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**BEFORE THE  
NATIONAL ENERGY BOARD**

**NORTH AMERICAN ELECTRIC )  
RELIABILITY CORPORATION )**

**PETITION OF THE  
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION  
FOR APPROVAL OF PROPOSED RELIABILITY STANDARD  
VAR-002-2b**

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November 28, 2012

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NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION  
FOR APPROVAL OF PROPOSED RELIABILITY STANDARD  
VAR-002-2b**

The North American Electric Reliability Corporation (“NERC”) hereby requests approval of the proposed Reliability Standard — VAR-002-2b—Generator Operation for Maintaining Network Voltage Schedules, since the proposed Reliability Standard is just, reasonable, not unduly discriminatory or preferential and in the public interest. VAR-002-2b was approved by the NERC Board of Trustees on August 16, 2012.<sup>1</sup>

NERC is hereby requesting approval of the proposed Reliability Standard, the associated implementation plan, Violation Risk Factors (“VRFs”) and Violation Severity Levels (“VSLs”), and retirement of the currently effective Reliability Standard as detailed below. Specifically, NERC requests approval of the following:

- Approval of proposed Reliability Standard VAR-002-2b included in **Exhibit B**
  - Retirement of the VAR-002-1.1b<sup>2</sup> Reliability Standard midnight of the day immediately prior to the effective date of VAR-002-2b:
- Approval of the implementation plan for the proposed VAR-002-2b Reliability Standard which is included in **Exhibit C**;

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<sup>1</sup> Unless otherwise designated, all capitalized terms shall have the meaning set forth in the Glossary of Terms Used in NERC Reliability Standards, available here: [http://www.nerc.com/files/Glossary\\_of\\_Terms.pdf](http://www.nerc.com/files/Glossary_of_Terms.pdf).

<sup>2</sup> NERC notes that on August 16, 2012, the NERC Board of Trustees approved retirement of CAN-022 VAR-002 R1 and R3, Generator AVR Operation in Alternative Mode concurrent with the retirement of VAR-002-1.1b.

The proposed effective dates for the standard are just and reasonable and appropriately balance the urgency in the need to implement the standards against the reasonableness of the time allowed for those who must comply to develop necessary procedures, software, facilities, staffing or other relevant capability. This petition presents the technical basis and purpose of the proposed Reliability Standard VAR-002-2b and a demonstration that the proposed Reliability Standard meets the criteria for reliability.

NERC filed this proposed standard with the Federal Energy Regulatory Commission (“FERC”), and is also filing this standard with the other applicable governmental authorities in Canada.

## **I. EXECUTIVE SUMMARY**

The proposed Reliability Standard represents an improvement over the currently effective standard because it clarifies in Requirement R1 that a communication between a Generator Operator and a Transmission Operator is not necessary during start-up or shutdown of a generator. This clarification reflects current industry practices and will ensure that the VAR-002 Reliability Standard is interpreted and applied in the same manner across regions.

Based on stakeholder comments received during the initial ballot, revisions were also made to Requirement R2 and its VSLs. Proposed VAR-002-2b, Requirement R2 has been revised to change the word “output” to “schedule” to reflect the existing link between VAR-001-2, Requirement R4 and VAR-002-2b, Requirement R2. The VSLs for Requirement R2 were also revised. The previously approved VSLs incorporated a percentage methodology indicating how far off from the directed voltage or reactive power output that the generator was operated. Since generator terminal voltage often fluctuates, even in automatic voltage control mode, a time methodology for the VSLs was incorporated and this is based on how long a generator is

operated outside the voltage or reactive power schedule. NERC respectfully requests approval of the proposed Reliability Standard as just, reasonable, not unduly discriminatory or preferential and in the public interest.

## **II. NOTICES AND COMMUNICATIONS**

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

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## **III. BACKGROUND**

### **a. NERC Reliability Standards Development Procedure**

The proposed Reliability Standard was developed in an open and fair manner and in accordance with the Reliability Standard development process. NERC develops Reliability Standards in accordance with Section 300 (Reliability Standards Development) of its Rules of Procedure and the NERC Standard Processes Manual.<sup>3</sup> NERC's proposed rules provide for

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<sup>3</sup> The NERC Rules of Procedure are available here: <http://www.nerc.com/page.php?cid=1%7C8%7C169>. The current NERC Standard Processes Manual is available here: [http://www.nerc.com/files/Appendix\\_3A\\_StandardsProcessesManual\\_20120131.pdf](http://www.nerc.com/files/Appendix_3A_StandardsProcessesManual_20120131.pdf).

reasonable notice and opportunity for public comment, due process, openness, and a balance of interests in developing Reliability Standards. The development process is open to any person or entity with a legitimate interest in the reliability of the bulk power system. NERC considers the comments of all stakeholders, and a vote of stakeholders and the NERC Board of Trustees is required to approve a Reliability Standard before the Reliability Standard is submitted to the applicable governmental authorities for approval.

