

August 27, 2014

**VIA OVERNIGHT MAIL**

Sheri Young, Secretary of the Board  
National Energy Board  
517 – 10<sup>th</sup> Avenue SW  
Calgary, Alberta  
T2R 0A8

RE: *North American Electric Reliability Corporation*

Dear Ms. Young:

The North American Electric Reliability Corporation (“NERC”) hereby submits Notice of Filing of the North American Electric Reliability Corporation of Proposed Reliability Standards for Facility Connection Requirements FAC-001-2 and FAC-002-2. NERC requests, to the extent necessary, a waiver of any applicable filing requirements with respect to this filing.

Please contact the undersigned if you have any questions.

Respectfully submitted,

/s/ Stacey Tyrewala

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Enclosure

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**BEFORE THE  
NATIONAL ENERGY BOARD**

**NORTH AMERICAN ELECTRIC )  
RELIABILITY CORPORATION )**

**NOTICE OF FILING OF THE  
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION  
OF PROPOSED RELIABILITY STANDARDS FOR FACILITY CONNECTION  
REQUIREMENTS  
FAC-001-2 AND FAC-002-2**

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August 27, 2014

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<b>Exhibit A</b>	Proposed Reliability Standards, FAC-001-2 and FAC-002-2
<b>Exhibit B</b>	Implementation Plan
<b>Exhibit C</b>	Reliability Standards Criteria for FAC-001-2 and FAC-002-2
<b>Exhibit D</b>	Mapping Document
<b>Exhibit E</b>	Analysis of Violation Risk Factors and Violation Severity Levels
<b>Exhibit F</b>	Consideration of Issues and Directives
<b>Exhibit G</b>	Summary of Development History and Complete Record of Development
<b>Exhibit H</b>	Standard Drafting Team Roster for Project 2008-12, Connecting New Facilities to the Grid

**BEFORE THE  
NATIONAL ENERGY BOARD**

**NORTH AMERICAN ELECTRIC )  
RELIABILITY CORPORATION )**

**NOTICE OF FILING OF THE  
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION  
OF PROPOSED RELIABILITY STANDARDS  
FOR FACILITY CONNECTION REQUIREMENTS  
FAC-001-2 AND FAC-002-2**

The North American Electric Reliability Corporation (“NERC”) hereby submits proposed Reliability Standards FAC-001-2 and FAC-002-2. The proposed Reliability Standards (**Exhibit A**) are just, reasonable, not unduly discriminatory or preferential, and in the public interest.<sup>1</sup> NERC also provides notice of the associated implementation plan (**Exhibit B**), Violation Risk Factors (“VRFs”) and Violation Severity Levels (“VSLs”) (**Exhibit E**), as detailed in this filing.

This filing presents the technical basis and purpose of proposed Reliability Standards FAC-001-2 and FAC-002-2, a demonstration that the proposed Reliability Standards meet the Reliability Standards criteria (**Exhibit C**) and a summary of the development history (**Exhibit G**). Proposed Reliability Standards FAC-001-2 and FAC-002-2 were approved by the NERC Board of Trustees on August 14, 2014.

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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 at [http://www.nerc.com/files/Glossary\\_of\\_Terms.pdf](http://www.nerc.com/files/Glossary_of_Terms.pdf). Throughout the proposed FAC-001-2 and FAC-002-2 Reliability Standards, the lowercase term “interconnection” is deliberately used and does not refer to the defined term “Interconnection” in the *Glossary of Terms Used in NERC Reliability Standards*.

## I. EXECUTIVE SUMMARY

The Facility Design, Connections, and Maintenance (“FAC”) Reliability Standards address topics such as facility interconnection requirements, facility ratings, system operating limits, and transfer capabilities. The FAC Reliability Standards also establish requirements for maintaining equipment and rights-of-way, including vegetation management. Proposed Reliability Standard FAC-001-2 requires that Transmission Owners and applicable Generator Owners document and make Facility interconnection requirements available so that entities seeking to interconnect have the necessary information. Proposed Reliability Standard FAC-002-2 ensures that the reliability impact of interconnecting new or materially modified Facilities is studied. Collectively, proposed Reliability Standards FAC-001-2 and FAC-002-2 ensure that there is appropriate coordination and communication regarding the interconnection of Facilities, which improves the reliability of the Bulk-Power System. These reliability objectives are also consistent with Federal Energy Regulatory Commission (“FERC”) precedent regarding the need for standardized procedures for interconnecting generators.<sup>2</sup>

