

## Facility Ratings Standard Drafting Team Meeting

March 6, 2007 — 1 p.m.– 5 p.m.  
March 7, 2007 — 8 a.m.– 3 p.m.  
San Antonio, TX

### Agenda

1. Introductions and welcome new members (**Attachment 1**)
2. Review of new Antitrust Guidelines (**Attachment 2**)
3. Review purpose of meeting:
  - a. Respond to the comments submitted on the SAR and draft FAC-008-2
  - b. Make conforming changes to the SAR, if needed
  - c. Make conforming changes to FAC-008-2, if needed
  - d. Determine whether to make more modifications and re-post or move to ballot
4. Draft responses to comments submitted on SAR and FAC-008-2 (**Attachment 3 – to be sent separately**)
5. Make conforming changes to the SAR (**Attachments 4**)
6. Make conforming changes to FAC-008-2 (**Attachments 5**)
7. Make conforming changes to the Implementation Plan (**Attachments 6**)
8. Determine whether FAC-008-2 is ready for ballot
9. Schedule next meeting
10. Adjourn

## Facility Ratings Standard Drafting Team

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**Facility Rating March 6–7, 2007 Agenda  
Attachment 1**

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### NERC Antitrust Compliance Guidelines

#### I. General

It is NERC's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct that violates, or that might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition.

It is the responsibility of every NERC participant and employee who may in any way affect NERC's compliance with the antitrust laws to carry out this commitment.

Antitrust laws are complex and subject to court interpretation that can vary over time and from one court to another. The purpose of these guidelines is to alert NERC participants and employees to potential antitrust problems and to set forth policies to be followed with respect to activities that may involve antitrust considerations. In some instances, the NERC policy contained in these guidelines is stricter than the applicable antitrust laws. Any NERC participant or employee who is uncertain about the legal ramifications of a particular course of conduct or who has doubts or concerns about whether NERC's antitrust compliance policy is implicated in any situation should consult NERC's General Counsel immediately.

#### II. Prohibited Activities

Participants in NERC activities (including those of its committees and subgroups) should refrain from the following when acting in their capacity as participants in NERC activities (e.g., at NERC meetings, conference calls and in informal discussions):

- Discussions involving pricing information, especially margin (profit) and internal cost information and participants' expectations as to their future prices or internal costs.
- Discussions of a participant's marketing strategies.
- Discussions regarding how customers and geographical areas are to be divided among competitors.
- Discussions concerning the exclusion of competitors from markets.
- Discussions concerning boycotting or group refusals to deal with competitors, vendors or suppliers.

#### III. Activities That Are Permitted

From time to time decisions or actions of NERC (including those of its committees and subgroups) may have a negative impact on particular entities and thus in that sense adversely impact competition. Decisions and actions by NERC (including its committees and subgroups) should only be undertaken for the purpose of promoting and maintaining the reliability and

adequacy of the bulk power system. If you do not have a legitimate purpose consistent with this objective for discussing a matter, please refrain from discussing the matter during NERC meetings and in other NERC-related communications.

You should also ensure that NERC procedures, including those set forth in NERC's Certificate of Incorporation, Bylaws, and Rules of Procedure are followed in conducting NERC business.

In addition, all discussions in NERC meetings and other NERC-related communications should be within the scope of the mandate for or assignment to the particular NERC committee or subgroup, as well as within the scope of the published agenda for the meeting.

No decisions should be made nor any actions taken in NERC activities for the purpose of giving an industry participant or group of participants a competitive advantage over other participants. In particular, decisions with respect to setting, revising, or assessing compliance with NERC reliability standards should not be influenced by anti-competitive motivations.

