



**TEXAS RE**

# **FERC Order 901 Standards Update**

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**September 16, 2024**

# FERC Order 901 Summary

## IBR Data Sharing

## IBR Model Validation

## IBR Planning and Operational Studies

## IBR Performance Requirements

185 FERC ¶ 61,042  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 40

[Docket No. RM22-12-000; Order No. 901]

Reliability Standards to Address Inverter-Based Resources

(Issued October 19, 2023)

**AGENCY:** Federal Energy Regulatory Commission

**ACTION:** Final rule

**SUMMARY:** The Federal Energy Regulatory Commission (Commission) is directing the North American Electric Reliability Corporation (NERC), the Commission-certified Electric Reliability Organization, to develop new or modified Reliability Standards that address reliability gaps related to inverter-based resources in the following areas: data sharing; model validation; planning and operational studies; and performance requirements. The Commission is also directing NERC to submit to the Commission an informational filing within 90 days of the issuance of this final rule that includes a detailed, comprehensive standards development plan providing that all new or modified Reliability Standards necessary to address the inverter-based resource-related reliability gaps identified in this final rule be submitted to the Commission by November 4, 2026.

**DATES:** This rule is effective [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]

[E-1-RM22-12-000 | Federal Energy Regulatory Commission \(ferc.gov\)](https://www.ferc.gov/ferc-order/2023/10/19/ferc-order-901)



## FERC Order 901 Milestones

**1****COMPLETED  
JANUARY  
2024**

Order No. 901 Work Plan  
submission

**2****DUE  
NOVEMBER 4,  
2024**

Standards development and filing to  
address performance requirements  
and post-performance validations for  
Registered IBRs

**3****DUE  
NOVEMBER 4,  
2025**

Development and filing of Reliability  
Standards to address data sharing  
and model validation for all IBRs