The proposed revisions to Reliability Standards FAC-001-2 and FAC-002-2 are consistent with the principles of Paragraph 81, which involve the examination for duplication across the NERC body of Reliability Standards and the technical basis and necessity for each and every requirement.<sup>3</sup> For example, revisions are proposed to Requirement R1 of Reliability Standard FAC-001-2 to eliminate redundancies with FAC-002-2 and to clarify the actions

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<sup>2</sup> See *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146 (2003), *order on reh'g*, Order 2003-A, FERC Stats. & Regs. ¶ 31,160 (2004), *order on reh'g*, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171 (2004), *order on reh'g*, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005), *affirmed sub. nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007).

<sup>3</sup> See *Electric Reliability Organization Proposal to Retire Requirements in Reliability Standards*, Order No. 788, 145 FERC ¶ 61,147 (2013).

required. The proposed revisions are designed to maintain the existing reliability goals, while providing responsible entities with flexibility regarding how they fulfill the actions required.

The proposed standards are 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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### **A. NERC Reliability Standards Development Process**

The proposed Reliability Standards were developed in an open and fair manner and in accordance with the Reliability Standard development process.<sup>4</sup> NERC develops Reliability Standards in accordance with Section 300 (“Reliability Standards Development”) of its Rules of Procedure and the NERC Standard Processes Manual.<sup>5</sup> NERC’s proposed rules provide for reasonable notice and opportunity for public comment, due process, openness, and a balance of

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<sup>4</sup> *Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards*, Order No. 672, FERC Stats. & Regs. ¶ 31,204, *order on reh’g*, Order No. 672-A, FERC Stats. & Regs. ¶ 31,212 (2006).

<sup>5</sup> The NERC Rules of Procedure are available at <http://www.nerc.com/AboutNERC/Pages/Rules-of-Procedure.aspx>. The NERC Standard Processes Manual is available at [http://www.nerc.com/comm/SC/Documents/Appendix\\_3A\\_StandardsProcessesManual.pdf](http://www.nerc.com/comm/SC/Documents/Appendix_3A_StandardsProcessesManual.pdf).

interests in developing Reliability Standards and thus satisfies certain of the criteria for approving 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.

### **B. History of Project 2010-02: Connecting New Facilities to the Grid**

The NERC Standard Processes Manual requires NERC to conduct periodic reviews of Reliability Standards<sup>6</sup> and consistent with this requirement, a periodic review was conducted of the Facilities Design, Connections, and Maintenance (“FAC”) body of Reliability Standards.

The NERC Standards Committee appointed six industry experts to serve on the FAC five-year review team on April 22, 2013. The review team recommended revisions to Reliability Standards FAC-001-1 and FAC-002-1 and affirmed FAC-003-3, FAC-008-3 and FAC-013-2.<sup>7</sup> A Standards Authorization Request was then initiated to revise Reliability Standards FAC-001-1 and FAC-002-1 and a standard drafting team was appointed.

### **III. JUSTIFICATION**

As discussed in detail in **Exhibit C**, proposed Reliability Standards FAC-001-2 and FAC-002-2 satisfy the Reliability Standards criteria and are just, reasonable, not unduly discriminatory or preferential, and in the public interest. Provided below is the following: (A) a description of each proposed Reliability Standard and discussion of how applicable FERC

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<sup>6</sup> Section 13.0 of the NERC Standard Processes Manual provides: “All Reliability Standards shall be reviewed at least once every ten years from the effective date of the Reliability Standard or the date of the latest Board of Trustees adoption to a revision of the Reliability Standard, whichever is later.”

<sup>7</sup> The review team also recommended to delay the review of Reliability Standards FAC-010-2.1, FAC-011-2, and FAC-014-2. WECC separately reviewed and affirmed regional Reliability Standard FAC-501-WECC-1.

directives are satisfied; and (B) justification for the proposed Reliability Standards on a Requirement-by-Requirement basis.

