# Reliability Compliance Update

Gizella Mali

August, 2024

NERC Compliance

| STANDARD: MOD-026-1 MOD-027-1 | Project 2020-06 Verification of Models and Data for Generators/Draft 3 of the Inverter-based Resource Glossary Term | | |
|---|---|---|---|
| PROJECT BACKGROUND: | | Action | End Date |

## Background

The following proposed term is intended to be used in MOD-026 and other inverter-based resource related standards:

**Inverter-Based Resource (IBR):** A plant/facility consisting of individual devices that are capable of exporting Real Power through a power electronic interface(s) such as an inverter or converter, and that are operated together as a single resource at a common point of interconnection to the electric system. Examples include, but are not limited to, plants/facilities with solar photovoltaic (PV), Type 3 and Type 4 wind, battery energy storage system (BESS), and fuel cell devices.

Inverter-based Resource Glossary Term-Redline

Comment Form

**Balloting & Comments**

**08/12/2024**

| STANDARD: PRC-024-4 PRC-029-1 | Project 2020-02 Modifications to PRC-024 (Generator Ride-through) | |
|---|---|---|
| PROJECT BACKGROUND: | Action | End Date |

## Background

Project 2020-02 is to mitigate the recent and ongoing disturbance ride through performance issues identified across multiple Interconnections and numbers of disturbances analyzed by NERC and the Regions.

PRC-029-1 (Frequency and Voltage Ride-through Requirements for Inverter-based Resources): To ensure that IBRs Ride-through to support the Bulk Power System (BPS) during and after defined frequency and voltage excursions. PRC-029-1 includes requirements for Generator Owner IBR to continue to inject current and perform voltage support during a BPS disturbance. The standard also specifically requires Generator Owner IBR to prohibit momentary cessation in the no-trip zone during disturbances.

Implementation Plan

Comment Form

| Action | End Date |
|---|---|
| **Balloting & Comments** | **08/12/2024** |

| STANDARD: PRC-002-5 PRC-028-1 | Project 2021-04 Modifications to PRC-002 – Phase II | | |
|---|---|---|---|
| PROJECT BACKGROUND: | | Action | End Date |

## Background

The second phase of the project will address gaps the Inverter-Based Resource Performance Task Force (IRPTF) identified within the PRC-002. The goal is to modify the requirements to ensure adequate data is available and periodically assessed to facilitate the analysis of BES disturbances, including in areas of the Bulk Power System (BPS) that may not be covered by the existing requirements.

PRC-028-1(Disturbance Monitoring and Reporting Requirements for Inverter-based Resources): To have adequate data available from Inverter-Based Resources to evaluate Inverter-Based Resource ride-through performance during System Disturbances and to provide data for Inverter-Based Resource model validation.

Implementation Plan
Comment Form

**Balloting & Comments**

**08/12/2024**

| STANDARD: **PRC-030-1** | **Project 2023-02 Analysis and Mitigation of BES Inverter-Based Resource Performance Issues** | | |
|---|---|---|---|
| PROJECT BACKGROUND: | | **Action** | **End Date** |

## Background

Project 2023-02 addresses the reliability-related need by requiring analysis and mitigation of unexpected or unwarranted protection and control operations from IBRs. This includes any types of protections and controls that result in abnormal performance issues within the plant, including abnormal performance resulting in anomalous behavior of active power output from the facility during events.

PRC-030-1(Unexpected Inverter-Based Resource Event Mitigation): Identify, analyze, and mitigate unexpected Inverter-Based Resource (IBR) change of power output.

Implementation Plan
Comment Form

**Balloting & Comments**

**08/12/2024**

| STANDARD: MULTIPLE | Project 2024-01 Rules of Procedure Definitions Alignment (Generator Owner and Generator Operator) Standard Authorization Request |
|---|---|

| PROJECT BACKGROUND: | Action | End Date |
|---|---|---|
| **Background**<br>The project will address concerns regarding the reliability impacts of inverter-based resources (IBRs) on the Bulk-Power System that do not meet the current definition of Bulk Electric System (BES) and have not historically been required to be registered with NERC for compliance with the NERC Reliability Standards. Such concerns are discussed in detail in the Federal Energy Regulatory Commission (FERC) November 17, 2022 order in Docket No. RD22-4-000, in which FERC directed NERC to develop a work plan to address the registration of these IBRs and ensure their compliance with Reliability Standards by certain milestone dates. Revising the GO and GOP definitions in the NERC Glossary of Terms to match the registry criteria will ensure these previously unregistered IBRs will be subject to the NERC Reliability Standards and mitigate their impacts on the BPS.<br>Comment Form | **Comments** | **08/20/2024** |