Subject to the foregoing restrictions, participants in NERC activities may discuss:

- Reliability matters relating to the bulk power system, including operation and planning matters such as establishing or revising reliability standards, special operating procedures, operating transfer capabilities, and plans for new facilities.
- Matters relating to the impact of reliability standards for the bulk power system on electricity markets, and the impact of electricity market operations on the reliability of the bulk power system.
- Proposed filings or other communications with state or federal regulatory authorities or other governmental entities.
- Matters relating to the internal governance, management and operation of NERC, such as nominations for vacant committee positions, budgeting and assessments, and employment matters; and procedural matters such as planning and scheduling meetings.

Any other matters that do not clearly fall within these guidelines should be reviewed with NERC's General Counsel before being discussed.

## Standards Authorization Request Form

## Standard Authorization Request Form

Title of Proposed Standard	Revisions to Facility Ratings Standards FAC-008 and FAC-009 (Project 2006-09)
Request Date	December 18, 2006

SAR Requestor Information	SAR Type <i>(Check a box for each one that applies.)</i>
Name Paul Johnson and members of the Determine Facility Ratings SDT	<input type="checkbox"/> New Standard
Primary Contact Paul Johnson	<input checked="" type="checkbox"/> Revision to existing Standard
Telephone 614-552-1670 Fax	<input type="checkbox"/> Withdrawal of existing Standard
E-mail pbjohnson@aep.com	<input type="checkbox"/> Urgent Action

**Purpose**

The purpose of revising these standards is to:

1. Provide an adequate level of reliability for the North American bulk power systems - the standards are complete and the requirements are set at an appropriate level to ensure reliability.
2. Ensure they are enforceable as mandatory reliability standards with financial penalties - the applicability to bulk power system owners, operators, and users, and as appropriate particular classes of facilities, is clearly defined; the purpose, requirements, and measures are results-focused and unambiguous; the consequences of violating the requirements are clear.
3. Consider comments received during the initial development of the standards and other comments received from ERO regulatory authorities and stakeholders. (Attachment 1)
4. Bring the standards into conformance with the latest version of the Reliability Standards Development Procedure and the ERO Rules of Procedure. (Attachment 2)
5. Satisfy the standards procedure requirement for five-year review of the standards.

**Industry Need**

As the electric reliability organization begins enforcing compliance with reliability standards under Section 215 of the Federal Power Act in the United States and applicable statutes and regulations in Canada, the industry needs a set of clear, measurable, and enforceable reliability standards. While the Federal Energy Regulatory Commission indicated in its October 20, 2006 Notice of Proposed Rulemaking on Mandatory Reliability Standards for the Bulk-Power System that it intends to approve both FAC-008 and FAC-009 as enforceable reliability standards, the Commission also indicated that it intends to direct NERC to make modifications to FAC-008 and that making these modifications should be considered a 'high' priority and should be accomplished within a year.

**Brief Description**

The revisions to these two standards will result in a single standard that is responsive to the recommended changes identified in the Standard Review Forms attached to this SAR.

The development may include other improvements to the standards deemed appropriate by the drafting team, with the consensus of stakeholders, consistent with establishing high quality, enforceable and technically sufficient bulk power system reliability standards.