**b. History of Project 2011-INT-02**

On January 28, 2011, Constellation Power Generation requested an interpretation of VAR-002-1.1b, Requirement R1. The request sought clarification regarding whether a communication must be conducted between a Generator Operator and a Transmission Operator during start up or shutdown of a generator, when the unit is not stable and is not counted upon for real or reactive power by the Balancing Authority and Transmission Operator at that time.

The request for interpretation states:

During startup and shutdown of a generator, it is industry practice to have a generator's AVR in the manual mode. Due to the instabilities associated with the changes in the field during these times, it is more reliable to have an operator control the generator than the AVR. Further, an AVR's response is slower and more unreliable when the field current is low, which is the case during start up and shut down. Both the BA and TOP realize that during start up and shut down the real and reactive power from that generator cannot be counted upon for system stability.

Some regions have taken the stance that during start up and shut down of a generator, it is reasonable to assume that the AVR is in manual and that it will be switched to automatic once stable. This would not require contacting the TOP to state that the AVR is in manual for this time period. Other regions have taken the approach that all status changes of the AVR from automatic, regardless of industry practice and stability, needs to be communicated to the TOP.

Constellation is seeking clarification of Requirement R1 as to whether or not a communication must be conducted between a GOP and a TOP during start up or shut down of a generator, when the unit is not stable and is not counted upon for real or reactive power by the BA and TOP at that time.

On January 13, 2012, NERC Staff submitted a Standards Authorization Request (“SAR”) proposing to modify VAR-002-1b, Requirement R1. In April 2012, the drafting team received approval from the Standards Committee to modify the SAR to allow for revisions to Requirement R2 and the VSLs as a result of comments received during the initial comment period and ballot as explained in further detail below.

#### **IV. JUSTIFICATION FOR APPROVAL OF THE PROPOSED RELIABILITY STANDARD**

##### **a. Basis and Purpose of Reliability Standard and Improvements in this Revision**

VAR-002 is part of the Voltage and Reactive body of Reliability Standards. VAR-001 is dedicated to Voltage and Reactive Control and VAR-002 is dedicated to Generator Operation for Maintaining Network Voltage Schedules. VAR-001 ensures that voltage levels, reactive flows, and reactive resources are monitored, controlled, and maintained within limits in real-time to protect equipment and the reliable operation of the Interconnection. VAR-002 ensures that 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. These two Reliability Standards, along with two regional standards (VAR-002-WECC-1 and VAR-501-WECC-a) form the VAR Reliability Standards.

i. VAR-002-2b

Reliability Standard VAR-002-1 was submitted on September 11, 2006. On May 5, 2009, NERC submitted VAR-002-1.1a , in order to address errata changes identified in the Reliability Standard. VAR-002-1.1b was submitted on May 5, 2009.

The proposed Reliability Standard achieves the specific reliability goal of ensuring that the VAR-002 Reliability Standard is applied in the same manner across all regions. The proposed Reliability Standard ensures that 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. The proposed Reliability Standard does not restrict the available transmission capability or limit use of the bulk-power system in a preferential manner. The proposed Reliability Standard applies throughout North America and does not favor one geographic area or regional model. The proposed Reliability Standard achieves its reliability goals effectively and efficiently and does not reflect a “lowest common denominator” approach. To the contrary, the proposed standard represents a significant improvement over the previous version as described herein.

#### **Proposed Requirements<sup>4</sup>**

**R1.** The Generator Operator shall operate each generator connected to the interconnected transmission system in the automatic voltage control mode (automatic voltage regulator in service and controlling voltage) unless the Generator Operator has notified the Transmission Operator of one of the following: [*Violation Risk Factor: Medium*] [*Time Horizon: Real-time Operations*]

- That the generator is being operated in start-up<sup>[FN1]</sup> or shutdown<sup>[FN2]</sup>
- That the generator is not being operated in the automatic voltage control mode for a reason other than start-up or shutdown.

