

FERC, NERC, and Regional Activities

Becky Davis, NERC Compliance Reliability Standards & Compliance Subcommittee (RSCS) June 10, 2022



NERC Projects

Standards	Project	Action	End Date
EOP-011 EOP-012	Project 2021-07 Extreme Cold Weather Grid Operations, Preparedness, and Coordination	Join Ballot Pools	06/02/22
	Purpose/Industry Need: To address the ten recommendations for new or enhanced NERC Reliability Standards proposed by the Joint Inquiry Report. Project is in two phases, current Phase I to address the following recommendations from the report:	Formal Comment Period	06/17/22
	Key Recommendations	&	
	(New Standard EOP-012-1 Extreme Cold Weather Preparedness & Operations)	Ballot Period	
	1d. Corrective Action Plans for Freeze-Related Causes	i ented	
	1e. Annual Training on Cold Weather Plans		
	1f. Operate to Specified Ambient Temperature, Weather		
	(Revisions to EOP-011-3 Emergency Operations)		
	1j. Overlap of Manual and Automatic Load Shed/UFLS		



NERC Project 2021-07 continued:

Commenting and Balloting:

- Revisions to EOP-011-3 Emergency Operations
- New Standard EOP-012-1 Extreme Cold Weather Preparedness and Operations
 - ➢ Requirements R1, R2, R4, and R6 are new Requirements
 - Requirements R3 and R5 are carried over from EOP-011-2 with some revisions
- Implementation Plan



NERC Projects

Standards	Project	Action	End Date
AOD-026 AOD-027	Project 2020-06 Verifications of Models and Data for Generators I Reliability Standard MOD-026-2 Background: Reliability Standard MOD-026-2 will replace MOD-026-1 and MOD-027-1. MOD- 026-2 includes requirements for verifying dynamic models, which are used in planning studies to ensure BES reliability. The new version of MOD-026-2 adds a requirement for Applicable Entities to provide verified electromagnetic transient (EMT) models and adds clarifications for inverter based resource Facilities. There are two Standard Authorization Requests supporting this Project to address inverter-based resources and transmission connected dynamic reactive resources.	Join Ballot Pools Comment Period & Ballot Period	06/21/22



NERC Projects

PRC-024Project 2020-02 Transmission-connected Dynamic Reactive Resources Generator Ride-through I Standard Authorization Request (SAR)Comment Period & Standard background: The SAR is meant to retire PRC-024-3 and replace it with a performance-based 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.Of/14/22 Comment Period & Standard Drafting Team NominationsOf/14/22 Of/14/22Revise 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).Comment Period & Standard Drafting Team Nominations	Standards	Project	Action	End Date
	PRC-024	 Project 2020-02 Transmission-connected Dynamic Reactive Resources Generator Ride-through I 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. 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). 	Comment Period & Standard Drafting Team Nominations	07/14/22



A pi	ner Ner	RC Proje	cts
Standards	Project	Action	End Date
PRC-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. Link to comment form: https://www.nerc.com/pa/Stand/Project202104ModificationstoPRC0022DL/Proje ct_2021-04_Unofficial%20Comment%20Form%20-%20Glencoe%20Light.docx	Join Ballot Pools Comment Period & Ballot Period	07/08/22



NERC & Regional News

ReliabilityFirst

- Technical Talks with RF
 - ➤ June 20, 2022
 ➤ July 18, 2022
 2:00 p.m. 3:30 p.m.
 2:00 p.m. 3:30 p.m.
- RF CUG Meeting
 - ➤ June 24, 2022
 10:00 a.m. 12:00 p.m.
 - CUG = Compliance Users Group



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Appendix



Project 2021-07 Links

Project 2021-07 project page: <u>https://www.nerc.com/pa/Stand/Pages/Project-2021-07-ExtremeColdWeather.aspx</u>

EOP-011-3 redline: <u>https://www.nerc.com/pa/Stand/Project202107ExtremeColdWeatherDL/2021-07%20Initial%20Ballot_EOP-011-3_redline_051922.pdf</u>

EOP-011-3 clean: <u>https://www.nerc.com/pa/Stand/Project202107ExtremeColdWeatherDL/2021-07%20Initial%20Ballot_EOP-011-3_clean_051922.pdf</u>