**Standards Authorization Request Form**

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***Reliability Functions***

<b>The Standard will Apply to the Following Functions</b> <i>(Check box for each one that applies.)</i>		
<input type="checkbox"/>	Reliability Coordinator	Ensures the reliability of the bulk transmission system within its Reliability Authority area. This is the highest Reliability Authority.
<input type="checkbox"/>	Balancing Authority	Integrates resource plans ahead of time, and maintains load-interchange-resource balance within its metered boundary and supports system frequency in real time.
<input type="checkbox"/>	Interchange Authority	Authorizes valid and balanced Interchange Schedules.
<input type="checkbox"/>	Planning Authority	Plans the Bulk Electric System.
<input type="checkbox"/>	Resource Planner	Develops a long-term (>one year) plan for the resource adequacy of specific loads within a Planning Authority area.
<input checked="" type="checkbox"/>	Transmission Planner	Develops a long-term (>one year) plan for the reliability of transmission systems within its portion of the Planning Authority area.
<input type="checkbox"/>	Transmission Service Provider	Provides transmission services to qualified market participants under applicable transmission service agreements
<input checked="" type="checkbox"/>	Transmission Owner	Owns transmission facilities.
<input type="checkbox"/>	Transmission Operator	Operates and maintains the transmission facilities, and executes switching orders.
<input type="checkbox"/>	Distribution Provider	Provides and operates the "wires" between the transmission system and the customer.
<input checked="" type="checkbox"/>	Generator Owner	Owns and maintains generation unit(s).
<input type="checkbox"/>	Generator Operator	Operates generation unit(s) and performs the functions of supplying energy and Interconnected Operations Services.
<input type="checkbox"/>	Purchasing-Selling Entity	The function of purchasing or selling energy, capacity, and all necessary Interconnected Operations Services as required.
<input type="checkbox"/>	Market Operator	Integrates energy, capacity, balancing, and transmission resources to achieve an economic, reliability-constrained dispatch.
<input type="checkbox"/>	Load-Serving Entity	Secures energy and transmission (and related generation services) to serve the end user.

**Standards Authorization Request Form**

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***Reliability and Market Interface Principles***

<b>Applicable Reliability Principles</b> <i>(Check box for all that apply.)</i>	
<input checked="" type="checkbox"/>	1. Interconnected bulk electric systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards.
<input type="checkbox"/>	2. The frequency and voltage of interconnected bulk electric systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand.
<input checked="" type="checkbox"/>	3. Information necessary for the planning and operation of interconnected bulk electric systems shall be made available to those entities responsible for planning and operating the systems reliably.
<input type="checkbox"/>	4. Plans for emergency operation and system restoration of interconnected bulk electric systems shall be developed, coordinated, maintained and implemented.
<input type="checkbox"/>	5. Facilities for communication, monitoring and control shall be provided, used and maintained for the reliability of interconnected bulk electric systems.
<input type="checkbox"/>	6. Personnel responsible for planning and operating interconnected bulk electric systems shall be trained, qualified, and have the responsibility and authority to implement actions.
<input type="checkbox"/>	7. The security of the interconnected bulk electric systems shall be assessed, monitored and maintained on a wide area basis.
<b>Does the proposed Standard comply with all of the following Market Interface Principles?</b> <i>(Select 'yes' or 'no' from the drop-down box.)</i>	
1. The planning and operation of bulk electric systems shall recognize that reliability is an essential requirement of a robust North American economy. Yes	
2. An Organization Standard shall not give any market participant an unfair competitive advantage. Yes	
3. An Organization Standard shall neither mandate nor prohibit any specific market structure. Yes	
4. An Organization Standard shall not preclude market solutions to achieving compliance with that Standard. Yes	
5. An Organization Standard shall not require the public disclosure of commercially sensitive information. All market participants shall have equal opportunity to access commercially non-sensitive information that is required for compliance with reliability standards. Yes	

**Standards Authorization Request Form**

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***Related Standards***

<b>Standard No.</b>	<b>Explanation</b>

***Related SARs***

<b>SAR ID</b>	<b>Explanation</b>

***Regional Differences***

<b>Region</b>	<b>Explanation</b>
ERCOT	
FRCC	
MRO	
NPCC	
SERC	
RFC	
SPP	
WECC	

**The drafting team will consider these comments from FERC and stakeholders in determining what changes to make to the standards:**

**FAC-008-1 — Facility Ratings Methodology**

FERC NOPR Comments:

- Document underlying assumptions and methods used to determine normal and emergency facility ratings; and
- Develop facility ratings consistent with industry standards developed through an open process such as IEEE or CIGRE; and
- Identify the limiting component(s) and define for all critical facilities the increase in rating based on the next limiting component(s).

FERC Staff Report Comments:

- Lack of consistent methodology (Blackout item #27)

Comment from Draft SAR on Planning Authority:

- Provide clarity where the Planning Authority is mentioned

**FAC-009-1 — Establish and Communicate Facility Ratings**

FERC NOPR Comments:

- No changes identified.

