of its required entities.	~~meeting the directives of the requirement because multiple interconnected TOPs and BAs were not included.~~ The applicable entity did not coordinate load shedding plans, as directed by the requirement, affecting 10-15%, inclusive, of its required entities.	~~Authorities.~~ The applicable entity did not coordinate load shedding plans, as directed by the requirement, affecting greater than 15% of its required entities.	
8	EOP-003-1	R4.	A Transmission Operator or Balancing Authority shall consider one or more of these factors in designing an automatic load shedding scheme: frequency, rate of frequency decay, voltage level, rate of voltage decay, or power flow levels.	~~The Transmission Operator and Balancing Authority has demonstrated the existence of a load shedding scheme, but is missing minor details or minor program/procedural elements.~~ N/A	~~The Transmission Operator and Balancing Authority has demonstrated the existence of the load shedding scheme but failed to show it considered one of the factors in designing an automatic load shedding scheme.~~ N/A	~~The Transmission Operator and Balancing Authority has demonstrated the existence of the load shedding scheme but failed to show it considered more than one of the factors in designing an automatic load shedding scheme.~~ N/A	~~The Transmission Operator or Balancing Authority has failed to demonstrate the existence of load shedding scheme.~~ The applicable entity did not consider one of the five required elements, as directed by the requirement.	2b

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
8	EOP-003-1	R7.	The Transmission Operator and Balancing Authority shall coordinate automatic load shedding throughout their areas with underfrequency isolation of generating units, tripping of shunt capacitors, and other automatic actions that will occur under abnormal frequency, voltage, or power flow conditions.	~~The Transmission Operator or Balancing Authority has demonstrated coordination of automatic load shedding with required entities but is missing minor program/procedural elements.~~ The applicable entity did not coordinate automatic load shedding, as directed by the requirement, affecting 5% or less of its automatic actions.	~~The Transmission Operator and Balancing Authority has coordinated it's automatic load shedding, but did not include details on one of the elements of the requirement.~~ The applicable entity did not coordinate automatic load shedding, as directed by the requirement, affecting between 5 -10% of its automatic actions.	~~The Transmission Operator and Balancing Authority has not coordinated with 50% of their areas or was missing 50% of the required elements detail.~~ The applicable entity did not coordinate automatic load shedding, as directed by the requirement, affecting 10-15%, inclusive, of its automatic actions.	~~The Transmission Operator and Balancing Authority has failed to coordinate it's automatic load shedding with the required entities as directed by the requirement.~~ The applicable entity did not coordinate automatic load shedding, as directed by the requirement, affecting greater than 15% of its automatic actions.	2b
8	EOP-003-1	R8.	Each Transmission Operator or Balancing Authority shall have plans for operator-controlled manual load shedding to respond to real-time	~~The Transmission Operator or Balancing Authority has plans for manual load shedding but is missing minor program/procedural elements.~~ N/A	~~N/A~~ The applicable entity did not have plans for operator controlled manual load shedding, as directed by the requirement.	~~N/A~~ The applicable entity did not have the capability to implement the load shedding, as directed by the requirement.	~~The Transmission Operator or Balancing Authority does not have plans for manual load shedding or is not capable of implementing in an adequate time frame.~~ The	2b

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
			emergencies. The Transmission Operator or Balancing Authority shall be capable of implementing the load shedding in a timeframe adequate for responding to the emergency.				applicable entity did not have plans for operator controlled manual load shedding, as directed by the requirement nor had the capability to implement the load shedding, as directed by the requirement.	
16	FAC-003-1	R1.	The Transmission owner shall prepare, and keep current, a formal transmission vegetation management program (TVMP). The TVMP shall include the Transmission Owner's objectives, practices, approved procedures, and work Specifications. 1. ANSI A300,	~~The Transmission Owner has a TVMP, but it has not been updated to include changes that are currently in effect, but have not been in effect for more than one month.~~ The applicable entity did not include and keep current one of the four required elements of its TVMP, as directed by the	~~The Transmission Owner has a TVMP, but it has not been updated to include changes that have been in effect for more than one month, but have not been in effect for more than six months.~~ The applicable entity did not include and keep current two of the four required elements of its TVMP, as	~~The Transmission Owner has a TVMP, but it has not been updated to include changes that have been in effect for more than six months.~~ The applicable entity did not include and keep current three of the four required elements of its TVMP, as directed by the requirement.	~~The Transmission Owner does not have TVMP.~~ The applicable entity did not include and keep current four of the four required elements of the TVMP, as directed by the requirement.	3