[FN1: Start-up is deemed to have ended when the generator is ramped up to its minimum continuously sustainable load and the generator is prepared for continuous operation.]

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<sup>4</sup> Please note that Requirements R3 through R5 are substantively unchanged as described in further detail below.



[FN2: Shutdown is deemed to begin when the generator is ramped down to its minimum continuously sustainable load and the generator is prepared to go offline.]

**R2.** Unless exempted by the Transmission Operator, each Generator Operator shall maintain the generator voltage or Reactive Power schedule<sup>[FN3]</sup> (within applicable Facility Ratings<sup>[FN4]</sup>) as directed by the Transmission Operator. *[Violation Risk Factor: Medium] [Time Horizon: Real-time Operations]*

**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.

[FN3: The voltage or Reactive Power schedule is a target value communicated by the Transmission Operator to the Generator Operator establishing a tolerance band within which the target value is to be maintained during a specified period.]

[FN4: When a Generator is operating in manual control, Reactive Power capability may change based on stability considerations and this may lead to a change in the associated Facility Ratings.]

**R3.** Each Generator Operator shall notify its associated Transmission Operator as soon as practical, but within 30 minutes of any of the following: *[Violation Risk Factor: Medium] [Time Horizon: Real-time Operations]*

**R3.1.** A status or capability change on any generator Reactive Power resource, including the status of each automatic voltage regulator and power system stabilizer and the expected duration of the change in status or capability.

**R3.2.** A status or capability change on any other Reactive Power resources under the Generator Operator's control and the expected duration of the change in status or capability.

**R4.** The Generator Owner shall provide the following to its associated Transmission Operator and Transmission Planner within 30 calendar days of a request. *[Violation Risk Factor: Lower] [Time Horizon: Real-time Operations]*

**R4.1.** For generator step-up transformers and auxiliary transformers with primary voltages equal to or greater than the generator terminal voltage:

**R4.1.1.** Tap settings.

**R4.1.2.** Available fixed tap ranges.

**R4.1.3.** Impedance data.

**R4.1.4.** The +/- voltage range with step-change in % for load-tap changing transformers.

**R5.** After consultation with the Transmission Operator regarding necessary step-up transformer tap changes, the Generator Owner shall ensure that transformer tap positions are changed according to the specifications provided by the Transmission Operator, unless such action would

violate safety, an equipment rating, a regulatory requirement, or a statutory requirement.  
[Violation Risk Factor: Medium] [Time Horizon: Real-time Operations]

**R5.1.** If the Generator Operator can't comply with the Transmission Operator's specifications, the Generator Operator shall notify the Transmission Operator and shall provide the technical justification.

## **Requirement R1**

Requirement R1 has been modified to add two bullets to clarify that a communication between a Generator Operator and a Transmission operator is not necessary during start-up or shutdown of a generator. Two footnotes were added to define what is considered a start-up and shutdown. The drafting team determined that requiring a Generator Operator to communicate that the Automatic Voltage Regulator ("AVR") is in manual during start-up/shutdown is an unnecessary distraction at a time when the unit is unstable for the following reasons:

- During start-up and shutdown of a generator, it is industry practice to have a generator's AVR in the manual mode.
- A Generator Operator already communicates to the Transmission Operator that the unit is being started up or is shutting down and any additional communication would impose a redundant task when the Generator Operator is focused on controlling the unit and ensuring reliability.
- Due to the instabilities associated with the changes in the generator field during these times, it is more reliable to have a Generator Operator control the generator than to utilize the AVR.
- Further, an AVR's response is slower and more unreliable when the generator field current is low, which is the case during start-up and shutdown.

- Both the Balancing Authority and Transmission Operator are aware that during start-up and shutdown the real and reactive power from that generator cannot be relied upon for system stability.

The proposed revisions to VAR-002-2b will ensure that the VAR-002 Reliability Standard is interpreted and applied in the same manner across regions.<sup>5</sup>

## **Requirement R2**

Based on stakeholder comments received during the initial ballot, revisions were made to Requirement R2 and its VSLs. Requirement R2 of VAR-002-2b is intrinsically linked to VAR-001-2, Requirement R4:

R4. Each Transmission Operator shall specify a voltage or Reactive Power schedule<sup>1</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 in service and controlling voltage).