Comment from Draft SAR on Planning Authority:

- Provide clarity where the Planning Authority is mentioned

The drafting team will reference these guidelines in determining what changes to make to the standards to bring them into conformance with the *Reliability Standards Development Procedure Manual, Version 6* and the *ERO Rules of Procedure*:

### **Standard Review Guidelines**

#### **Applicability**

Does this reliability standard clearly identify the functional classes of entities responsible for complying with the reliability standard, with any specific additions or exceptions noted? Where multiple functional classes are identified is there a clear line of responsibility for each requirement identifying the functional class and entity to be held accountable for compliance? Does the requirement allow overlapping responsibilities between Registered Entities possibly creating confusion for who is ultimately accountable for compliance?

Does this reliability standard identify the geographic applicability of the standard, such as the entire North American bulk power system, an interconnection, or within a regional entity area? If no geographic limitations are identified, the default is that the standard applies throughout North America.

Does this reliability standard identify any limitations on the applicability of the standard based on electric facility characteristics, such as generators with a nameplate rating of 20 MW or greater, or transmission facilities energized at 200 kV or greater or some other criteria? If no functional entity limitations are identified, the default is that the standard applies to all identified functional entities.

#### **Purpose**

Does this reliability standard have a clear statement of purpose that describes how the standard contributes to the reliability of the bulk power system? Each purpose statement should include a value statement.

#### **Performance Requirements**

Does this reliability standard state one or more performance requirements, which if achieved by the applicable entities, will provide for a reliable bulk power system, consistent with good utility practices and the public interest?

Does each requirement identify who shall do what under what conditions and to what outcome?

#### **Measurability**

Is each performance requirement stated so as to be objectively measurable by a third party with knowledge or expertise in the area addressed by that requirement?

Does each performance requirement have one or more associated measures used to objectively evaluate compliance with the requirement?

If performance results can be practically measured quantitatively, are metrics provided within the requirement to indicate satisfactory performance?

#### **Technical Basis in Engineering and Operations**

Is this reliability standard based upon sound engineering and operating judgment, analysis, or experience, as determined by expert practitioners in that particular field?

#### **Completeness**

Is this reliability standard complete and self-contained? Does the standard depend on external information to determine the required level of performance?

**Consequences for Noncompliance**

In combination with guidelines for penalties and sanctions, as well as other ERO and regional entity compliance documents, are the consequences of violating a standard clearly known to the responsible entities?

**Clear Language**

Is the reliability standard stated using clear and unambiguous language? Can responsible entities, using reasonable judgment and in keeping with good utility practices, arrive at a consistent interpretation of the required performance?

**Practicality**

Does this reliability standard establish requirements that can be practically implemented by the assigned responsible entities within the specified effective date and thereafter?

**Capability Requirements versus Performance Requirements**

In general, requirements for entities to have ‘capabilities’ (this would include facilities for communication, agreements with other entities, etc.) should be located in the standards for certification. The certification requirements should indicate that entities have a responsibility to ‘maintain’ their capabilities.

**Consistent Terminology**

To the extent possible, does this reliability standard use a set of standard terms and definitions that are approved through the NERC reliability standards development process?

If the standard uses terms that are included in the NERC Glossary of Terms Used in Reliability Standards, then the term must be capitalized when it is used in the standard. New terms should not be added unless they have a ‘unique’ definition when used in a NERC reliability standard. Common terms that could be found in a college dictionary should not be defined and added to the NERC Glossary.

Are the verbs on the ‘verb list’ from the DT Guidelines? If not – do new verbs need to be added to the guidelines or could you use one of the verbs from the verb list?