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
			Tree Care Operations – Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices, while not a requirement of this standard, is considered to be an industry best practice.	requirement.	directed by the requirement.			
16	FAC-003-1	R1.1.	The TVMP shall define a schedule for and the type (aerial, ground) of ROW vegetation inspections. This schedule should be flexible enough to adjust for changing conditions. The inspection schedule shall be based on the anticipated growth of vegetation and any other environmental or operational	~~Not Applicable.~~ N/A	~~The TVMP includes a schedule for inspections, but it is not based on anticipated growth of vegetation and any relevant other environmental or operational factors.~~ N/A	~~The TVMP includes a schedule for inspections, but it is not flexible enough to adjust for changing conditions.~~ The applicable entity TVMP did not define a schedule, as directed by the requirement, or the type of ROW vegetation inspections, as directed by the requirement.	~~The Transmission Owner's TVMP does not include a schedule for inspections.~~ The applicable entity TVMP did not define a schedule, as directed by the requirement, nor the type of ROW vegetation inspections, as directed by the requirement.	3

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
			factors that could impact the relationship of vegetation to the Transmission Owner's transmission lines.					
16	FAC-003-1	R1.5.	Each Transmission Owner shall establish and document a process for the immediate communication of vegetation conditions that present an imminent threat of a transmission line outage. This is so that action (temporary reduction in line rating, switching line out of service, etc.) may be taken until the threat is relieved.	~~Not Applicable.~~ N/A	~~Not Applicable.~~ N/A	N/A	~~The Transmission Owner's TVMP does not include a process for the immediate communication of vegetation conditions that present an imminent threat of line outage.~~ The applicable entity did not establish or did not document a process, as directed by the requirement.	3
16	FAC-003-1	R2.	The Transmission Owner shall create and	~~Not Applicable.~~ The applicable entity annual plan did not	~~Not Applicable.~~ The applicable entity annual plan did not	~~The Transmission Owner's annual plan for~~	~~The Transmission Owner does not have an annual~~	3

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
			implement an annual plan for vegetation management work to ensure the reliability of the system. The plan shall describe the methods used, such as manual clearing, mechanical clearing, herbicide treatment, or other actions. The plan should be flexible enough to adjust to changing conditions, taking into consideration anticipated growth of vegetation and all other environmental factors that may have an impact on the reliability of the transmission systems. Adjustments to the plan shall be	include one of the three required elements, as directed by the requirement.	include two of the three required elements, as directed by the requirement.	~~vegetation management does not describe the methods used for vegetation management, or The plan is not flexible enough to allow for changing conditions, or Adjustments to the plan have not been documented as they occurred, or The plan does not account for time required for permission or permitting, or The Transmission Owner does not have systems and procedures for documenting and tracking planned work and completion.~~ The applicable entity annual plan did not include any of the three required	~~plan for vegetation management.~~ The applicable entity did not create an annual plan; or the applicable entity did not implement an annual plan; the applicable entity did not document adjustments to the plan as they occurred; or the applicable entity did not have systems or procedures for documenting and tracking the planned vegetation management work, as directed by the requirement.	