EOP-012-1 redline: <u>https://www.nerc.com/pa/Stand/Project202107ExtremeColdWeatherDL/2021-07%20Initial%20Ballot%20EOP-012-1_redline_051922.pdf</u>

EOP-012-1 clean: <u>https://www.nerc.com/pa/Stand/Project202107ExtremeColdWeatherDL/2021-07%20Initial%20Ballot_EOP-012-1_clean_051922.pdf</u>

Implementation Plan: <u>https://www.nerc.com/pa/Stand/Project202107ExtremeColdWeatherDL/2021-07%20Implementation%20Plan_051922.pdf</u>

EOP-011-3 Technical Rationale: <u>https://www.nerc.com/pa/Stand/Project202107ExtremeColdWeatherDL/2021-07%20Draft%20Technical%20Rationale%20for%20EOP-011-3_051922.pdf</u>

EOP-012-1 Technical Rationale: <u>https://www.nerc.com/pa/Stand/Project202107ExtremeColdWeatherDL/2021-07%20Draft%20Technical%20Rationale%20for%20EOP-012-1_051922.pdf</u>

Comment Form: <u>https://www.nerc.com/pa/Stand/Project202107ExtremeColdWeatherDL/2021-07_Unofficial_Comment_Form_051922.docx</u>



Project 2020-06 Links

Project 2020-06 project page: <u>https://www.nerc.com/pa/Stand/Pages/Project-2020_06-Verifications-of-Models-and-Data-for-Generators.aspx</u>

MOD-026-2: <u>https://www.nerc.com/pa/Stand/Project_2020_06_Verifications_of_Models_and_Data_f/2020-06_MOD-026-</u> 2_Draft_1_clean_05202022.pdf

Implementation Plan: <u>https://www.nerc.com/pa/Stand/Project_2020_06_Verifications_of_Models_and_Data_f/2020-06_MOD-026-</u> 2_Implementation_Plan_05202022.pdf

Comment Form: <u>https://www.nerc.com/pa/Stand/Project_2020_06_Verifications_of_Models_and_Data_f/2020-06_Unofficial_Comment_Form_05202022.docx</u>

VRF/VSL Justifications: <u>https://www.nerc.com/pa/Stand/Project_2020_06_Verifications_of_Models_and_Data_f/2020-06_MOD-026-</u> 2_VRF_VSL_Justifications_05202022.pdf

Mapping Document: <u>https://www.nerc.com/pa/Stand/Project_2020_06_Verifications_of_Models_and_Data_f/2020-06_Mapping_Document_05202022.pdf</u>

Technical Rationale: <u>https://www.nerc.com/pa/Stand/Project_2020_06_Verifications_of_Models_and_Data_f/2020-06_MOD-026-</u> 2_Technical_Rationale_05202022.pdf

Standard Authorization Request (IBR):

https://www.nerc.com/pa/Stand/Project_2020_06_Verifications_of_Models_and_Data_f/2020_06%20IBR%20SAR%20clean_072021.pdf

Standard Authorization Request (transmission-connected dynamic reactive resources):

https://www.nerc.com/pa/Stand/Project_2020_06_Verifications_of_Models_and_Data_f/2020_06%20TCDRR%20SAR%20clean_07202 1.pdf

Effective Date	Standards
July 1, 2022	<u>CIP-012-1</u> Cyber Security Communications between Control Centers <u>PRC-002-2</u> Disturbance Monitoring and Reporting Requirements (100% compliance for Requirements R2-R4, R6-R11)

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Effective Date	Standards
October 1, 2022	<u>CIP-005-7</u> Cyber Security Electronic Security Perimeter(s) <u>CIP-010-4</u> Cyber Security Configuration Change Management and Vulnerability Assessments <u>CIP-013-2</u> Cyber Security Supply Chain Risk Management
	<u>PRC-024-3</u> Frequency and Voltage Protection Settings for Generating Resources
January 1, 2023	<u>TPL-007-4</u> 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)

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Effective Date	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)

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Effective Date Standards

April 1, 2024 FAC-003-5 Transmission Vegetation Management FAC-011-4 System Operating Limits Methodology for the **Operations Horizon** <u>FAC-014-3</u> 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

