

Frequently Asked Questions

Proposed Revisions to NERC Rules of Procedure to Address Registration of Owners and Operators of Unregistered Inverter-based Resources

Introduction

On November 17, 2022, the Federal Energy Regulatory Commission (FERC) issued an order in Docket No. RD22-4 entitled Registration of Inverter-based Resources (i.e., IBR Order).¹ The order directed NERC to submit a work plan describing, in detail, how it planned to identify and register owners and operators of IBR that are connected to the bulk power system (BPS),² but are not currently required to register with NERC under the Bulk Electric System (BES) definition³ (referred to hereafter and in NERC's filings in the proceeding as "unregistered IBRs") that have an aggregate, material impact on the reliable operation of the BPS.⁴ The work plan was approved on May 18, 2023.⁵ NERC has worked with the Regional Entities to develop potential revisions to its Rules of Procedure (ROP) to address registration of owners and operators of unregistered IBRs that have an aggregate, material impact. These revisions were preliminarily shared with the Compliance and Certification Committee in July 2023 and posted for comment on the NERC Rules of Procedure (ROP) web page⁶ on September 13, 2023 for a 45-day comment period. This document aims to help answer frequently asked questions as stakeholders review the draft ROP revisions.

Frequently Asked Questions (FAQ)

Question: What sections of the ROP are affected by NERC's proposal?

Answer: Appendices 2, 5A, and 5B of the ROP will be changed to include two new functional entity categories: Generator Owner-IBR (GO-IBR) and Generator Operator-IBR (GOP-IBR), make conforming changes, and reduce legislative history that is no longer necessary.

Question: What did NERC's work plan propose regarding unregistered IBRs?

Answer: NERC proposed to register owners and operators of IBRs that have an aggregate nameplate capacity of greater than or equal to 20 MVA, delivering such capacity to a common point of connection at a voltage greater than or equal to 60 kV. Owners and operators of IBRs greater than

¹ See *Registration of Inverter-based Resources*, 181 FERC ¶ 61,124 (November 17, 2022): <https://www.ferc.gov/media/e-1-rd22-4-000> ("IBR Order"). The IBR Order uses the term IBR to include all generating facilities that connect to the electric power system using power electronic devices that change direct current (DC) power produced by a resource to alternating current (AC) power compatible with distribution and transmission systems. The IBR Order does not address IBR connected to the distribution system.

² The BPS is defined in the Federal Power Act (FPA) as facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof), and electric energy from generating facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy.

³ NERC's FERC-approved BES definition is a subset of the BPS and defines the scope of the Reliability Standards and the entities subject to NERC compliance; NERC, *Glossary of Terms Used in NERC Reliability Standards*, pp. 5-7, March 29, 2022.

⁴ The IBR Order focuses on unregistered IBR that may have smaller individual capacities but which, when considered together or in the aggregate, have a material impact on the reliability of the BPS.

⁵ *Order Approving Registration Work Plan*, 183 FERC ¶ 61,116 (2023).

⁶ <https://www.nerc.com/AboutNERC/Pages/Rules-of-Procedure.aspx>

75 MVA connected at 100 kV and above are already subject to registration under the existing Generator Owner (GO) and Generator Operator (GOP) Registry Criteria in the ROP.

Question: What was the technical justification behind NERC’s proposed expansion of the Registry Criteria?

Answer: As discussed in NERC’s work plan filing and updates in Docket No. RD22-4, NERC’s analysis of 2016–2021 EIA data⁷ concerning the changing resource mix determined that approximately 14% of the operational IBRs (by nameplate capacity) in 2021 (greater than 20 MVA and less than or equal to 75 MVA)⁸ were not applicable to NERC Reliability Standards. In comparison, only 3% of synchronous nameplate capacity was unregistered.⁹ Please see NERC’s filings in the proceeding for further details, as well as the *Quick Reference Guide: Inverter-Based Resource Activities*.¹⁰

Question: In the NERC ROP, will the unregistered IBR owners and operators be classified using the current GO and GOP functional entities as defined in the ROP’s Registry Criteria, respectively?