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
			documented as they occur. The plan should take into consideration the time required to obtain permissions or permits from landowners or regulatory authorities. Each Transmission Owner shall have systems and procedures for documenting and tracking the planned vegetation management work and ensuring that the vegetation management work was completed according to work specifications.			elements, as directed by the requirement.		
31	IRO-006-3	R6.	During the implementation of relief procedures, and up to the point	~~N/A~~ The applicable entity did not comply with one of the four required	~~N/A~~ The applicable entity did not comply with two of the four required	~~The responsible entity failed to comply with one of the interchange~~	~~The responsible entity failed to comply with more than one of the~~	See Note 3

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
			that emergency action is necessary, Reliability Coordinators and Balancing Authorities shall comply with interchange scheduling standards INT-001 through INT-004.	interchange scheduling standards (INT-001 through INT-004).	interchange scheduling standards (INT-001 through INT-004).	~~scheduling standards INT-001 through INT-004, during the implementation of relief procedures, up to the point that emergency action is necessary.~~The applicable entity did not comply with three of the four required interchange scheduling standards (INT-001 through INT-004).	~~interchange scheduling standards INT-001 through INT-004, during the implementation of relief procedures, up to the point that emergency action is necessary.~~ The applicable entity did not comply with any of the four required interchange scheduling standards (INT-001 through INT-004).	
19	PER-002-0	R1.	Each Transmission Operator and Balancing Authority shall be staffed with adequately trained operating personnel.	~~The Transmission Operator and Balancing Authority has produced the training records for the training completed for more than 75% but less than 100% of their operating personnel.~~ The applicable entity	~~The Transmission Operator and Balancing Authority has produced the training records for the training completed for more than 50% but less than or equal to 75% of their operating personnel.~~ The applicable entity	~~The Transmission Operator and Balancing Authority has produced the training records for the training completed for more than 25% but less than or equal to 50% of their operating personnel.~~ The applicable entity	~~The Transmission Operator and Balancing Authority has produced the training records for the training completed for more than or equal to 0% but less than or equal to 25% of their operating personnel.~~The	3

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
				did not adequately staff and train operating personnel, affecting 5% or less of its operating personnel.	did not adequately staff and train operating personnel, affecting between 5-10% of its operating personnel.	did not adequately staff and train operating personnel, affecting 10-15%, inclusive, of its operating personnel.	applicable entity did not adequately staff and train operating personnel, affecting greater than 15% of its operating personnel.	
19	PER-002-0	R3.	For personnel identified in Requirement R2, the Transmission Operator and Balancing Authority shall provide a training program meeting the following criteria:	~~Each Transmission Operator and Balancing Authority failed to comply with one of the provisions specified in R3.1, 3.2, 3.3, or 3.4.~~ The applicable entity did not comply with one of the four required elements.	~~Each Transmission Operator and Balancing Authority failed to comply with two of the provisions specified in R3.1, 3.2, 3.3, or 3.4.~~ The applicable entity did not comply with two of the four required elements.	~~Each Transmission Operator and Balancing Authority failed to comply with three of the provisions specified in R3.1, 3.2, 3.3, or 3.4.~~ The applicable entity did not comply with three of the four required elements.	~~Each Transmission Operator and Balancing Authority failed to comply with all 4 of the provisions specified in R3.1, 3.2, 3.3, or 3.4.~~ The applicable entity did not comply with any of the four required elements.	see Note 1
19	PER-002-0	R4.	For personnel identified in Requirement R2, each Transmission Operator and Balancing Authority shall provide its operating personnel at	~~For personnel identified in Requirement R2, the responsible entity provided at least 4 (but less than 5) days per year of training and drills using~~	~~For personnel identified in Requirement R2, the responsible entity provided at least 3 (but less than 4) days per year of training and drills using~~	~~For personnel identified in Requirement R2, the responsible entity provided at least 2 (but less than 3) days per year of training and drills using~~	~~For personnel identified in Requirement R2, the responsible entity provided less than 2 days per year of training and drills using realistic~~	3