[FN1: The voltage schedule is a target voltage to be maintained within a tolerance band during a specified period.]

VAR-001 applies to Transmission Operators, Purchasing-Selling Entities; Load Serving Entities and Generator Operators within the Western Interconnection. VAR-002 applies to Generator Operators and Generator Owners. VAR-001 is dedicated to Voltage and Reactive Control and Requirement R4 uses the terminology “Reactive Power schedule.” VAR-002-2b, R2 was revised to change the word “output” to “schedule” to reflect the link between VAR-001-2, R4 and VAR-002-2b, R2 and to ensure consistency across the VAR body of standards. A revised version of

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<sup>5</sup> As stated in the Request for Interpretation, there is an inconsistent view among Regional Entities regarding compliance with Requirement R1. Such inconsistencies are contrary to the intent of NERC’s Compliance Monitoring Enforcement Program and could expose entities to inconsistent evaluations.

the footnote in VAR-001-2, which explains the use of the term “schedule,” was added to VAR-002-2b, R2 as footnote 3.

[FN3: The voltage or Reactive Power schedule is a target value communicated by the Transmission Operator to the Generator Operator establishing a tolerance band within which the target value is to be maintained during a specified period.]

The VSLs for Requirement R2 are also proposed to be revised to utilize a time-based methodology in lieu of the current percentage-based methodology which evaluates how far off from the directed voltage or reactive power output that the generator was operated. While a voltage schedule may be conducive to a VSL that uses percentage deviations, a Reactive Power schedule is not, because where the Reactive Power schedule is very small (*e.g.*, 1 MVAR), it would be impossible for a Generator Operator to comply unless the tolerance band were quite large. Since generator terminal voltage often fluctuates, even in automatic voltage control mode, the drafting team determined to utilize time-based methodology for the VSLs, evaluating how long a generator is operated outside the voltage or reactive power schedule.

### **Requirements R3 – Requirements R5**

Requirements R3 through R5 have been revised to include bracketed references to their associated VRFs and Time Horizons but are otherwise unaltered since the prior submission.

#### **b. Enforceability of the Proposed Reliability Standard**

The proposed Reliability Standard contains measures that support each standard requirement by clearly identifying what is required and how the requirement will be enforced. These measures help provide clarity regarding how the requirements will be enforced, and ensure that the requirements will be enforced in a clear, consistent, and non-preferential manner and without prejudice to any party. Measure 1 has been revised to reflect the proposed changes to

Requirement R1. The VSLs also provide further guidance on the way that NERC will enforce the requirements of the standard.

The proposed VAR-002-2b Reliability Standard applies to Generator Operators and Generator Owners and is clear and unambiguous as to what is required and who is required to comply. Further, the proposed Reliability Standard includes clear and understandable consequences for a violation.

i. Violation Risk Factors and Violation Severity Levels

The VRFs and VSLs for each requirement were incorporated into the standard during this revision. These compliance elements were not included in the previously approved and posted version of the standard.

The current VRFs for VAR-002-1.1b were submitted on July 8, 2009. No changes are proposed to the current VRFs. The VRFs have been incorporated into the Reliability Standard itself, however, and therefore appear as redlined changes in **Exhibit B**.

The current VSLs for VAR-002-1.1a were submitted on July 8, 2009. The instant filing proposes modifications to VAR-002-1.1a and therefore supersedes the VSLs proposed in that filing. The revisions proposed in VAR-002-2b required one change to the VSL for Requirement R2. The VRFs and VSLs for the proposed standard comports with NERC guidelines related to their assignment. For a detailed review of the VRFs, the VSLs, and the analysis of how the VRFs and VSLs were determined using these guidelines, please see **Exhibit E**.

V. **SUMMARY OF THE RELIABILITY STANDARD DEVELOPMENT PROCEEDINGS**

The development record for proposed Reliability Standard VAR-002-2b is summarized below. **Exhibit D** contains the Consideration of Comments Reports created during the

development of the Reliability Standards. **Exhibit F** contains the complete record of development for the standards.

**a. Overview of the Drafting Team**

The technical expertise of the ERO is derived from the standard drafting team. The VAR-002-2b drafting team is comprised of 4 members and is chaired by John Simpson, an independent transmission consultant. A detailed set of biographical information for each of the team members is included along with the standard development team roster in **Exhibit G**.

