

# NERC

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

# Industry Webinar

Project 2021-08 Modifications to FAC-008

October 2, 2023

**RELIABILITY | RESILIENCE | SECURITY**



- Panelists
  - Standard Drafting Team
    - Chair, Joey Zukowski, Pacific Gas and Electric Company
    - Vice Chair, Ryan Walter, Tri-State Generation & Transmission Association, Inc.
    - Member, Paul Luciani, Ameren Services
    - Member, Kimberly Jursic, Southern Company - Georgia Power
  - NERC Staff
    - Ben Wu (Senior Standards Developer)
    - Al McMeekin (Senior Technical Advisor)
- Administrative Items
- Project 2021-08 Status and Background
- Proposed FAC-008 Revisions
- Implementation Plan for FAC-008
- Next Steps
- Questions and Answers

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- **Presentation Material**
  - Information used herein is used for presentation purposes and may not reflect the actual work of the official posted materials
- **For the official record**
  - This presentation is not a part of the official project record
  - Comments must be submitted during the formal posting
- **Q&A Session**
  - Q/A feature or the raise hand feature

Name	Organization/ Company
Joey Zukowski (Chair)	Pacific Gas and Electric Company
Ryan Walter (Vice Chair)	Tri-State Generation & Transmission Association, Inc.
Sachna Bobal	Hydro One Networks Inc.
Tomas Espinosa	WAPA-SNR
John Zong	Electric Power Engineers, Inc. (EPE)
Paul Luciani	Ameren Services
Steve Winsett	Entergy - Power Generation
Gordon Kawaley	Bonneville Power
Keith S. Jenkins Jr.	FirstEnergy
Kimberly M. Jursic	Southern Company - Georgia Power

- Project 2021-08 seeks to modify Reliability Standard FAC-008 to address the inconsistent understanding of “jointly owned” as well as the concern of non-electrical equipment in the determination of Generator Owner Facility Ratings (Requirement R1).
- At the October 20, 2021 meeting, the Standards Committee (SC) accepted the Standard Authorization Request (SAR). At the same meeting, the SC authorized soliciting members for the SAR Drafting Team (SAR DT). The formal comment period for the SAR and the solicitation for the SAR DT occurred from December 9, 2021 — January 27, 2022

- At the April 20, 2022 meeting, the SC appointed the chair, vice chair, and members to the Project 2021-08 Modifications to FAC-008 SAR DT.
- On September 21, 2022, the SC accepted the revised Project 2021-08 Modifications to FAC-008 SAR, authorized drafting revisions to the Reliability Standard identified in the SAR and appointed the Project 2021-08 SAR DT as the Project 2021-08 Standard Drafting Team (SDT).
- From October 17, 2022 – June 22, 2023, the SDT conducted 16 meetings (including a two-day in-person meeting) to make revisions to the standard language, associated Implementation Plan, and VRFs and VSLs.

- The Quality Review (QR) for this posting was performed from April 12 – April 25, 2023. The QR Team includes but not limited to NERC internal staff, experts from the industry, as well as NERC Facility Ratings Task Force to help ensure that the objectives are coordinated to minimize overlap and possibility of inconsistencies.
- At the SC's August 23, 2023 meeting, the SC authorized initial posting for this project.



- **Industry Need**
  - Produce Generator Owner Facility Ratings that accurately reflect the real power capability of the facility and are therefore useful for reliability-related activities (such as in contingency analysis, SOL determination, etc.).
- **Purpose/Goal**
  - The purpose of the proposed project is to produce Generator Owner Facility Ratings that accurately reflect the real power capability of the facility.
  - Additionally, provide clarification around the phrase “jointly owned” and the level of individual component ratings that are required to be shared with the other entity. This will ensure clear expectations are set such that there are no gaps or conflicts between interconnecting entities.

- **Project Scope**
  - Clarify the term “jointly owned” as it applies to FAC-008, and what information is required to be shared with neighboring entities.
  - Examine the appropriateness and effectiveness of Requirement 1 for the development of Facility Ratings information for Generation Facilities.
  - Ensure that Requirement R6 is reviewed as a risk-based Requirement.

## • Changes to R6

**R6.** Each Transmission Owner and Generator Owner shall ~~have~~ develop Facility Ratings for its solely and jointly owned BES Facilities accurately identifying the rating of the most Limiting Element(s) in accordance ~~that are consistent~~ with ~~the~~ its associated Facility Ratings methodology or documentation for determining its Facility Ratings. *[Violation Risk Factor: Medium] [Time Horizon: Operations Planning]*

**6.1.** For a BES Facility where no entity owns the Facility in its entirety, all applicable entities that own the Facility shall coordinate development of a common Facility Rating using one or a combination of the following:

- Entities shall use the most limiting Equipment Rating of their solely owned Elements and the most limiting Equipment Rating(s) from the other Element owner(s).
- For Element(s) with multiple owners, the owners shall designate one owner to solely develop the most limiting Equipment Rating(s) for the Element(s).

