

# Reliability Compliance Update

Becky Davis
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NERC Compliance



# **NERC Projects**

Standards	Project	Action	End Date
PRC-024	Project 2020-02 Transmission-connected Dynamic Reactive Resources Generator Ride-through   Standard Authorization Request (SAR)		
	Background: The SAR is meant to retire PRC-024-3 and replace it with a performance-based ride-through standard that ensures generators remain connected to the BPS during system disturbances. The SAR focuses on the generator protection and control systems that can result in the reduction or disconnection of generating resources during disturbance events.	Comment Period & Standard Drafting Team Nominations	07/14/22
	Revise the "Applicability-Facilities" section to comprehensively address all varieties of transmission-connected dynamic reactive resources that are utilized in providing Essential Reliability Services (ERS) in the Bulk Electric System (BES).		



# **NERC Projects**

tandards	Project	Action	End Date
RC-002	Project 2021-04 Modifications to PRC-002		
	Background: The purpose of PRC-002 is to have adequate data available to facilitate analysis of Bulk Electric System (BES) disturbances. The goal of this project is to clarify the necessary notifications relative to fault recording (FR) data; and clearly identify the BES element owner(s) that need to have FR data for transformers and transmission lines with the associated identified bus.	Comment Period & Ballot Period	07/08/22
	Link to comment form: <a href="https://www.nerc.com/pa/Stand/Project202104ModificationstoPRC0022DL/Project_2021-04_Unofficial%20Comment%20Form%20-%20Glencoe%20Light.docx">https://www.nerc.com/pa/Stand/Project202104ModificationstoPRC0022DL/Project_2021-04_Unofficial%20Comment%20Form%20-%20Glencoe%20Light.docx</a>		07/25/22
		Period	



# **NERC Projects**

Standards	Project	Action	End Date
TPL-001 EOP TOP	Project 2022-03 Energy Assurance with Energy-Constrained Resources Standard Authorization Request (SAR)  Background: This project will enhance reliability by requiring entities to perform energy reliability assessments to evaluate energy assurance and develop Corrective Action Plan(s) to address identified risks. Energy reliability assessments evaluate energy assurance across the Operations Planning, Near-Term Transmission Planning, and Long-Term Transmission Planning or equivalent time horizons by analyzing the expected resource mix availability (flexibility) and the expected availability of fuel during the study period.  There are two SARs to review and comment on:  Operations and Operations Planning Time Horizons SAR  Planning Time Horizons SAR  Link to comment form:  https://www.nerc.com/pa/Stand/Project202203EnergyAssurancewithEnergyConstraine	Comment Period & Standard Drafting Team Nominations	07/21/22
	dR/2022-03%20Unofficial Comment Form%20SAR.docx		



#### NERC Section 1600 Data Request

#### Request for Comments

Links to documentation included in the Appendix of this presentation

- Modifications to Section 1600 Data Request for Generating Availability Data System (GADS)
  - ➤ Comment Period: June 21, 2022 August 5, 2022
  - ➤ NERC is seeking to update the GADS section 1600 data request to add value to expanding GADS reporting to include:
- Solar (new): Inventory/configuration, event reporting, and performance data; and Inventory/configuration of connected energy storage and performance data
- > GADS Wind extensions: Event reporting and connected energy storage; and changes to configuration data to support event reporting
- Conventional GADS extensions: Unit design data that is comparable to the types of information being collected for wind and solar; and Contributing Operating Conditions Code



# NERC Draft Reliability Guidelines – Request for Comments

NERC Inverter-Based Resource Subcommittee (IRPS) requests comments for the following NERC Guidelines Due by August 5, 2022:

Links to documentation included in the Appendix of this presentation

- BPS-Connected Inverter-Based Resource Performance
- Improvements to Interconnection Requirements for BPS-Connected Inverter-Based Resources

#### Due by August 20, 2022:

 Performance, Modeling, and Simulations of BPS-Connected Battery Energy Storage Systems and Hybrid Power Plants



- Save the Date for 2022 NERC-NATF-EPRI Annual Transmission Planning and Modeling Workshop
  - > NERC, the North American Transmission Forum (NATF), and the Electric Power Research Institute (EPRI) will be holding their annual transmission planning and modeling workshop on November 2–3, 2022. This year's theme will be "Grid Transformation: The Change is Here," focusing on the future of power system studies, industry planning practices in the face of extreme weather events, and leveraging emerging technologies such as cloud computing and machine learning for reliability studies.

Event will be held virtually, and more details will be announced closer to the workshop.



### ReliabilityFirst

Technical Talks with RF

➤ June 18, 2022
2:00 p.m. – 3:30 p.m.

➤ August 15, 2022 2:00 p.m. – 3:30 p.m.

> RF Workshops

➤ 8<sup>th</sup> Annual Protection System Workshop

➤ August 3, 2022 1:00 p.m. – 5:00 p.m.