| STANDARD: MULTIPLE | Project 2024-03 Revisions to EOP-012-2 Standard Authorization Request | | |
|---|---|---|---|
| PROJECT BACKGROUND: | | Action | End Date |
| **Background**<br>The purpose of this project is to address the directives identified by FERC in its June 27, 2024 order approving Reliability Standard EOP-012-2 and directing further modifications. N. Am. Elec. Reliability Corp., 187 FERC ¶ 61,204 (2024), available here. In that order, FERC found that further improvements needed to be made to address ambiguous language and address other reliability gaps/implementation issues in the standard and related definitions to fully address issues first raised in the Commission's February 2023 Order approving EOP-012-1. FERC directed that NERC submit the modifications within 9 months of the date of the order, or by March 27, 2025.<br>Comment Form | | **Comments** | **08/16/2024** |

| STANDARD: TPL-008-1 | Project 2023-07 Transmission System Planning Performance Requirements for Extreme Weather (Draft two of TPL-008-1) | | |
|---|---|---|---|
| PROJECT BACKGROUND: | | Action | End Date |

## Background

FERC directed NERC (Order No. 896) to develop modifications to Reliability Standard TPL-001-5.1 or a new Reliability Standard, to require the following:

(1) development of benchmark planning cases based on major prior extreme heat and cold weather events and/or meteorological projections;

(2) planning for extreme heat and cold weather events using steady state and transient stability analyses expanded to cover a range of extreme weather scenarios including the expected resource mix's availability during extreme heat and cold weather conditions, and including the wide-area impacts of extreme heat and cold weather; and

(3) development of corrective action plans that mitigate any instances where performance requirements for extreme heat and cold weather events are not met.

Comment Form

**Balloting & Comments**

**08/22/2024**

## Request for Comments

- Considerations for Performing an Energy Reliability Assessment – Vol 2
  - Comment period June 17, 2024 – August 16, 2024

- Draft Technical Reference Document: Considerations for Performing an Energy Reliability Assessment – Vol 2
- Draft Technical Reference Document: Considerations for Performing an Energy Reliability Assessment – Vol 2 – Comment Matrix

# NERC – Announcement

Request for Comments – Reliability Guidelines:

1. DER Forecasting and Relationship to BPS Studies and
2. Electromagnetic Transient Studies for Interconnection of Inverter-Based Resource
   - Comment period July 1, 2024 – August 15, 2024

- DER Forecasting and Relationship to BPS Studies – Comment Matrix
- Electromagnetic Transient Studies for Interconnection of IBR – Comment Matrix

## 2024 Registered Ballot Body Self-Select Attestation Process

- Each RBB voting member should log into Standards Balloting and Commenting System (SBS) and **ensure the role listed is "Voter"**. Then click this link to access the attestation page and complete the steps to confirm there have been no material changes in the last 12 months that affect the entity's current Segment selection(s), thus the entity continues to meet the Segment qualifications (as outlined in the qualifications in Appendix 3D: *RBB Criteria* referenced below). Proxy Voters **are not** required to attest.

  - **Response by 8:00 p.m. Eastern, Friday, August 16, 2024**.

- Entities with segment(s) not attested for will be removed from the system. Anyone removed (un-vetted) can re-apply at any time.

Appendix 3D Registered Ballot Body (RBB) Criteria

# ERO Enterprise to Perform Blackstart Study of Eastern, Western Interconnections as Recommended by Winter Storm Elliott Report

- ERO Enterprise staff, in collaboration with FERC, will conduct a joint review of the availability and readiness of the blackstart generators during cold weather conditions in the U.S. portions of the Eastern and Western Interconnections. This review is an outcome of the October 2023 ***Inquiry into Bulk Power System Operations During December 2022 Winter Storm Elliott*** report and follows the release of the ***Blackstart and Next-Start Resource Availability in the Texas Interconnection*** **study**, which similarly assessed blackstart capabilities as recommended by the February 2021 **report** on Winter Storm Uri.
  - Report including recommendations to improve reliability to be issued Q1 2025.

# NERC Announcements

- NERC Files Five Year ERO Performance Assessment
  - Five-Year ERO Performance Assessment Filing
- 2024 Performance Assessment Highlights ERO Enterprise Collaboration, Innovation, and Improved Grid Performance
  - 2024 Performance Assessment
- NERC Publishes FERC Order No. 901 Milestone 2 Summary
  - Milestone 2 Summary
- ERO Enterprise Joint IROL Activity Report
  - IROL Activity Report

# NERC Announcement

## Industry Workshop

- 2024 Electromagnetic Transient Simulation Workshop at ORNL – Knoxville TN
  - August 12 -13, 2024 08:00 a.m. – 3:00 p.m. Eastern
    - Registration

# ReliabilityFirst Announcement

ReliabilityFirst (RF)

- Technical Talks with RF
  - August 19, 2024 2:00 p.m. – 3:30 p.m.
  - September 16, 2024 2:00 p.m. – 3:30 p.m.

# Contact

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