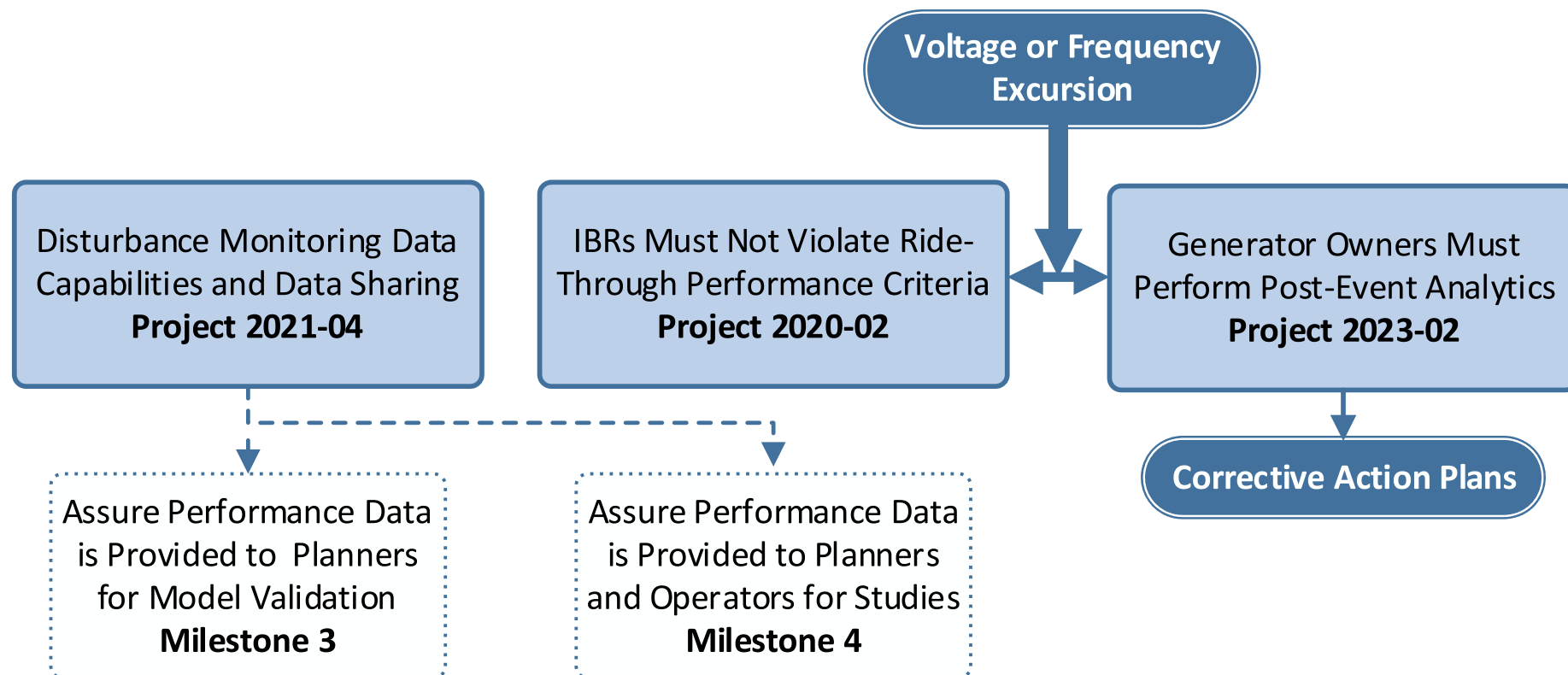
**4****DUE  
NOVEMBER 4,  
2026**

Development and filing of Reliability  
Standards to address use of  
performance data in Operational and  
Planning studies

In order to meet  
FERC's filing timeline  
for Milestone 2,  
NERC's Standards  
Committee approved  
waivers to the  
Standard Processes  
Manual at the  
December 2023  
meeting to reduce  
formal comment and  
ballot periods.



## Milestone 2 Projects



## Project 2021-04 Modifications to PRC-002—Phase II

**Separated IBR requirements from PRC-002-4**

**New Standard: PRC-028-1 Disturbance Monitoring and Reporting Requirements for Inverter-Based Resources**

- Data needed by **all** 901 related Standards
- Requires installation of equipment - phased-in through 2030
- Share data on request

**Reached consensus in August ballot**

- Removed “4.1.1 Transmission Owner that owns equipment as identified in section 4.2” from Applicability and all of the Transmission Owner references in the Requirements of Standard PRC-028-1
- Non-substantive changes for PRC-002-5 also passed ballot

**Next step – expecting a short turnaround final ballot before September 30**



## Project 2020-02 PRC-024 (Generator Ride-Through)

### New Standard: PRC-029-1 Frequency and Voltage Ride-Through Requirements for Inverter-Based Resources

- PRC-024-4 revision, which removed IBRs, continued separately and reached consensus
- PRC-029 for IBRs did not reach consensus

### In August, NERC Board invoked a non-traditional procedure to meet FERC directive (Section 321 of Rules of Procedure)

- One more effort to reach 60% ballot consensus before the 45-day window closes

### Technical conference September 4-5 in Washington, D.C. provided input

- Time and labor required for OEMs to implement new products
- Particular concern about addressing +/- 4 Hz frequency deviation
- Challenges for older equipment to evaluate, test, or upgrade

### Next step – NERC to release a revised version PRC-029-1 for abbreviated comment period

- Final ballot for PRC-024-4 revision expected before September 30



# Project 2023-02 Analysis and Mitigation of BES IBR Performance Issues

Public

## New Standard: PRC-030-1 Unexpected Inverter-Based Resource Event Mitigation

- Analysis of performance during a disturbance
- Triggers what is evaluated for ride-through performance

## 17-day formal comment period for draft 4 of PRC-030-1 is open through 8 p.m. Eastern, Friday, September 13, 2024

- Consensus reached on earlier ballot
- Minor changes from the last passing ballot based on comments, such as removal of "Elements associated with" from the Facilities section and improving clarity of Implementation Plan

## Next step – ready for abbreviated final ballot before September 30



The background of the slide features a blurred image of a Texas state flag on the left and a close-up of a wind turbine's hub and blades on the right. The blades are white with red tips. A dark blue rounded rectangle with a thin white border is centered over the image.

# Questions?