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
			least five days per year of training and drills using realistic simulations of system emergencies, in addition to other training required to maintain qualified operating personnel.	~~realistic simulations of system emergencies, in addition to other training required to maintain qualified operating personnel.~~ The applicable entity did not provide five days per year of training and drills, as directed by the requirement, affecting 5% or less of its operating personnel.	~~realistic simulations of system emergencies, in addition to other training required to maintain qualified operating personnel.~~ The applicable entity did not provide five days per year of training and drills, as directed by the requirement, affecting between 5-10% of its operating personnel.	~~realistic simulations of system emergencies, in addition to other training required to maintain qualified operating personnel.~~ The applicable entity did not provide five days per year of training and drills, as directed by the requirement, affecting 10-15%, inclusive, of its operating personnel.	~~simulations of system emergencies, in addition to other training required to maintain qualified operating personnel.~~ The applicable entity did not provide five days per year of training and drills, as directed by the requirement, affecting greater than 15% of its operating personnel.	
23	VAR-001-1	R1.	Each Transmission Operator, individually and jointly with other Transmission Operators, shall ensure that formal policies and procedures are developed, maintained, and implemented for monitoring and controlling	The applicable entity did not ensure the development and/or maintenance and/or implementation of formal policies and procedures, as directed by the requirement, affecting 5% or less of their individual and	The applicable entity did not ensure the development and/or maintenance and/or implementation of formal policies and procedures, as directed by the requirement, affecting between 5-10% of their	The applicable entity did not ensure the development and/or maintenance and/or implementation of formal policies and procedures, as directed by the requirement, affecting 10-15%, inclusive, of their	The applicable entity did not ensure the development and/or maintenance and/or implementation of formal policies and procedures, as directed by the requirement, affecting greater than 15% of their individual	see Note 2

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
			voltage levels and Mvar flows within their individual areas and with the areas of neighboring Transmission Operators.	neighboring areas voltage levels and Mvar flows.	individual and neighboring areas voltage levels and Mvar flows.	individual and neighboring areas voltage levels and Mvar flows.	and neighboring areas voltage levels and Mvar flows.	
23	VAR-001-1	R10.	Each Transmission Operator shall correct IROL or SOL violations resulting from reactive resource deficiencies (IROL violations must be corrected within 30 minutes) and complete the required IROL or SOL violation reporting.	~~The Transmission Operator corrected the IROL or SOL violations resulting from reactive resource deficiencies and completed the required IROL or SOL violation reporting within the specified time as specified in R10 for 95% or more of the occurrences.~~ The applicable entity did not correct the IROL or SOL violations and/or complete the required	~~The Transmission Operator corrected the IROL or SOL violations resulting from reactive resource deficiencies and completed the required IROL or SOL violation reporting within the specified time as specified in R10 for 90% or more but less than 95% of the occurrences.~~ The applicable entity did not correct the IROL or SOL violations and/or complete	~~The Transmission Operator corrected the IROL or SOL violations resulting from reactive resource deficiencies and completed the required IROL or SOL violation reporting within the specified time as specified in R10 for 85% or more but less than 90% of the occurrences.~~ The applicable entity did not correct the IROL or SOL violations and/or complete	~~The Transmission Operator corrected the IROL or SOL violations resulting from reactive resource deficiencies and completed the required IROL or SOL violation reporting within the specified time as specified in R10 for less than 85% of the occurrences.~~ The applicable entity did not correct the IROL or SOL violations and/or complete the required	4