**A. Reliability Standard FAC-001-2 – Facility Interconnection Requirements**

The purpose of FAC-001 is to avoid adverse impacts on the reliability of the Bulk Electric System by requiring Transmission Owners and applicable Generator Owners to document Facility interconnection requirements and to make them available so that entities seeking to interconnect will have the necessary information.

**1. Procedural Background**

Reliability Standard FAC-001-0 was submitted on April 4, 2006<sup>8</sup> In order to expand its applicability to Generator Owners and to modernize the formatting of FAC-001-0, FAC-001-1 was developed by NERC and was submitted on August 27, 2012, with an effective implementation date for Transmission Owners on November 25, 2013 and for Generation Owners on January 1, 2015.

**2. Requirement-by-Requirement Justification**

Proposed Reliability Standard FAC-001-2—Facility Interconnection Requirements consists of four requirements and is applicable to Transmission Owners and Generator Owners with a fully executed Agreement to conduct a study on the reliability impact of interconnecting a third party Facility to the Generator Owner’s existing Facility that is used to interconnect to the Transmission System (i.e., an applicable Generator Owner). Proposed Requirements R1 and R3 apply to Transmission Owners, and proposed Requirements R2 and R4 apply to applicable Generator Owners. Proposed Requirements R2 and R4 are identical, except for its applicability.

**Proposed FAC-001-2, Requirement R1**

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<sup>8</sup> Order No. 693 at P 680.



**R1. Each Transmission Owner shall document Facility interconnection requirements, update them as needed, and make them available upon request. Each Transmission Owner's Facility interconnection requirements shall address interconnection requirements for:**

- 1.1. generation Facilities;**
- 1.2. transmission Facilities; and**
- 1.3. end-user Facilities**

Proposed Requirement R1 of FAC-001-2 requires Transmission Owners to document Facility interconnection requirements, to update them, and to provide them upon request. This requirement is substantively unchanged from the currently-effective Requirement R1 of FAC-001-1, which requires Transmission Owners to document, maintain and publish Facility connection requirements. The proposed changes are intended to clarify the actions required and are designed to achieve the same reliability goals, while providing responsible entities with flexibility regarding how they fulfill the actions required.

#### **Proposed FAC-001-2, Requirement R2**

**R2. Each applicable Generator Owner shall document Facility interconnection requirements and make them available upon request within 45 calendar days of full execution of an Agreement to conduct a study on the reliability impact of interconnecting a third party Facility to the Generator Owner's existing Facility that is used to interconnect to the Transmission system.**

Proposed Requirement R2 of FAC-001-2 requires applicable Generator Owners with a fully executed Agreement to conduct a study on the reliability impact of interconnecting a third party Facility to the Generator Owner's existing Facility to document Facility interconnection requirements and to make them available upon request within 45 calendar days of full execution. This requirement is substantively identical to Requirement R2 of currently-effective Reliability Standard FAC-001-1. For example, the publishing of interconnection requirements has been replaced with the requirement to make interconnection requirements available upon request. This proposed change is designed to achieve the same reliability goal of ensuring that Facility

interconnection requirements are public and available in a manner that provides more flexibility to entities regarding how to maintain (such as on a website) or provide such information.

### **Proposed FAC-001-2, Requirement R3**

**R3. Each Transmission Owner shall address the following items in its Facility interconnection requirements:**

**3.1. Procedures for coordinated studies of new or materially modified existing interconnections and their impacts on affected system(s).**

**3.2. Procedures for notifying those responsible for the reliability of affected system(s) of new or materially modified existing interconnections.**

Proposed Requirement R3 is applicable to Transmission Owners and requires Transmission Owners to include procedures for coordination and communication regarding new or materially modified existing interconnections.

The currently-effective Requirement R3 of FAC-001-1 requires entities to include additional elements in their interconnection procedures, such as breaker duty and surge protection, system protection and coordination, etc. These elements have been moved to the Guideline and Technical Basis section of the standard as some items included in Parts 3.1.3 through 3.1.16 are not applicable to all entities and this is not an exhaustive list. This proposed change is designed to provide entities with the flexibility to determine which Facility interconnection requirements are technically appropriate for their respective Facilities. The information included in the Guideline and Technical Basis section can be used as a starting point for each Transmission Owner to consider in the development of Facility interconnection requirements. The proposed changes to Requirement R3 are designed to achieve the same

reliability goal of ensuring that entities specify their procedures for coordination and communication in their interconnection requirements, while providing entities with flexibility.