**Violation Risk Factors (Risk Factor)**

**High Risk Requirement**

A requirement that, if violated, could directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures;

or a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

**Medium Risk Requirement**

A requirement that, if violated, could directly affect the electrical state or the capability of the bulk electric system, or the ability to effectively monitor and control the bulk electric system. However, violation of a medium risk requirement is unlikely to lead to bulk electric system instability, separation, or cascading failures;

or a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly and adversely affect the electrical

state or capability of the bulk electric system, or the ability to effectively monitor, control, or restore the bulk electric system. However, violation of a medium risk requirement is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk electric system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

#### **Lower Risk Requirement**

A requirement that, if violated, would not be expected to adversely affect the electrical state or capability of the bulk electric system, or the ability to effectively monitor and control the bulk electric system. A requirement that is administrative in nature;

or a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to adversely affect the electrical state or capability of the bulk electric system, or the ability to effectively monitor, control, or restore the bulk electric system. A planning requirement that is administrative in nature.

#### **Mitigation Time Horizon**

The drafting team should also indicate the time horizon available for mitigating a violation to the requirement using the following definitions:

- **Long-term Planning** — a planning horizon of one year or longer.
- **Operations Planning** — operating and resource plans from day-ahead up to and including seasonal.
- **Same-day Operations** — routine actions required within the timeframe of a day, but not real-time.
- **Real-time Operations** — actions required within one hour or less to preserve the reliability of the bulk electric system.
- **Operations Assessment** — follow-up evaluations and reporting of real time operations.

#### **Violation Severity Levels**

The drafting team should indicate a set of violation severity levels that can be applied for the requirements within a standard. ('Violation severity levels' replace existing 'levels of non-compliance.')

The violation severity levels may be applied for each requirement or combined to cover multiple requirements, as long as it is clear which requirements are included.

**The violation severity levels should be based on the following definitions:**

- **Lower: mostly compliant with minor exceptions** — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more minor details. Equivalent score: 95% to 99% compliant.
- **Moderate: mostly compliant with significant exceptions** — The responsible entity is mostly compliant with and meets the intent of the requirement but is deficient with respect to one or more significant elements. Equivalent score: 85% to 94% compliant.
- **High: marginal performance or results** — The responsible entity has only partially achieved the reliability objective of the requirement and is missing one or more significant elements. Equivalent score: 70% to 84% compliant.
- **Severe: poor performance or results** — The responsible entity has failed to meet the reliability objective of the requirement. Equivalent score: less than 70% compliant.

**Compliance Monitor**

Replace, ‘Regional Reliability Organization’ with ‘Electric Reliability Organization’

**Fill-in-the-blank Requirements**

Do not include any ‘fill-in-the-blank’ requirements. These are requirements that assign one entity responsibility for developing some performance measures without requiring that the performance measures be included in the body of a standard – then require another entity to comply with those requirements.

Every reliability objective can be met, at least at a threshold level, by a North American standard. If we need regions to develop regional standards, such as in under-frequency load shedding, we can always write a uniform North American standard for the applicable functional entities as a means of encouraging development of the regional standards.

**Requirements for Regional Reliability Organization**

Do not write any requirements for the Regional Reliability Organization. Any requirements currently assigned to the RRO should be re-assigned to the applicable functional entity.

**Effective Dates**

Must be 1<sup>st</sup> day of 1<sup>st</sup> quarter after entities are expected to be compliant – must include time to file with regulatory authorities and provide notice to responsible entities of the obligation to comply. If the standard is to be actively monitored, time for the Compliance Monitoring and Enforcement Program to develop reporting instructions and modify the Compliance Data Management System(s) both at NERC and Regional Entities must be provided in the implementation plan.

**Associated Documents**

If there are standards that are referenced within a standard, list the full name and number of the standard under the section called, ‘Associated Documents’.

**Functional Model Version 3**

Review the requirements against the latest descriptions of the responsibilities and tasks assigned to functional entities as provided in pages 13 through 53 of the draft Functional Model Version 3.