**b. The First Posting, Initial Ballot**

The first draft of VAR-002-2b was posted for a formal comment period from February 8, 2012 to March 23, 2012 and for an initial ballot from March 14, 2012 to March 23, 2012. A mapping document was provided to industry to assist in the review of the standard, along with the original request for interpretation.<sup>6</sup> There were 51 sets of comments received from 133 different individuals from 90 different companies, representing each of the 10 Industry Segments within NERC's stakeholder structure. Commenters provided feedback on the rapid revision process as well as the specific requirement language proposed to address the interpretation request. Based on the comments received, modifications were made to the standard, including:

- Revising the wording of Requirement R1 and Measure M1 to add further clarity to the standards.
- Revised Requirement R2 to change the word “output” to “schedule” to reflect the link between VAR-001-2, R4 and VAR-002-2b, R2. The standard drafting team also added a footnote to VAR-002-2b, R2.

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<sup>6</sup> The revision to VAR-002-2b was prompted by a request for an interpretation from Constellation Power Generation on Requirement R1 of VAR-002-2.2b, but NERC determined that the Rapid Revision was the best way to resolve the issue presented in the interpretation request.

- Revised the VSLs for R2 to reflect a violation based on the time the Generator Operator operated the generator outside the voltage or reactive schedule range.

**c. The Second Posting, Successive Ballot**

The second draft of VAR-002-2b was posted for formal comment from May 22, 2012 to June 27, 2012 and for a successive ballot from June 18, 2012 to June 27, 2012. A mapping document was again provided to industry to assist in the review of the standard. Thirty-five sets of comments were received, including comments from 112 different individuals from 76 companies, and representing each of the 10 Industry Segments within NERC's stakeholder structure.

NERC received comments on revisions to the standard and VSL language and in response made revisions to the timing element of the VSL for Requirement R2. The standard drafting team revised the VSLs so that the moderate VSL for Requirement R2 begins at more than 45 minutes after the first violation of the requirement and the High and Severe VSLs increase in severity by 15 minute intervals thereafter. The 15 minute intervals replace the percentages used in VAR-002 VSLs, which the standard drafting team determined to be impossible to calculate given the varying Reactive Power schedules that could be created for different size units on the BES.

NERC decided that the remaining comments on the standard language would be best addressed in Project 2008-01 in further revisions to the VAR-002 standard. The NERC standard drafting team has added the comments received to the NERC Issues database for the VAR-002 standard.

**d. The Third Posting, Recirculation Ballot**

A third and final draft of VAR-002-2b was posted for a recirculation ballot and a non-binding poll of VFS and VSLs from July 18, 2012 to July 27, 2012. A mapping document was again provided to industry to assist in the review of the standard. The ballot for the standard achieved a quorum of 90.97%, and an approval of 69.81%, and the non-binding poll received a quorum of 81.31%, with supportive opinions provided by 60.93% of the ballot body.

**e. Board of Trustees Approval**

The final draft of VAR-002-2b was presented to NERC's Board of Trustees for approval on August 16, 2012. NERC staff provided a summary of the improvements made to the standard, as well as a summary of minority issues and associated drafting team responses. NERC has identified no competing public interests regarding the request for approval of this proposed Reliability Standard. No comments were received that indicated the proposed standard conflicts with other vital public interests. The Board of Trustees approved the standard and directed that it be filed with applicable governmental authorities. No negative factors relevant to whether the proposed Reliability Standard is just and reasonable were identified during the standard development process.



## VI. CONCLUSION

For the reasons set forth above, NERC respectfully requests:

- approval of the proposed VAR-002-2b Reliability Standard included in **Exhibit B**, effective as proposed herein;
- approval of the implementation plans included in **Exhibit C**;
- approval of the retirement of Reliability Standards, effective as proposed herein.

Respectfully submitted,

*/s/ Stacey Tyrewala*

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Reliability Corporation

**Dated: November 28, 2012**

## EXHIBIT A

### Reliability Standards Criteria

The discussion below explains how the proposed Reliability Standard has met or exceeded the Reliability Standards criteria:

**1. Proposed Reliability Standard is designed to achieve a specified reliability goal and contains a technically sound means to achieve that goal.**

The proposed standard achieves the specific reliability goal of ensuring that the VAR-002 Reliability Standard is applied in the same manner across all regions. The proposed Reliability Standard ensures that 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.