#### **Proposed FAC-001-2, Requirement R4**

**R4. Each applicable Generator Owner shall address the following items in its Facility interconnection requirements:**

**4.1. Procedures for coordinated studies of new interconnections and their impacts on affected system(s).**

**4.2. Procedures for notifying those responsible for the reliability of affected system(s) of new interconnections.**

Proposed Requirement R4 of FAC-001-2 applies to applicable Generator Owners and requires Generator Owners to include procedures for coordination and communication regarding new or materially modified existing interconnections. Proposed Requirement R4 is identical to proposed Requirement R3 except for its applicability, and as such, the justification for Requirement R3 of FAC-001-2 applies with due weight to Requirement R4.

#### **B. Reliability Standard FAC-002-2 –Facility Interconnection Studies**

The purpose of FAC-002 is to study the impact of interconnecting new or materially modified Facilities on the Bulk Electric System. Proposed Reliability Standard FAC-002-2 consists of five requirements and is applicable to: Planning Coordinators; Transmission Planners; Transmission Owners; Distribution Providers; Generator Owners; applicable Generator Owners; and Load-Serving Entities. Applicable Generator Owners are Generator Owners with a fully executed Agreement to conduct a study on the reliability impact of interconnecting a third party Facility to the Generator Owner’s existing Facility that is used to interconnect to the Transmission System. Proposed Requirement R5 applies to “applicable Generator Owners.”

The currently-effective Reliability Standards FAC-002-1 consists of one requirement with five Parts. The proposed Reliability Standard FAC-002-2 consists of five requirements which clarifies the actions required of the applicable entities.

## **1. Procedural Background**

Reliability Standard FAC-002-0 was submitted on April 4, 2006. In response to a FERC directive in Order No. 693, the FAC-002-0 Reliability Standard was modified, and these modifications were submitted as FAC-002-1 on March 3, 2001.<sup>9</sup> Requirement R2 of FAC-002-1 was proposed for retirement in a filing submitted on March 19, 2013.

## **2. Requirement-by-Requirement Justification**

Proposed Requirement R1 requires Transmission Planners and Planning Coordinators to study the reliability impact of certain interconnections and sets forth a minimum criteria to be evaluated in Parts 1.1 through 1.4. Proposed Requirements R2 through R5 require the applicable entities to coordinate and cooperate in these studies and to provide the data described in Parts 1.1 through 1.4 of Requirement R1.

### **Proposed FAC-002-2, Requirement R1**

**R1. Each Transmission Planner and each Planning Coordinator shall study the reliability impact of: (i) interconnecting new generation, transmission, or electricity end-user Facilities and (ii) materially modifying existing interconnections of generation, transmission, or electricity end-user Facilities. The following shall be studied:**

- 1.1. The reliability impact of the new interconnection, or materially modified existing interconnection, on affected system(s);**
- 1.2. Adherence to applicable NERC Reliability Standards; regional and Transmission Owner planning criteria; and Facility interconnection requirements;**
- 1.3. Steady-state, short-circuit, and dynamics studies, as necessary, to evaluate system performance under both normal and contingency conditions; and**

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<sup>9</sup> *North American Electric Reliability Corp.*, 134 FERC ¶ 61,015 (2011).

**1.4. Study assumptions, system performance, alternatives considered, and coordinated recommendations. While these studies may be performed independently, the results shall be evaluated and coordinated by the entities involved.**

Proposed Requirement R1 is applicable to Transmission Planners and Planning Coordinators and requires the study of the reliability impact of interconnecting new Facilities. Parts 1.1 through 1.4 specify a minimum set of considerations that must be studied.

**Proposed FAC-002-2, Requirement R2**

- R2. Each Generator Owner seeking to interconnect new generation Facilities, or to materially modify existing interconnections of generation Facilities, shall coordinate and cooperate on studies with its Transmission Planner or Planning Coordinator, including but not limited to the provision of data as described in R1, Parts 1.1-1.4.**

Proposed Requirement R2 is applicable to Generator Owners and requires coordination and cooperation on studies with their Transmission Planner or Planning Coordinator when Generator Owners are seeking to interconnect new generation Facilities or to materially modify existing interconnections. Generator Owners must also provide, at a minimum, the data in Parts 1.1 through 1.4 of Requirement R1 of FAC-002-2.