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
				IROL or SOL violation reporting, as directed by the requirement, affecting 5% or less of the violations.	the required IROL or SOL violation reporting, as directed by the requirement, affecting between 5-10% of the violations.	the required IROL or SOL violation reporting, as directed by the requirement, affecting 10-15%, inclusive, of the violations.	IROL or SOL violation reporting, as directed by the requirement, affecting greater than 15% of the violations.	
23	VAR-001-1	R5.	Each Purchasing-Selling Entity shall arrange for (self-provide or purchase) reactive resources to satisfy its reactive requirements identified by its Transmission Service Provider.	~~The Purchasing-Selling Entity failed to arrange reactive resources for 1% to 5% of its reactive requirements identified by its Transmission Service Provider.~~ The applicable entity did not arrange for reactive resources, as directed by the requirement, affecting 5% or less of its reactive requirements.	~~The Purchasing-Selling Entity failed to arrange reactive resources for 6% to 10% of its reactive requirements identified by its Transmission Service Provider.~~ The applicable entity did not arrange for reactive resources, as directed by the requirement, affecting between 5-10% of its reactive requirements.	~~The Purchasing-Selling Entity failed to arrange reactive resources for 11% to 15% of its reactive requirements identified by its Transmission Service Provider.~~ The applicable entity did not arrange for reactive resources, as directed by the requirement, affecting 10-15%, inclusive, of its reactive requirements.	~~The Purchasing-Selling Entity failed to arrange reactive resources for more than15% of its reactive requirements identified by its Transmission Service Provider.~~ The applicable entity did not arrange for reactive resources, as directed by the requirement, affecting greater than 15% of its reactive requirements.	see Note 1
23	VAR-001-1	R6.	The Transmission Operator shall know the status of all	~~N/A~~ The applicable entity did not know the status of all transmission	~~N/A~~ The applicable entity did not know the status of all transmission	~~N/A~~ The applicable entity did not know the status of all transmission	~~The Transmission Operator did not know the status of all~~	See Note 3

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
			transmission Reactive Power resources, including the status of voltage regulators and power system stabilizers.	reactive power resources, including the status of voltage regulators and power system stabilizers, as directed by the requirement, affecting 5% or less of the required resources.	reactive power resources, including the status of voltage regulators and power system stabilizers, as directed by the requirement, affecting between 5-10% of the required resources.	reactive power resources, including the status of voltage regulators and power system stabilizers, as directed by the requirement, affecting 10-15%, inclusive, of the required resources.	~~transmission Reactive Power resources, including the status of voltage regulators and power system stabilizers.~~ The applicable entity did not know the status of all transmission reactive power resources, including the status of voltage regulators and power system stabilizers, as directed by the requirement, affecting 15% or greater of required resources.	
23	VAR-001-1	R7.	The Transmission Operator shall be able to operate or direct the operation of devices necessary to regulate transmission voltage and reactive flow.	~~The Transmission Operator was unable to operate or direct the operation of devices necessary to regulate transmission voltage and reactive flow~~	~~The Transmission Operator was unable to operate or direct the operation of devices necessary to regulate transmission voltage and reactive flow~~	~~The Transmission Operator was unable to operate or direct the operation of devices necessary to regulate transmission voltage and reactive flow~~	~~The Transmission Operator was unable to operate or direct the operation of devices necessary to regulate transmission voltage and reactive flow~~	4

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
				~~less than 25% of the time.~~ The applicable entity was not able to operate or direct the operation of devices necessary to regulate transmission voltage and reactive flow, affecting 5% or less of the required devices.	~~less than 50% of the time but more than or equal to 25% of the time.~~ The applicable entity was not able to operate or direct the operation of devices necessary to regulate transmission voltage and reactive flow, affecting between 5-10% of the required devices.	~~less than 75% of the time but more than or equal to 50% of the time.~~ The applicable entity was not able to operate or direct the operation of devices necessary to regulate transmission voltage and reactive flow, affecting 10-15%, inclusive, of the required devices.	~~more than 75% of the time.~~ The applicable entity was not able to operate or direct the operation of devices necessary to regulate transmission voltage and reactive flow, affecting greater than 15% of the required devices.	
23	VAR-001-1	R8.	Each Transmission Operator shall operate or direct the operation of capacitive and inductive reactive resources within its area – including reactive generation scheduling; transmission line and reactive resource switching; and,	~~The Transmission Operator failed to operate or direct the operation of capacitive and inductive reactive resources within its area – including reactive generation scheduling; transmission line and reactive resource~~	~~The Transmission Operator failed to operate or direct the operation of capacitive and inductive reactive resources within its area – including reactive generation scheduling; transmission line and reactive resource~~	~~The Transmission Operator failed to operate or direct the operation of capacitive and inductive reactive resources within its area – including reactive generation scheduling; transmission line and reactive resource~~	~~The Transmission Operator failed to operate or direct the operation of capacitive and inductive reactive resources within its area – including reactive generation scheduling; transmission line and reactive resource~~	4

