



TEXAS RE

August 2026 NERC Update

ERCOT IBRWG

**Mark Henry
August 17, 2026**



NERC Standards Development Update for FERC Order 901

Public

Public

Milestone 2 – Approved, added FERC directives

- PRC-028-1, PRC-029-1, and PRC-030-1

[Project 2025-05](#) – Ride-through Revisions PRC-029-2

- Version and Implementation Plan passed final Ballot on August 7
- Compliance Monitoring and Enforcement Program (CMEP) Practice Guide: [PRC-029-1 Enforcement Discretion](#) posted on August 10. *Implementation of Frequency and Voltage Ride-through Requirements for IBRs* still in draft.

Milestone 3 – Approved by FERC in February 2026

[Project 2020-06](#) – Verification of Models and Data for Generators

- [RSAW](#) posted for MOD-026-2

[Project 2021-01](#) – System Model Validation with IBRs

- [RSAW](#) posted for MOD-033-3

[Project 2022-02](#) – Uniform Modeling Framework for IBR

- RSAWS still in draft: MOD-032-2, TOP-003-8, IRO-010-6

Small Group Advisory Sessions (SGAS) on IBR-Related Standards Effective in 2026 and 2027

PRC-028-1, PRC-029-1, PRC-030-1, and MOD-026-2
General Session, August 10: Recording to be Posted



Milestone 4 – Drafting underway

[Project 2025-03](#) – Order 901 Operational Studies

- Standards: TOP-003-9, FAC-011-5
- Version and Implementation Plan passed Ballot on August 7;
- Final ballot date TBD, drafting team met August 13, meets again August 18 and 20
- [Webinar Recording](#): July 28, 2026, 1:00 – 2:00 p.m.CPT

[Project 2025-04](#) – Order 901 Planning Studies

- Standards: TPL-001-6
- Final ballot passed, July 23 – headed to NERC Board



Standard Project 2022-04 EMT Modeling

- Initial ballot, October 1 – November 21, 2025, for FAC-002-5, Facility Interconnection Studies
- SDT revising FAC-002 to address comments from initial ballot. After finalizing these redlines, work on MOD-032 will begin, with planned concurrent ballots for revisions to FAC-002 and MOD-032 in September
- Drafting team met July 27, meets again on August 24, but project is ON HOLD
- Related, NERC EMTWG has [several supporting efforts](#) underway in 2026
- [2026 Workshop: Annual Electromagnetic Transient Simulation – August 19-20, Rockville, MD](#)

Standard Project 2023-01 EOP-004 IBR Event Reporting

- Approved at June NERC Board, [approved by FERC](#) on June 26
- NERC's event analysis program's threshold remains at 500 MW – but it is up for review this year



June 18th Technical Presentations:

- Eastern Wyoming and Western South Dakota Separation and Blackout due to Voltage Collapse
- Use of Frequency Domain Analysis for IBR Positive Sequence Model Validations

August 20th (12-3 Central) Agenda Technical Presentations:

- Practical Challenges with IBR Integration at Scale – Mohamed ElNozahy, Mohammed Aldawsari, Basil Bargaan
- Updates on IEEE 2800.1 and UNIFI Consortium – Andy Hoke
- Discussion - revised draft White Paper: Uniform User Interface and Internal Structure for IBR Plant EMT Models

[Join meeting](#) ID: 298 752 206 190 36 | Passcode: iu6Z2bL2

Work Plan Item #	Task Name	Task Description	Due Date
EMTWG 12	EMT Modeling and Simulation Considerations for Large Loads	Collaboration with Load Modeling Working Group and Large Load Task Force. Documents EMT modeling needs, considerations, and state of the art practices for representing large loads (data center, crypto-mining, etc.).	12/30/2026
8	Reliability Guideline: Recommended Approach to Interconnection Studies for BPS-Connected Inverter-Based Resources	Focused guidance on improving the study practices for BPS-connected inverter-based resources, particularly with increasing penetrations of these resources and the growing complexity of performing sufficient studies to ensure BPS reliability.	12/31/2026
24	Reliability Guideline: BPS-Connected IBR Commissioning Best Practices RSTC Vote on Public Comment Posting June 12	Reliability guideline to highlight best practices for commissioning BPS-connected inverter-based resources to ensure appropriate protection and controls are configured and that models and studies match actual installed operational capabilities.	4/30/2026
27	White Paper: IBR Equipment Model Validation Posted for Public Comments August 4, 2026 to September 3, 2026	Provide guidance on unit model validation practices, criteria and sample reports and templates for inverters and power plant controller models.	6/30/2026



NERC

Recommendations for OEMs, Generator Owners and Transmission Planners:

1. Commissioning Process Flow
2. Site-Specific Commissioning Plan Development
3. As-Built Installation Evaluation
4. Commissioning Tests
5. Post-Commissioning Monitoring
6. Post-Commissioning Model Validation and Verification
7. Periodic Tests and Verification
8. Special Scenarios – Complex Plant Control Architectures and Failure Modes

(Draft)

Reliability Guideline: Commissioning Best Practices

For BPS-Connected Inverter-Based Resources

June 2026

Posted for Public Comments



(Draft)

White Paper: IBR Equipment EMT Model Validation

Inverter-Based Resource Performance Subcommittee

June 2026

[Posted for Public Comments](#)