### Standard Development Roadmap

*This section is maintained by the drafting team during the development of the standard and will be removed when the standard becomes effective.*

#### Development Steps Completed:

1. SAC approved SAR and standard for posting (January 11, 2007).

#### Proposed Action Plan and Description of Current Draft:

This is the first draft of the proposed SAR and standard, posted for a 45-day comment period, along with the associated implementation plan from January 15–February 28, 2007.

#### Future Development Plan:

Anticipated Actions	Anticipated Date
1. Post response to comments.	March 9, 2007
2. Post for 30-day pre-ballot review.	April 2–May 1, 2007
3. Conduct initial ballot.	May 7–16, 2007
4. Respond to comments with initial ballot.	May 25, 2007
5. Conduct recirculation ballot.	May 29–June 7, 2007
6. Post for BOT 30-day preview.	July 2–31, 2007
7. BOT adoption.	August 1, 2007

**Definitions of Terms Used in Standard**

*This section includes all newly defined or revised terms used in the proposed standard. Terms already defined in the Reliability Standards Glossary of Terms are not repeated here. New or revised definitions listed below become approved when the proposed standard is approved. When the standard becomes effective, these defined terms will be removed from the individual standard and added to the Glossary.*

None

## A. Introduction

1. **Title:** Facility Ratings
2. **Number:** FAC-008-2
3. **Purpose:** To ensure that Facility Ratings used in the reliable planning and operation of the bulk power system are determined based on technically sound principles. A Facility Rating is one of the fundamental ‘starting points’ for the determination of the system operating limits.
4. **Applicability**
  - 4.1. Transmission Owner.
  - 4.2. Generator Owners that own units connected directly to the Bulk Electric System through a generator step-up transformer.
5. **Proposed Effective Date:** The first day of the first calendar quarter that is twelve months beyond the date approved by applicable regulatory authorities.

## B. Requirements

- R1. The Transmission Owner and Generator Owner shall each have a documented methodology for determining Facility Ratings (Facility Ratings Methodology) of its solely and jointly owned Facilities that contains all of the following criteria: *[Violation Risk Factor: Medium]*  
*[Mitigation Time Horizon: Operations Planning]*
  - R1.1. The methodology used to establish the Equipment Rating for each component of the Facility shall be consistent with one or more commonly accepted industry Equipment Rating standards or practices.<sup>1</sup>
  - R1.2. The underlying assumptions, design criteria, and methods used to determine the Equipment Ratings identified in R1.1, including identification of how the following were considered:
    - R1.2.1. Equipment Rating standard(s) used in development of this methodology.
    - R1.2.2. Ratings provided by equipment manufacturers.
    - R1.2.3. Ambient conditions.
    - R1.2.4. Operating limitations<sup>2</sup>.
  - R1.3. A statement that a Facility Rating shall respect the most limiting applicable Equipment Rating of the individual equipment that comprises that Facility.
  - R1.4. The method by which the Rating (of major bulk power system equipment that comprises a Facility) is determined.
    - R1.4.1. The scope of equipment addressed shall include, but not be limited to, generators, transmission conductors, transformers, relay protective devices, terminal equipment, series and shunt compensation devices.
    - R1.4.2. The scope of Ratings addressed shall include, as a minimum, both Normal and Emergency Ratings.

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<sup>1</sup> The industry Equipment Rating standard or practice used must be either a nameplate rating; an IEEE Standard; or a recognized, published industry-accepted practice such as a CIGRE guideline, the Westinghouse Transmission and Distribution Handbook, or other similar document.

<sup>2</sup> Including real-time operations re-ratings based on impaired equipment.