**2. Proposed Reliability Standard is applicable only to users, owners and operators of the bulk power system, and is clear and unambiguous as to what is required and who is required to comply.**

The proposed revisions to this Reliability Standard apply to Generator Operators and Generator Owners and are clear and unambiguous as to what is required and who is required to comply.

**3. Proposed Reliability Standard includes clear and understandable consequences and a range of penalties (monetary and/or non-monetary) for a violation.**

The current VRFs for VAR-002-1.1b were submitted on July 8, 2009. No changes are proposed to the current VRFs. The VRFs and VSLs for the proposed standard comports with NERC guidelines related to their assignment. The assignment of the severity level for each VSL is consistent with the corresponding Requirement and the VSLs should ensure uniformity and consistency in the determination of penalties. The

VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.

For these reasons, the proposed Reliability Standard includes clear and understandable consequences.

**4. Proposed Reliability Standard identifies clear and objective criterion or measure for compliance, so that it can be enforced in a consistent and non-preferential manner.**

The proposed Reliability Standard contains measures that support each requirement by clearly identifying what is required and how the requirement will be enforced. These measures, included below, help provide clarity regarding how the requirements will be enforced, and ensure that the requirements will be enforced in a clear, consistent, and non-preferential manner and without prejudice to any party.

**5. Proposed Reliability Standard achieves a reliability goal effectively and efficiently — but does not reflect “best practices” without regard to implementation cost or historical regional infrastructure design.**

The proposed Reliability Standard achieves its reliability goals effectively and efficiently.

**6. Proposed Reliability Standard is not “lowest common denominator,” *i.e.*, does not reflect a compromise that does not adequately protect Bulk-Power System reliability. Proposed Reliability Standards can consider costs to implement for smaller entities, but not at consequences of less than excellence in operating system reliability.**

The proposed Reliability Standard does not reflect a “lowest common denominator” approach. To the contrary, the proposed standard represents a significant improvement over the previous version as described herein.

**7. Proposed Reliability Standard is designed to apply throughout North America to the maximum extent achievable with a single Reliability Standard while not favoring one geographic area or regional model. It should take into account regional variations in the organization and corporate structures of transmission owners and operators, variations in generation fuel type and ownership patterns, and regional variations in market design if these affect the proposed Reliability Standard.**

The proposed Reliability Standard applies throughout North America and does not favor one geographic area or regional model.

**8. Proposed Reliability Standard causes no undue negative effect on competition or restriction of the grid beyond any restriction necessary for reliability.**

The proposed Reliability Standard does not restrict the available transmission capability or limit use of the bulk-power system in a preferential manner.

**9. The implementation time for the proposed Reliability Standard is reasonable.**

The proposed effective dates for the standard are just and reasonable and appropriately balance the urgency in the need to implement the standards against the reasonableness of the time allowed for those who must comply to develop necessary procedures, software, facilities, staffing or other relevant capability.

This will allow applicable entities adequate time to ensure compliance with the requirements. The proposed effective dates are explained in the proposed Implementation Plan, attached as **Exhibit C**.

**10. The Reliability Standard was developed in an open and fair manner and in accordance with the Reliability Standard development process.**

The proposed Reliability Standard was developed in accordance with NERC's ANSI- accredited processes for developing and approving Reliability Standards. Section V, *Summary of the Reliability Standard Development Proceedings*, below, details the

processes followed to develop the standard (for a more thorough review, please see the complete development history included as **Exhibit F**).

These processes included, among other things, multiple comment periods, pre-ballot review periods, and balloting periods. Additionally, all drafting team meetings were properly noticed and open to the public. The initial and recirculation ballots both achieved a quorum and exceeded the required ballot pool approval levels.

**11. NERC explains any balancing of vital public interests in the development of proposed Reliability Standards.**

NERC has identified no competing public interests regarding the request for approval of this proposed Reliability Standard. No comments were received that indicated the proposed standard conflicts with other vital public interests.

**12. Proposed Reliability Standard considers any other appropriate factors.**

No other negative factors relevant to whether the proposed Reliability Standard is just and reasonable were identified.

**EXHIBITS B -G**

(Available on the NERC Website at  
[http://www.nerc.com/fileUploads/File/Filings/Attachments\\_VAR-002-2b\\_std\\_filing](http://www.nerc.com/fileUploads/File/Filings/Attachments_VAR-002-2b_std_filing))