➤ 5<sup>th</sup> Annual Performance Workshop

➤ August 4, 2022 8:00 a.m. – 12:00 p.m.



- SERC Technical Webinars
  - ➤ The Scoop: Supply Chain Webinar

➤ July 19, 2022

1:00 p.m. – 5:00 p.m.

Transmission and Generation Modeling for Evolving Power Grid

➤ July 27, 2022

10:00 a.m. – 4:00 p.m.



SME/Presenter: Elizabeth (Becky) Davis

Elizabeth.Davis@pjm.com

Regional\_compliance@pjm.com



#### Member Hotline

(610) 666 - 8980

(866) 400 - 8980

custsvc@pjm.com



# Appendix



### NERC – Section 1600 Data Request Links

Request for Comments: Modifications to Section 1600 Data Request for Generating Availability Data System (GADS):

- GADS Section 1600 Data Request Materials
- Comment Form



### Draft Reliability Guidelines/Comment Form Links

- Draft Reliability Guideline: BPS-Connected Inverter-Based Resource Performance:
   <a href="https://www.nerc.com/comm/RSTC\_Reliability\_Guidelines/Inverter-Based\_Resource\_Performance\_Guideline\_redline\_June\_16\_2022.pdf">https://www.nerc.com/comm/RSTC\_Reliability\_Guidelines/Inverter-Based\_Resource\_Performance\_Guideline\_redline\_June\_16\_2022.pdf</a>
- Link to Comment Form: <a href="https://www.nerc.com/comm/RSTC">https://www.nerc.com/comm/RSTC</a> Reliability Guidelines/Copy of Comment Matrix IRPTF BPS-Connected Inverter-Based Resource Performance.xlsx

- Draft Reliability Guideline: Improvements to Interconnection Requirements for BPS-Connected Inverter-Based Resources:
   https://www.nerc.com/comm/RSTC\_Reliability\_Guidelines/Reliability\_Guideline\_-\_Interconnection\_Requirements-redline\_June\_16\_2022.pdf
- Link to Comment Form:
   <u>https://www.nerc.com/comm/RSTC\_Reliability\_Guidelines/Copy\_of\_Comment\_Matrix\_IRPTF\_Improvements\_to\_Interconnection\_Requirements\_for\_BPS-Connected\_Inverter-Based\_Resources.xlsx</u>

- Link to Comment Form:
   https://www.nerc.com/comm/RSTC\_Reliability\_Guidelines/Copy\_of\_Comment\_Matrix\_IRPTF\_Performance, Modeling, and Simulations of BPS-Connected\_Battery\_Energy\_Storage\_Systems\_and\_Hybrid\_Power\_Plants.xlsx



# U.S. Effective Dates (future) of NERC Standards

<b>Effective Date</b>	Standards
October 1, 2022	CIP-005-7 Cyber Security Electronic Security Perimeter(s) CIP-010-4 Cyber Security Configuration Change Management and Vulnerability Assessments CIP-013-2 Cyber Security Supply Chain Risk Management
	PRC-024-3 Frequency and Voltage Protection Settings for Generating Resources
January 1, 2023	TPL-007-4 Transmission System Planned Performance for Geomagnetic Disturbance Events (Requirements R3, R4, 4.1, 4.1.1, 4.1.2, 4.2, 4.3, 4.3.1, R8, 8.1, 8.1.1, 8.1.2, 8.2, 8.3, 8.3.1)



# U.S. Effective Dates (future) of NERC Standards

<b>Effective Date</b>	Standards
April 1, 2023	EOP-011-2 Emergency Preparedness and Operations  IRO-010-4 Reliability Coordinator Data Specification & Collection  TOP-003-5 Operational Reliability Data
July 1, 2023	TPL-001-5.1 Transmission System Planning Performance Requirements I Implementation Plan
January 1, 2024	TPL-007-4 Transmission System Planned Performance for Geomagnetic Disturbance Events (Requirements R7, 7.1-7.3, 7.3.1-7.3.2, 7.4, 7.4.1-7.4.3, 7.5, 7.5.1, R11, 11.3.1-11.3.2, 11.4, 11.4.3-11.4.3, 11.5, and 11.5.1)



# U.S. Effective Dates (future) of NERC Standards

<b>Effective Date</b>	Standards
April 1, 2024	FAC-003-5 Transmission Vegetation Management
	FAC-011-4 System Operating Limits Methodology for the
	Operations Horizon
	FAC-014-3 Establish and Communicate System Operating Limits
	IRO-008-3 Reliability Coordinator Operational Analyses and
	Real-time Assessments
	PRC-023-5 Transmission Relay Loadability Implementation Plan
	PRC-002-3 Disturbance Monitoring and Reporting
	Requirements Implementation Plan
	PRC-026-2 Relay Performance During Stable Power Swings
	Implementation Plan
	TOP-001-6 Transmission Operations

