

# NERC

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

# Industry Webinar

Project 2021-02 Modifications to VAR-002

December 6, 2022

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## Administrative

- Review NERC Antitrust Compliance Guidelines and Public Announcement

## Agenda

- Project Background
- Reliability Standard VAR-002-4.1 Revisions
- Q&A

- North American Electric Reliability Corporation (NERC) Antitrust Guidelines
  - 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
- Notice of Open Meeting
  - Participants are reminded that this webinar is public. The access number was widely distributed. Speakers on the call should keep in mind that the listening audience may include members of the press and representatives of various governmental authorities, in addition to the expected participation by industry stakeholders.

- Participants are reminded that this webinar is being recorded. The purpose of the recording is to provide individuals an opportunity to review the content following the webinar. Please mute your microphones during the session until the question and answer period. Questions can also be sent via the chat feature during the presentation.

Name	Entity
David Daniels	AEP
Adrian Raducea	DTE Electric
Mark Atkins	AESI
Hans de Boer	Utility Services
Freddy Garcia	ERCOT
C. Scott King	Southern Company Services, Inc.
Gabe Kurtz	TVA
Kristina Marriott	Miller Bros. Solar, LLC
David Plumb	TVA
Robert Staton	Public Service Company of Colorado
Kimberly Turco	Constellation
Eric White	BHE Renewables, LLC
Sean McCormick	ACT Power Services

- Background

- NERC Project 2021-02 proposed revisions address the NERC Inverter-based Resource Performance Task Force (IRPTF) Standard Authorization Request (SAR) and the VAR-002 Enhanced Periodic Review (EPR), NERC [Project 2016-EPR-02](#), to address ambiguities of voltage and reactive resource Requirements concerning dispersed power producing resources. The IRPTF issued an [IRPTF White Paper, March 2020](#), evaluating today's current standards and requirements of Inverter Based Resources (IBRs) to determine whether current Standards sufficiently address the needs for IBRs. There were 19 recommendations from the VAR-002 EPR reviewed by the SDT to be considered for inclusion into the VAR-002 working draft with the objective to address clarity and technical accuracy of the NERC requirements.

- IRPTF White Paper – Key Concepts

- For dispersed power producing resources, it is not clear if a Generator Operator (GOP) is required to notify the Transmission Operator (TOP) for status change of voltage control on an individual generating unit.
  - Project 2014-01 Standards Applicability for Dispersed Generation Resources revise VAR-002, Requirement R4 to clarify that it is not applicable to individual generating units.
  - IRPTF did not identify any reason Requirement R3 should be treated any differently than Requirement R4.
  - IRPTF recommended VAR-002-4.1 be revised for this clarification in Requirement R3.

- Project 2016-EPR-02 VAR-002 – Key Concepts
  - Attachment 5 Recommendations:
    - Clarity
    - Compliance elements
    - Terminology
    - Technical accuracy

- Purpose and Applicability Sections
  - Updated for clarity of dispersed Generation
- Requirement R1 and Requirement R2
  - Added “dispersed power producing resource” and “volt/VAR controller” for clarity of dispersed Generation.
- Requirement R2, Part 2.1
  - Added “control capability is limited” conditions for dispersed power producing resource if partial outage of facility voltage control equipment.
- Requirement R2, Part 2.3
  - Removed “specified by the Transmission Operator” to remove confusion of whether voltage schedule or methodology is being referred to in the requirement.

- Requirement R3
  - Added “degrades/restore its ability to automatically control voltage to add clarity for reporting to TOP on Power System Stabilizers (PSS) and dispersed Generation operation.
  - Added “functionality” for computing functions or range of functions in a control system.
  - Added language to clarify the changes impacting voltage and reactive control equipment are for changes that degrades/restores its ability to follow Transmission instruction.
- Requirement R3 and Requirement R4
  - Added “mutually-agreeable format” to provide clarity of how and what reporting threshold to provide notification to the TOP.

- Requirement R4
  - Added language for threshold of notification that indicates Transmission Operator needs to provide notification criteria to Generator Operator to assess the system reactive resource per VAR-001, Requirement R2.
  - Removed language that stated Requirement R4 is not applicable to individual generating units and rather have Transmission indicate the threshold for not applicable for assessing Generator Reactive resources per VAR-001, Requirement R2.
- Requirement R5
  - Changed the time horizon from Real-time to Operations Planning due to 30-day time provided in the requirement.
  - Removed “fixed” to provide technology neutral language and to be inclusive of Load Tap Changing Transformers.

- Requirement R6
  - Capitalized “equipment rating” for NERC defined term.
  - Changed the time horizon from “Real-time Operations” to “Operations Planning.”
- Measures
  - Measure M1 – Restructured last sentence for clarity of exemption.
  - Measures M1-M6 – Minor updates to Measures to align with proposed revisions in the requirements.

- **Project posting dates update:**
  - In response to industry requests to extend posting dates past the upcoming holidays and end-of-year obligations, the Comment and Ballot period has been extended until 8:00 p.m. Eastern on January 13, 2023.
  - The initial ballots for the standard and Implementation Plan, as well as a non-binding poll of the associated Violation Risk Factors and Violation Severity Levels will be conducted January 4-13, 2023.

- Respond to Comments
  - Team Meetings January/February 2023
- Point of Contact
  - Laura Anderson, Standards Developer
    - [laura.anderson@nerc.net](mailto:laura.anderson@nerc.net) or call 404-446-9671
- Webinar Slides and Recording Posting
  - Within 48-72 hours of Webinar completion
  - Will be available in the Standards, Compliance, and Enforcement Bulletin

- Informal Discussion
  - Via the Questions and Answers feature
  - Respond to stakeholder questions
- Other
  - Some questions may require future team consideration
  - Please reference slide number, standard section, etc., if applicable
  - Team will address as many questions as possible
  - Webinar and chat comments are not a part of the official project record
  - Questions regarding compliance with existing Reliability Standards should be directed to ERO Enterprise compliance staff, not the SDT



# Questions and Answers