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
			if necessary, load shedding – to maintain system and Interconnection voltages within established limits.	~~switching; and, if necessary, load shedding – to maintain system and Interconnection voltages within established limits less than 25% of the time.~~ The applicable entity did operate or direct the operation of capacitive and inductive reactive resources or load shedding within its area, as directed by the requirement, affecting 5% or less of the required resources.	~~switching; and, if necessary, load shedding – to maintain system and Interconnection voltages within established limits less than 50% of the time but more than or equal to 25% of the time.~~ The applicable entity did operate or direct the operation of capacitive and inductive reactive resources or load shedding within its area, as directed by the requirement, affecting between 5-10% of the required resources.	~~switching; and, if necessary, load shedding – to maintain system and Interconnection voltages within established limits less than 75% of the time but more than or equal to 50% of the time.~~ The applicable entity did operate or direct the operation of capacitive and inductive reactive resources or load shedding within its area, as directed by the requirement, affecting 10-15%, inclusive, of the required resources.	~~switching; and, if necessary, load shedding – to maintain system and Interconnection voltages within established limits more than 75% of the time.~~ The applicable entity did operate or direct the operation of capacitive and inductive reactive resources or load shedding within its area, as directed by the requirement, affecting greater than 15% of the required resources.	
23	VAR-001-1	R9.1.	Each Transmission Operator shall disperse and locate the reactive resources so that the resources	~~The Transmission Operator has dispersed and located 95% or more of the reactive resources so that~~	~~The Transmission Operator has dispersed and located 85% or more but less than 95% of the reactive~~	~~The Transmission Operator has dispersed and located 75% or more but less then 85% of the reactive~~	~~The Transmission Operator has dispersed and located less than 75% of the reactive resources so that~~	3

Final Blackout Report Recommendation	Standard Number	Requirement Number	Text of Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL	Guideline
			can be applied effectively and quickly when Contingencies occur.	~~the resources can be applied effectively and quickly when Contingencies occur.~~ The applicable entity did not disperse and/or locate the reactive resources, as directed in the requirement, affecting 5% or less of the resources.	~~resources so that the resources can be applied effectively and quickly when Contingencies occur.~~ The applicable entity did not disperse and/or locate the reactive resources, as directed in the requirement, affecting between 5-10% of the resources.	~~resources so that the resources can be applied effectively and quickly when Contingencies occur.~~ The applicable entity did not disperse and/or locate the reactive resources, as directed in the requirement, affecting 10-15%, inclusive, of the resources.	~~the resources can be applied effectively and quickly when Contingencies occur.~~ The applicable entity did not disperse and/or locate the reactive resources, as directed in the requirement, affecting greater than 15% of the resources.	

Notes:

(1) Minor revision for term and reference consistency.

(2) NERC did not submit Violation Severity Levels for this requirement. The Commission recommends Violation Severity Levels for this requirement consistent with the guidelines set forth in this order.

(3) Revision to employ gradation.

Guidelines:

(2) VSL assignments should ensure uniformity and consistency among all approved Reliability Standards in the determination of penalties:

(2b) VSL assignments that contain ambiguous language.

(3) VSL assignments should be consistent with the corresponding requirement.

(4) VSL assignments should be based on a single violation, not on a cumulative number of violations.

Final Blackout Report Recommendations:

- Recommendation No. 8: Shield operators who initiate load shedding pursuant to approved guidelines from liability or retaliation.
- Recommendation No. 16: Establish enforceable standards for maintenance of electrical clearances in right-or-way areas.
- Recommendation No. 19: Improve near-term and long-term training and certification requirements for operators, reliability coordinator, and operator support staff.
- Recommendation No. 23: Strengthen reactive power and voltage control practices in all NERC regions
- Recommendation No. 31: Clarify that the transmission loading relief (TLR) process should not be used in situations involving an actual violation of an Operating Security Limit. Streamline the TLR process.