TEXAS RE

October 2025 NERC Activities Spotlight

NSRF Meeting
Mark Henry

October 23, 2025

NERC Standards Development Update for FERC Order 901

Milestone 2

- PRC-028-1 RSAW was approved in March
- FERC approved PRC-029-1 on July 24, 2025
- Standards Committee approved PRC-029-1 RSAW on October 16

Milestone 3

Project 2020-06 Verification of Models and Data for Generators

- Met quorum and approval October 10; next step, final ballot
- MOD-026 Verification of Dynamic Models & Data

Project 2021-01 System Model Validation with IBRs

- Final ballot not required, (94% approval in second ballot)
- MOD-033-3 Steady-State and Dynamic System Model Validation

Project 2022-02 Uniform Modeling Framework for IBR

- Final ballots passed October 3
- Standards will be sent to NERC Board, then FERC
- MOD-032-2 – Data for Power System Modeling and Analysis
- IRO-010-6 – Reliability Coordinator Data & Information Specification & Collection
- TOP-003-8 – Transmission Operator and Balancing Authority Data & Information Specification & Collection Implementation

Milestone 4

- SARS posted for comments August 28-October 10; drafting team nominations open until September 15
  - Project 2025-03 Operational Studies
  - Project 2025-04 901 Planning Studies

FERC Order 909 and 909-A

Approves PRC-024-4 (Frequency and Voltage Protection Settings for Synchronous Generators, Type 1/2 Wind Resources, and Synchronous Condensers), PRC-029-1 (Frequency and Voltage Ride-through Requirements for IBRs), and definition of "ride-through."

Directs NERC, within 12 months, to determine through its Standards process whether and how to account for:

- Equipment limitations of HVDC-connected IBRs with choppers (which may physically prevent them from fully complying with the ride-through provisions of the standard), and
- Long lead time between adopting IBR design specifications and placing IBRs in service

Directs NERC to report to FERC in 18 months on reliability impacts of PRC-029-1, R4 exemption process (including number of exemptions requested, and number granted with reasons for exemptions).

NERC hosts a webinar November 5 to discuss FERC Order 909 directives

Other NERC Activity Related to IBRs

Standard Project 2022-04 EMT Modeling. Formal comment period and initial ballot October 1 – November 21 (extended) for FAC-002-5 Facility Interconnection Studies and Implementation Plan. Ballot pool forming until November 6.

Standard Project 2023-01 EOP-004 IBR Event Reporting has scheduled drafting team meetings in October and still plans to conduct a formal ballot and comment before end of 2025.

Category 2 GO/GOP IBR Standards Applicability

New Category 2 GO/GOP registrations for IBR entities connected to transmission at or above 60kV with capacity 20 MVA or greater will be effective May 15, 2026. These Standards have requirements effective at start of registration or in the first year afterwards:

IBR REGISTRATION INITIATIVE

- BAL-001-TRE
- IRO-010-5
- MOD-032-1
- PRC-012-2
- PRC-017-1
- TOP-003-6.1
- VAR-001-5
- VAR-002-4.1

- PRC-028-1 (July 1, 2026)
  - Phased Implementation - 100% compliance by January 1, 2030
- PRC-029-1 (January 1, 2027)
  - Performance-based elements (R1-R3) dates depend on PRC-028
- PRC-030-1 (January 1, 2027)

Future Standards Development Projects for Cat 2 GO/GOP IBR

November 2026

- Planning and operation studies for registered IBRs, “unregistered IBRs,” and IBR DERs in the aggregate
- Goal of identifying Standards by Q3 2025

Standards that will need to be modified to be applicable to Category 2 GOs and GOPs: **Standards Compliance Dates for Generator Owners & Generator Operators**

CIP Standards	COM-001 COM-002	EOP-004 EOP-005 EOP-012	FAC-008	IRO-001	MOD-025 MOD-027	PER-005 PER-006	PRC-002 PRC-005 PRC-019 PRC-023 PRC-024 PRC-025 PRC-026 PRC-027	TOP-001	TPL-007

IBR Commissioning Guidelines

Posted for Public Comment September 22- November 6

Recommendations

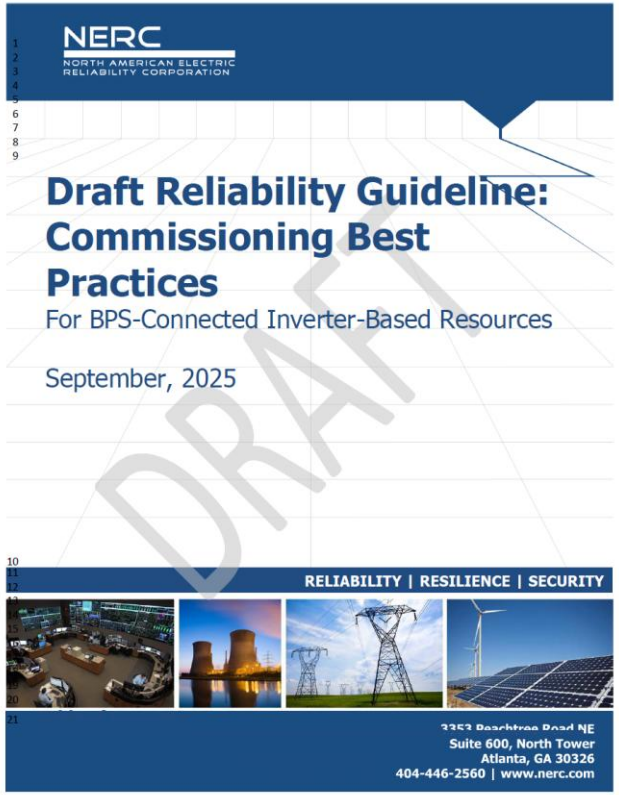
Model to Field Parameter Mapping, Verification, and Validation: Coordination and communication between OEMs, GO/GOPs, and Transmission Planners and Operators

