

INVERTER-BASED RESOURCES

REGISTRATION INITIATIVE

The Inverter-Based Resource (IBR) Registration Initiative is closing a critical reliability gap by targeting unregistered IBRs connected to the bulk power system (BPS). These unregistered resources materially affect the BPS but are not subject to NERC Reliability Standards.

In response to FERC’s [directive](#), NERC is tackling the reliability risks of inverter-based technology head-on. NERC’s comprehensive [work plan](#) includes changing the NERC [Rules of Procedure](#) (ROP) to ensure IBRs that affect the bulk electric system (BES) are registered. On May 18, 2023, FERC accepted NERC’s work plan. The ROP changes to Appendix 5B introduce a new category—“Category 2” Generator Owners (GO) and Generator Operators (GOP)—entities that:

- Own or operate non-BES inverter-based generating resources with an aggregate nameplate capacity of 20 MVA or more.
- Are connected through a system designed to deliver capacity to a common point at a voltage of 60 kV or higher.

FERC [approved](#) these modifications on June 27, 2024. By May 2025, WECC and other Regional Entities will identify and notify Category 2 GOs and GOPs about the NERC registration process, compliance obligations, and next steps. The most common types of inverter-based generating resources in the WECC footprint are solar, Type 3 and Type 4 wind power plants, and battery energy storage systems. These entities are expected to register by May 2026.

This initiative ensures reliability and accountability as we become a more resilient and modern power system.

IBRs can provide essential reliability services to the BPS, but the rapid growth of IBRs presents significant risks to reliability if these resources are not integrated properly.

WECC IBR Resources

[State of the Interconnection—IBRs](#)

[Reliability in the West: Inverter-Based Resources and Ride-Through](#)

[Reliability in the West: Inverter-based Resources—Grid-Forming Technology](#)

[WECC Study Program: Grid-Forming Inverters](#)

[CAISO New Resource Implementation Stakeholder Meeting, May 2024](#)

[WECC Weekly Update—Subscribe \[here\]\(#\)](#)

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NERC IBR RESOURCES

[Quick Reference Guide: IBR Registration Initiative](#)

[IBR Registration Initiative 101](#)

[Ensuring Grid Reliability—the Inverter-Based Resources Registration Initiative](#)

[Application of the Registration Criteria for Category 2 Generator Owner and Generator Operator Inverter-Based Resources](#)

[Information to be Considered by CMEP Staff Regarding Inverter-Based Resources](#)

LATEST UPDATES



Registration

- The ERO Enterprise hosted an IBR Registration Initiative webinar for new registrants on November 13, 2024. The webinar recording is available [here](#), and the presentation slides are posted [here](#).
- The Regional Entities, as part of a broader ERO Enterprise Initiative, are identifying assets that meet the new Category 2 Generator Owner (GO) or Generator Operator (GOP) registration criteria. WECC began dispatching its Request for Information in batches starting January 24, 2025. Recipients must submit the requested information within 45 days via WECC’s [Secure Workspace](#). For any questions about this RFI or the IBR Registration Initiative, please contact registration@wecc.org.

Standards

- In response to FERC Order No. 901, NERC continues to develop active Reliability Standards projects that address several aspects of IBR planning.
- In August, the NERC Board of Trustees invoked Section 321 of the Rules of Procedure to ensure that systemic reliability issues associated with IBRs are addressed and that NERC is responsive to FERC’s Order No. 901 directives.
- On October 8, 2024, NERC’s board of trustees approved three Milestone 2 projects: Project 2020-02—Modifications to PRC-024 (Generator Ride-through), Project 2021-04—Modifications to PRC-0022, and Project 2023-02—Analysis and Mitigation of BES Inverter-Based Resource Performance Issues; and a definition for “Inverter-Based Resources” proposed by Project 2020-06—Verifications of Models and Data for Generators.

Upcoming Stakeholder Outreach and E-ISAC Engagements

- On March 5, 2025, the ERO Enterprise will host an informational webinar on the CMEP Practice Guide: Application of the Registration Criteria for Category 2 Generator Owner and Generator Operator Inverter-Based Resources.
 - [Webinar Registration](#)

Legal

- On August 26, 2024, NERC submitted a [compliance filing](#) in response to the order issued by FERC on June 27, 2024, approving revisions to the NERC Rules of Procedure. As directed by FERC, the compliance filing clarified the types of IBRs included in the term “generating resources.”
- On February 5, 2025, NERC filed a [work plan progress update](#) with FERC.

[WECC Registration](#)

[About WECC](#)

[Standards](#)