- R2.** The Transmission Owner and Generator Owner shall each make its Facility Ratings Methodology available for inspection and technical review by those Reliability Coordinators, Transmission Operators, Transmission Planners and Planning Authorities that have responsibility for the area in which the associated Facilities are located, within 15 business days of receipt of a request. *[Violation Risk Factor: Lower] [Mitigation Time Horizon: Operations Planning]*
- R3.** If a Reliability Coordinator, Transmission Operator, Transmission Planner or Planning Authority provides written comments on its technical review of a Transmission Owner's or Generator Owner's Facility Ratings Methodology, the Transmission Owner or Generator Owner shall provide a response to that commenting entity within 45 calendar days of receipt of those comments. The response shall indicate whether a change will be made to the Facility Ratings Methodology and, if no change will be made to that Facility Ratings Methodology, the reason why. *[Violation Risk Factor: Lower] [Mitigation Time Horizon: Operations Planning]*
- R4.** The Transmission Owner and Generator Owner shall each have Facility Ratings for its solely and jointly owned Facilities that are consistent with the associated Facility Ratings Methodology. *[Violation Risk Factor: Medium] [Time Horizon for Mitigation: Real-time Operations]*
- R5.** The Transmission Owner and Generator Owner shall each provide Facility Ratings for its solely and jointly owned Facilities that are existing Facilities, new Facilities, modifications to existing Facilities and re-ratings of existing Facilities to its associated Reliability Coordinator(s), Planning Authority(ies), Transmission Planner(s), and Transmission Operator(s) as scheduled by such requesting entities. *[Violation Risk Factor: Medium] [Mitigation Time Horizon: Real-time Operations]*

**C. Measures**

- M1.** The Transmission Owner and Generator Owner shall each have a documented Facility Ratings Methodology that includes all of the items identified in Requirement 1.1 through Requirement 1.4.
- M2.** The Transmission Owner and Generator Owner shall each have evidence, such as a copy of a dated electronic note, or other comparable evidence to show that it made its Facility Ratings Methodology available for inspection within 15 business days of a request in accordance with Requirement 2.
- M3.** If the Reliability Coordinator, Transmission Operator, Transmission Planner or Planning Authority provides documented comments on its technical review of a Transmission Owner's or Generator Owner's Facility Ratings Methodology, the Transmission Owner or Generator Owner shall have evidence, (such as a copy of a dated electronic note or other comparable evidence from the Transmission Owner or Generator Owner addressed to the commenter that includes the response to the comment,) that it provided a response to that commenting entity in accordance with Requirement 3.
- M4.** The Transmission Owner and Generator Owner shall each be able to demonstrate that its Facility Ratings are consistent with its Facility Ratings Methodology (Requirement 4).
- M5.** The Transmission Owner's and Generator Owner's set of Facility Ratings shall include ratings for its solely and jointly owned Facilities including new Facilities, existing Facilities, modifications to existing Facilities and re-ratings of existing Facilities. (Requirement 4)
- M6.** The Transmission Owner and Generator Owner shall each have evidence, such as a copy of a dated electronic note, or other comparable evidence to show that it provided its Facility Ratings

to its associated Reliability Coordinator(s), Planning Authority(ies), Transmission Planner(s), and Transmission Operator(s) in accordance with Requirement 5.

## **D. Compliance**

### **1. Compliance Monitoring Process**

#### **1.1. Compliance Monitoring Responsibility**

Electricity Reliability Organization

#### **1.2. Compliance Monitoring Period and Reset Time Frame**

One or more of the following methods will be used to assess compliance:

- Self-certification (Conducted annually with submission according to schedule.)
- Spot Check Audits (Conducted anytime with up to 30 days notice given to prepare.)
- Periodic Audit (Conducted one or more times every three years according to schedule.)
- Triggered Investigations
- New Transmission Owners and Generator Owners shall each demonstrate compliance through an on-site audit conducted by the Compliance Monitor within the first year that it commences operation.
- Other methods as provided for in the Compliance Monitoring Enforcement Program

The Performance-Reset Period shall be 12 months from the last finding of noncompliance.

#### **1.3. Data Retention**

The Transmission Owner and Generator Owner shall each keep all superseded portions of its Facility Ratings Methodology for three years beyond the date of the change in that methodology and shall keep all documented comments on the Facility Ratings Methodology and associated responses for five years. In addition, entities found non-compliant shall keep information related to the non-compliance until found compliant.