**Proposed FAC-002-2, Requirement R3**

- R3. Each Transmission Owner, each Distribution Provider, and each Load-Serving Entity seeking to interconnect new transmission Facilities or electricity end-user Facilities, or to materially modify existing interconnections of transmission Facilities or electricity end-user Facilities, shall coordinate and cooperate on studies with its Transmission Planner or Planning Coordinator, including but not limited to the provision of data as described in R1, Parts 1.1-1.4.**

Proposed Requirement R3 is applicable to Transmission Owners, Distribution Providers and Load Serving Entities and requires coordination and cooperation on studies with their Transmission Planner or Planning Coordinator when Transmission Owners, Distribution

Providers and Load-Serving Entities are seeking to interconnect new transmission Facilities or to materially modify existing interconnections or end-user Facilities. Transmission Owners, Distribution Providers and Load-Serving Entities must also provide, at a minimum, the data in Parts 1.1 through 1.4 of Requirement R1 of FAC-002-2.

#### **Proposed FAC-002-2, Requirement R4**

**R4. Each Transmission Owner shall coordinate and cooperate with its Transmission Planner or Planning Coordinator on studies regarding requested new or materially modified interconnections to its Facilities, including but not limited to the provision of data as described in R1, Parts 1.1-1.4.**

Proposed Requirement R4 is applicable to Transmission Owners and requires coordination and cooperation regarding studies for new or materially modified interconnections to their Facilities. Transmission Owners must also provide, at a minimum, the data in Parts 1.1 through 1.4 of Requirement R1 of FAC-002-2.

#### **Proposed FAC-002-2, Requirement R5**

**R5. Each applicable Generator Owner shall coordinate and cooperate with its Transmission Planner or Planning Coordinator on studies regarding requested interconnections to its Facilities, including but not limited to the provision of data as described in R1, Parts 1.1-1.4.**

Proposed Requirement R5 is applicable to Generator Owners and is parallel to Requirement R4. Proposed Requirement R5 requires Generator Owners to coordinate and cooperate regarding studies for new or materially modified interconnections to their Facilities. Generator Owners must also provide, at a minimum, the data in Parts 1.1 through 1.4 of Requirement R1 of FAC-002-2.

### 3. FERC Directives Addressed

In Order No. 693, FERC directed NERC to consider a suggestion to include a reference to Reliability Standard TPL-004-0 in FAC-002.<sup>10</sup> The drafting team considered this suggestion and did not incorporate such a reference for several reasons. Reliability Standard TPL-004-0 has been superseded by Reliability Standard TPL-001-04. Further, the drafting team removed references to the TPL Reliability Standards to eliminate redundancy with Reliability Standard FAC-002-2, Requirement R1, Part 1.2, which requires entities to study adherence with all NERC Reliability Standards.

In Order No. 693, FERC also directed NERC to consider the comments of various entities regarding suggestions to improve the wording and organization of Reliability Standard FAC-002-0. The drafting team considered these suggestions and this information is included in **Exhibit F**.

#### C. Enforceability of Proposed Reliability Standards FAC-001-2 and FAC-002-2

The proposed Reliability Standards include Violation Risk Factors (“VRFs”) and Violation Severity Levels (“VSLs”). The VSLs provide guidance on the way that NERC will enforce the Requirements of the proposed Reliability Standards. The VRFs are one of several elements used to determine an appropriate sanction when the associated Requirement is violated. The VRFs assess the impact to reliability of violating a specific Requirement. The VRFs and VSLs for the proposed Reliability Standards comport with NERC and FERC 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**.

The proposed Reliability Standards also include Measures that support each Requirement by clearly identifying what is required and how the Requirement will be enforced. These

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<sup>10</sup> Order No. 693 at P 692.

Measures help ensure that the Requirements will be enforced in a clear, consistent, and non-preferential manner and without prejudice to any party.

