

# 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 changes to Appendix 5B in the ROP 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. 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. The ERO Enterprise has moved into Phase 3 (May 2025 to May 2026) of the Category 2 IBR Registration Initiative. Phase 3 consists of completing the registration of Category 2 Generator Owner and Generator Operator (GO/GOP) candidates and conducting specific Category 2 GO/GOP outreach and education.

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 2025](#)

[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](#)

[WECC LinkedIn](#)

### NERC IBR RESOURCES

[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

### IBR Registration Milestones

#### Phase 1: May 2023–May 2024

- Complete Rules of Procedure revisions and approvals
- Commence Category 2 GO and GOP candidate outreach and education (e.g., through trade organizations)

#### Phase 2: May 2024–May 2025

- Complete identification of Category 2 GO and GOP candidates
- Continue Category 2 GO and GOP candidate outreach and education (e.g., quarterly updates, webinars, workshops, etc.)

#### Phase 3: May 2025–May 2026

- Complete registration of Category 2 GO and GOP candidates thereafter subject to applicable NERC Reliability Standards
- Conduct specific Category 2 GO and GOP outreach and education (e.g., quarterly updates, webinars, workshops, etc.)

#### Registration

- On December 22, 2025, NERC published a new [Frequently Asked Questions](#) (FAQ) document to support Generator Owners and Generator Operators registering as Category 2 entities under the Inverter-Based Resource (IBR) Registration Initiative. The FAQ provides additional clarity on the registration process, including eligibility and jurisdiction considerations, documentation expectations, timelines, and common questions. It also supports NERC's efforts to promote a clear and consistent understanding of registration requirements as we navigate the rapidly evolving landscape of energy generation and integration.
- On July 14, 2025, NERC hosted an informational webinar that focused on the registration process for Category 2 GOs and GOPs. ([Recording](#)).
- On March 5, 2025, the ERO Enterprise hosted an informational webinar on the CMEP Practice Guide: Application of the Registration Criteria for Category 2 Generator Owner and Generator Operator Inverter-Based Resources ([Slide Presentation](#) | [Recording](#)).
- On November 13, 2024, the ERO Enterprise hosted an IBR Registration Initiative webinar for new registrants. ([Slide Presentation](#) | [Recording](#)).

#### Standards

- NERC continues to develop Reliability Standards that address multiple aspects of IBR planning in response to the final Milestone 4 directives from Order No. 901, due November 4, 2026. For more details, see [Project 2025-03 – Order No. 901 Operational Studies](#) and [Project 2025-04 – Order No. 901 Planning Studies](#) or visit our [Standards Under Development](#) page.
- NERC's [Milestone 3 Summary](#) was updated in July 2025, and NERC released the first [Standards Quarterly Outlook video](#), focused on FERC Order No. 901 and Milestone 3 Efforts on July 23, 2025.
- NERC published the [IBR Registration Initiative Reliability Standards Compliance Dates for Generator Owners & Generator Operators](#) on March 18, 2025, and is updated quarterly. The guide provides finalized and pending Reliability Standard compliance dates applicable to Category 2 registration.

#### Legal

- On October 31, 2025, NERC filed a [work plan progress update](#) with FERC.
- 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."

#### Upcoming Stakeholder Outreach and E-ISAC Information

- NERC and the Electricity Information Sharing and Analysis Center (E-ISAC) continue to actively support outreach and engagement efforts to the IBR community by participating in various targeted stakeholder engagements.
  - [NERC Calendar of Events](#)
  - [E-ISAC](#)

[WECC Registration](#)

[About WECC](#)

[Standards](#)