Commissioning Test Procedures and Checklists: For relay functional testing and coordination (PRC-027), SCADA and ancillary system commissioning, site acceptance tests/data collection (MOD 25, 26, & 27)

Lessons Learned: Track and apply to future interconnections

Plant Monitoring and Continuous Performance Validation Systems: To ensure compliance with PRC-028, PRC-030, and VAR-002

GUIDELINES are developed by NERC technical stakeholder groups. Recommendations represent wisdom of the industry but are not mandatory. GUIDANCE and PRACTICE GUIDES focus on Reliability Standards.

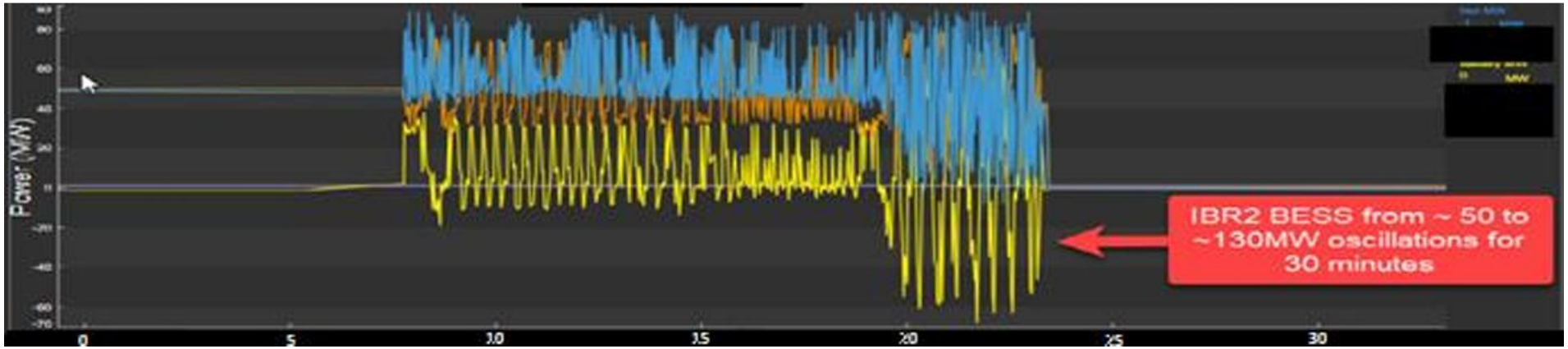


Lessons Learned from NERC Events Analysis Subcommittee

These are anonymized experiences that registered entities share for the betterment of the industry on a voluntary basis, aimed at avoiding recurrence of issues.

LL20250901 IBR Controls Oscillation Events

- Background: Two hybrid (battery + photovoltaic) sites experienced controller algorithm issues during commissioning, resulting in two IBR site batteries creating interconnection-wide, “oscillations.”
- Corrective actions: Utility operators created operational procedures to address oscillations and are developing engineering processes to detect and notify appropriate personnel. More rigorous controller integration evaluations such as, “hardware in the loop” testing for new interconnects with better IBR owner engagement and communication also are in the works.



EOP-012-3 Related

FERC Approval of EOP-012-3 on September 18 requires biennial NERC follow-up on Generator Cold Weather Constraints:

- Anonymized data on received and approved GO declarations by Region
- Narrative on RC/TOP notification by GO PINs
- Reliability impacts of extending Corrective Action Plans to 36 months
- Regional approval process consistency

As noted during Texas RE's 2024 Winter Weatherization Workshop (David Kezell's presentation), state weatherization rules (16 TAC 25.55) and NERC's Reliability Standard differ in details, dates, and processes. Minimum operating temperature thresholds and times under R1 and R2 are one example.

NERC reported to FERC on its Section 1600 Cold Weather Data Request on ability of generation to operate ECWT as well as performance during Winter 2024-25. In Texas RE:

- 126,371 MWs (97%) reported as operable at calculated ECWT
- 97% had ECWT below 32 degrees Fahrenheit
- 2,369 MWs were under a Corrective Action Plan
- Constraints were reported by 44 units (7,735 MWs)

Figure 2.1: ECWT by Plant and Temperature Range


Questions?
information@texasre.org
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Ensuring electric reliability for Texans