Respectfully submitted,

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Date: August 27, 2014



**Exhibits A – B and D – H**

**(Available on the NERC Website at**

**<http://www.nerc.com/FilingsOrders/ca/Canadian%20Filings%20and%20Orders%20DL/FAC%20Exhibits.pdf>**

## Exhibit C

### Reliability Standards Criteria

The discussion below explains how the proposed Reliability Standards have met or exceeded the Reliability Standards criteria.

**1. Proposed Reliability Standards must be designed to achieve a specified reliability goal and must contain a technically sound means to achieve that goal.**

The proposed Reliability Standards achieve specific reliability goals via sound methods. Proposed Reliability Standard FAC-001-2 is designed to avoid adverse impacts on the reliability of the Bulk Electric System by requiring Transmission Owners and applicable Generator Owners to document and make Facility interconnection requirements available so that entities seeking to interconnect will have the required information. Proposed Reliability Standard FAC-002-2 is designed to study the impact of interconnecting new or materially modified Facilities on the Bulk Electric System. These reliability objectives are also consistent with FERC precedent regarding the need for standardized procedures for interconnecting generators.<sup>1</sup>

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

Proposed Reliability Standard FAC-001-2, applies to Transmission Owners and Applicable Generator Owners and is clear and unambiguous as to what is required and who is required to comply. An Applicable Generator Owners is a “Generator Owner with a fully executed Agreement to conduct a study on the reliability impact of interconnecting a third party Facility to the Generator Owner’s existing Facility that is used to interconnect to the

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<sup>1</sup> See *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146 (2003), *order on reh'g*, Order 2003-A, FERC Stats. & Regs. ¶ 31,160 (2004), *order on reh'g*, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171 (2004), *order on reh'g*, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005), *affirmed sub. nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007).

Transmission system.” The requirements clearly state who is required to comply with the standard.

Proposed Reliability Standard FAC-002-2 applies to Planning Coordinators, Transmission Planners, Transmission Owners, Distribution Providers, Generator Owners, Applicable Generator Owners and Load-Serving Entities and is clear and unambiguous as to what is required and who is required to comply. An Applicable Generator Owner is a “Generator Owner with a fully executed Agreement to conduct a study on the reliability impact of interconnecting a third party Facility to the Generator Owner’s existing Facility that is used to interconnect to the Transmission system.” The requirements clearly state who is required to comply with the standard.

**3. A proposed Reliability Standard must include clear and understandable consequences and a range of penalties (monetary and/or non-monetary) for a violation.**

The VRFs and VSLs for each of the proposed standards comport with NERC and FERC 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 Standards include clear and understandable consequences.

**4. A proposed Reliability Standard must identify clear and objective criterion or measure for compliance, so that it can be enforced in a consistent and non preferential manner.**

The proposed Reliability Standards contain measures that support each 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.

- 5. Proposed Reliability Standards should achieve a reliability goal effectively and efficiently — but do not necessarily have to reflect “best practices” without regard to implementation cost or historical regional infrastructure design.**

The proposed Reliability Standards achieve the reliability goals effectively and efficiently. The proposed Reliability Standards improve reliability by ensuring that there is appropriate coordination and communication regarding the interconnection of Facilities.

- 6. Proposed Reliability Standards cannot be “lowest common denominator,” i.e., cannot 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 Standards do not reflect a “lowest common denominator” approach. To the contrary, the proposed Standards represent a significant improvement over the previous versions as described herein.

- 7. Proposed Reliability Standards must be 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 Standards apply throughout North America and do not favor one geographic area or regional model.

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

The proposed Reliability Standards do 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 proposed Reliability Standards 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. The changes should not require significant change in practice for entities, but acknowledging that some entities have lengthy approval processes for (inter)connection handbook or procedure revisions, one year was deemed reasonable for all applicable entities to implement the standards, including revisions to internal documents or procedures. 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 B**.

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

The proposed Reliability Standards were developed in accordance with NERC's ANSI-accredited processes for developing and approving Reliability Standards. **Exhibit G** includes a summary of the Reliability Standard development proceedings, and details the processes followed to develop the standard.

These processes included, among other things, multiple comment periods, pre-ballot review periods, and balloting periods. Additionally, all meetings of the drafting team 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 must explain 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 these proposed Reliability Standards. No comments were received that indicated the proposed Standards conflict with other vital public interests.

**12. Proposed Reliability Standards must consider any other appropriate factors.**

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