August 4, 2026 to September
3, 2026

- Chapter 1** : Fundamentals of IBR Equipment Model Validation
 - Equipment Models and Hierarchical Control.....
 - Equipment Model Validation
 - Continuous Model Validation Throughout Equipment Life
- Chapter 2** : Equipment Model Validation Tests
 - Inverter Tests
 - Power Plant Controller Tests for Equipment Model Validation
- Chapter 3** : What to Expect in Model Validation Reports.....
 - 3.1 Guidelines for IBR Equipment Documentation and Reporting
 - 3.2 Measurements for Model Validation
 - 3.3 Characteristics of Good Model vs. Measurement Comparison
- Chapter 4** : Guidance on Criteria and Engineering Judgment.....
 - 4.1 Introduction
 - 4.2 Industry Overview
 - 4.3 Understanding Sources of Errors in CHIL
 - 4.4 Error Metrics for Model Validation
 - 4.5 Defining Analysis Time Windows
 - 4.6 Quantitative Acceptance Criteria



Large Inverter Failure Modes Diagram

Public

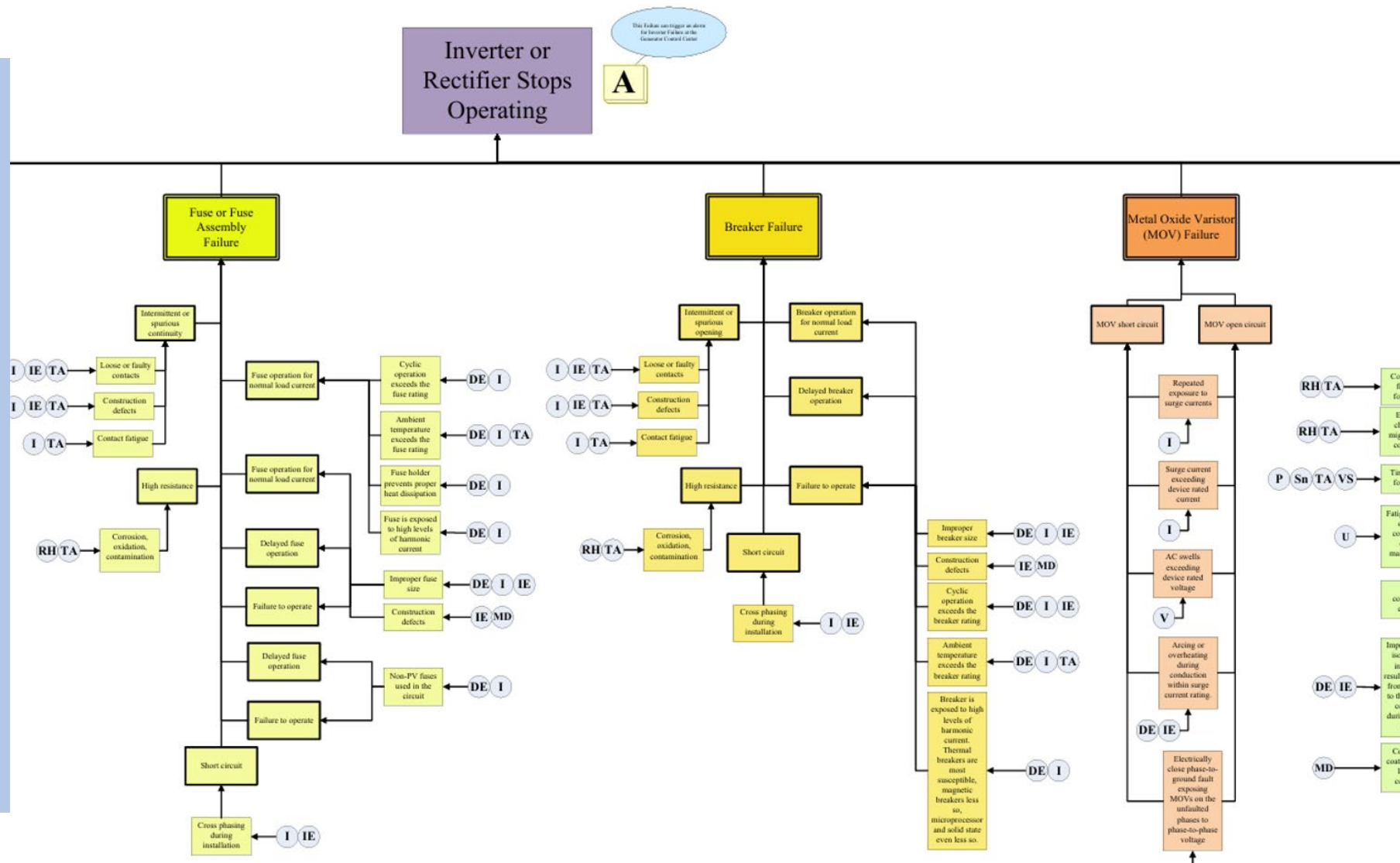
Public

Produced by industry team at NERC Event Analysis Subcommittee's Failure Modes and Mechanisms Task Force

Available on request – information@texasre.org

Many others available for:

- Medium (String) Inverters
- Wind Turbine Cold Weather
- Various Substation Components



Questions?