**M6.** Each Transmission Owner and Generator Owner shall have evidence to show that its Facility Ratings accurately identify the rating of the most Limiting Element(s) in accordance ~~are consistent~~ with the documentation for determining its Facility Ratings as specified in Requirement R1 or consistent with its Facility Ratings methodology as specified in Requirements R2 and R3 ~~(Requirement R6)~~. Where no entity owns a Facility in its entirety, each entity shall have evidence to show that its Facility Ratings were developed in accordance with Requirement R6 Part 6.1.

## Rationale for Requirement R6

The addition of the subparts in R6 addresses item 1 of the SAR Project Scope regarding any uncertainty in the responsibilities and the development of a single Facility Rating for jointly owned Facilities. The SDT recognizes there are 2 different scenarios of “jointly owned” that can occur within the confines of FAC-008 Facilities and has addressed these instances within the subpart.

- Scenario 1: Split ownership- Entities have shared ownership of a Facility where ownership of specific Elements that make up the Facility are solely owned by one entity and ownership changes over a line of demarcation.
- Scenario 2: Joint ownership- Entities share ownership of individual Element(s)

The inclusion of the wording *“accurately identifying the rating of the most Limiting Element(s)”* in part addresses item number 3 of the SAR Project Scope to ensure Requirement 6 is viewed as a risk-based Requirement. The addition focuses R6 on the risk posed to the Bulk Electric System (BES) when there is a discrepancy found in the most Limiting Element of a Facility Rating.

Many Entities expressed concerns with the term *“consistent”* within R6. The SDT maintains the addition of *“accurately identifying the rating of the most Limiting Element(s)”* in addition to the inclusion of the processes defined in R9 addresses the ambiguity of the term *“consistent”* in R6.

## Additional Requirement R9

- R9.** Each Transmission Owner and Generator Owner shall have a process to correct each rating discrepancy found in either Element or Equipment Rating(s) used to develop Facility Ratings, that includes developing timelines to: *[Violation Risk Factor: Lower]* *[Time Horizon: Operations Planning]*
- 9.1.** Complete the corrections
  - 9.2.** Determine if an extent of condition review is necessary
  - 9.3.** Perform extent of condition review when necessary
- M9.** Each Transmission Owner and Generator Owner shall have a documented process to correct rating discrepancies found in either Element or Equipment Rating(s) that includes the items identified in Requirement R9, Parts 9.1, 9.2, and 9.3

## **Rationale for Requirement R9**

While the changes in R6 focus on the risk to the BES when there is a discrepancy in determining the overall Facility Rating, it does not focus on maintaining data integrity outside of the most Limiting Element. The addition of R9 ensures entities correct discrepancies found in Equipment Ratings in accordance with their own documented process. The extent of condition review ensures potential systemic errors are discovered when a discrepancy is found. This allows entities the freedom to make necessary corrections to Equipment Ratings that do not affect the most Limiting Element within their own process without the administrative overhead of self-reporting.

This requirement supports the culture of continuous improvement of Facility Ratings and encourages internal controls and active change management.

## **Rationale for Requirement R1**

The Standard Drafting Team (SDT) extensively reviewed R1 and associated standards where there may be potential overlap. While there are similar requirements in other standards, FAC-008 is the only Standard that focuses on thermal rating capabilities for Generators and their associated Elements.

Regarding the initial Standard Authorization Request (SAR) requesting clarity on the inclusion of mechanical components in the documentation for R1, the SDT has determined mechanical components may be included in the entity's R1 documentation and therefore they may be included in the entity's Facility Ratings. The SDT notes that the absence of mechanical components does not indicate non-compliance with FAC-008.

The SDT has determined no changes to R1 are warranted at this time.

A stylized map of North America, including the United States, Canada, and Mexico. The map is rendered in shades of blue and grey. A dark blue horizontal band is overlaid across the middle of the map, containing the text 'Implementation Plan' in a bold, black, sans-serif font.

# Implementation Plan



*FAC-008-6 Effective date: First day of the first calendar quarter that is three (3) months after date of approval.*

*Compliance Date for FAC-008-6 – Requirement R6 - twelve (12) months after the effective date of Reliability Standard FAC-008-6.*

*Compliance Date for FAC-008-6 – Requirement R9 twenty-four (24) months after the effective date of Reliability Standard FAC-008-6.*

*Retirement Date Reliability Standard FAC-008-5 –immediately prior to the effective date of the FAC-008-6*

A stylized map of North America is centered on the page. The map is divided into three horizontal color bands: a light blue band at the top, a dark blue band in the middle, and a light grey band at the bottom. The text "Next Steps" is overlaid in the dark blue band. The text is in a bold, black, sans-serif font.

## Next Steps

- Posting
  - [Project Page 2021-08](#)
  - 45-day comment period and formal ballot September 5 – October 19, 2023
- Point of contact
  - Ben Wu, Senior Standards Developer
  - [Ben.Wu@nerc.net](mailto:Ben.Wu@nerc.net) or call 470-542-6882
- Webinar posting
  - Three business days
  - Standards Bulletin

A stylized map of North America is centered on the page. The map is divided into three horizontal color bands: a light blue band at the top, a medium blue band in the middle, and a dark blue band at the bottom. The text "Questions and Answers" is overlaid in the middle band. The text is in a bold, black, sans-serif font. The map shows the outlines of the United States, Canada, and Mexico.

# Questions and Answers