The Compliance Monitor shall keep the last audit and all subsequent compliance records.

#### **1.4. Additional Compliance Information**

The Transmission Owner and Generator Owner shall each make the following available for inspection during an on-site audit by the Compliance Monitor or within 15 business days of a request as part of an investigation upon complaint:

- 1.4.1** Facility Ratings Methodology.
- 1.4.2** Industry Equipment Rating standards or practice(s) used for developing Equipment Ratings.
- 1.4.3** Superseded portions of its Facility Ratings Methodology that had been replaced, changed or revised within the past 12 months.
- 1.4.4** Documented comments provided by a Reliability Coordinator, Transmission Operator, Transmission Planner or Planning Authority on its technical review of a Transmission Owner's or Generator Owner's Facility Ratings methodology, and the associated responses.
- 1.4.5** Facility Ratings.

1.4.6 Evidence that Facility Ratings were distributed.

1.4.7 Distribution schedules provided by entities that requested Facility Ratings.

## 2. Violation Severity Levels

2.1. **Lower:** There shall be a lower violation if one or more of the following conditions exists:

2.1.1 The Facility Ratings Methodology does not contain a statement that a Facility Rating shall equal the most limiting applicable Equipment Rating of the individual equipment that comprises that Facility.

2.1.2 The Facility Ratings Methodology does not address one of the required equipment types identified in FAC-008 R1.4.1.

2.1.3 No evidence of responses to a Reliability Coordinator's, Transmission Operator, Transmission Planner, or Planning Authority's comments on the Facility Ratings Methodology.

2.1.4 Not all requested Facility Ratings associated with existing Facilities were provided to the Reliability Coordinator(s), Planning Authority(ies), Transmission Planner(s), and Transmission Operator(s) in accordance with their respective schedules.

2.2. **Moderate:** There shall be a moderate violation if one or both of the following conditions exists:

2.2.1 The Facility Ratings Methodology is missing the assumptions used to determine Facility Ratings or does not address two of the required equipment types identified in FAC-008 R1.4.1.

2.2.2 Not all Facility Ratings associated with new Facilities, modifications to existing Facilities, and re-ratings of existing Facilities were provided to the Reliability Coordinator(s), Planning Authority(ies), Transmission Planner(s), and Transmission Operator(s) in accordance with their respective schedules.

2.3. **High:** There shall be a high violation if one or both of the following conditions exists:

2.3.1 The Facility Ratings Methodology does not address three of the required equipment types identified in FAC-008-1 R1.4.1.

2.3.2 Facility Ratings provided were not developed consistent with the Facility Ratings Methodology.

2.4. **Severe:** There shall be a severe violation if one or both of the following conditions exists:

2.4.1 The Facility Ratings Methodology does not address both Normal and Emergency Ratings or the Facility Ratings Methodology was not made available for inspection within 15 business days of receipt of a request.

2.4.2 No Facility Ratings were provided to the Reliability Coordinator(s), Planning Authority(ies), Transmission Planner(s), or Transmission Operator(s) in accordance with their respective schedules.

## E. Regional Differences

None Identified

## F. References

None Identified

**Version History**

Version	Date	Action	Change Tracking

## **Implementation Plan for FAC-008-02 – Facility Ratings**

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### **Prerequisite Approvals**

There are no other reliability standards or Standard Authorization Requests (SARs), in progress or approved, that must be implemented before this standard can be implemented.

### **Modified Standards**

FAC-008-01 and FAC-009-01 should both be retired when FAC-008-02 becomes effective.

### **Compliance with Standards**

Once this standard becomes effective, the responsible entities identified in the applicability section of the standard must comply with the requirements. This includes:

- Transmission Owners, and
- Generator Owners that own units connected directly to the Bulk Electric System through a generator step-up transformer

### **Proposed Effective Date**

All requirements in the standard should become effective on the first day of the first calendar quarter that is twelve months beyond the date the standard is approved by applicable regulatory authorities.