Answer: No. The GO-IBR and GOP-IBR will be two new classes or functions in the ROP as reflected in the proposed ROP revisions posting.

Question: Why didn’t NERC incorporate unregistered IBRs into the existing GO/GOP function or revise the BES Definition?

Answer: As presented in NERC’s filings in Docket No. RD22-4, NERC examined potential options to address unregistered IBRs as directed in the IBR Order and determined that creating new functional categories of GO-IBR and GOP-IBR as proposed would be the most effective and efficient approach to address registration of unregistered IBRs with an aggregate, material impact on Reliable Operation of the BPS. NERC may consider potential revisions to the BES Definition as part of thinking towards modification of Reliability Standards to address the new category of GO-IBR and GOP-IBR if approved. This would be part of a Reliability Standards project under the stakeholder processes in NERC’s *Standard Processes Manual* within Appendix 3A of the ROP.

Question: Will NERC require distributed energy resources (DER) to be registered with NERC?

Answer: No. DERs are connected to the local distribution system and are outside the scope of the IBR Order; however, NERC may evaluate DERs or aggregated DERs in the future.

Question: Will transmission facilities under 100 kV become in scope of the new Registry Criteria?

Answer: At this time, there are no plans to revise Registry Criteria in relation to owners/operators of lines under 100 kV.

⁷ NERC used the Energy Information Administration generator data as reported through the EIA-860 form requirements.

<https://www.eia.gov/electricity/data/eia860/>

⁸ The analysis and work plan reference nameplate capacity as “MW” and for registration, nameplate capacity is defined in “MVA.”

⁹ Registered synchronous capacity includes units greater than 20 MVA and plants greater than 75 MVA in aggregate.

¹⁰ https://www.nerc.com/pa/Documents/IBR_Quick%20Reference%20Guide.pdf

Question: When will a list of potential applicable NERC Reliability Standards be made available to the candidates who would be subject to registration as a GO-IBR and GOP-IBR if the ROP revisions were approved?

Answer: According to the work plan filed with regulators, NERC plans to have an initial list of applicable Reliability Standards available by the end of 2023. However, NERC will continue review this matter in 2024.

Question: When will candidates for registration be required to register?

Answer: According to the work plan filed in Docket No. RD22-4 and the IBR Order, NERC is required to identify candidates for registration under the revised rules by May 2024, and candidates must be registered by May 2024, and subject to applicable Reliability Standards by May 2026. NERC and the Regional Entities will help during the transition as entities evaluate whether they fall within the scope of any revised Registry Criteria or GO-IBR/GOP-IBR function.

Question: When will candidates who meet the criteria be subject to the NERC Reliability Standards and required to be compliant with those standards and their requirements?

Answer: See answer immediately above.

Question: Why must Reliability Standards be modified as a later phase of activities?

Answer: Most existing Reliability Standards do not include the new functions of GO-IBR and GOP-IBR that are proposed for inclusion in the NERC ROP. Most Reliability Standards would need to be revised to add the new function(s). Other changes may be appropriate. This process will occur through the stakeholder processes applicable under the *Standard Processes Manual*¹¹ within Appendix 3A of the NERC ROP.

Question: How will the new functions become aware of NERC Registration and Reliability Standards activities?

Answer: NERC has various distribution lists depending on a candidate's area of interest. To join a list, please email [Levetra Pitts](mailto:Levetra.Pitts@nerc.com) and request to be added to the NERC GO-IBR, GOP-IBR, and/or Standards lists.

Question: How do the Regional Entities fit into the picture of NERC and registration?

Answer: NERC delegates certain of its statutory functions to Regional Entities under FERC-approved Regional Delegation Agreements. At a practical level, the Regional Entity is the organization that has the most direct relationship with registered entities and candidates for registration.

Question: How will I know which Regional Entity applies to my company and facilities?

Answer: The applicable Regional Entity is based on the physical location where the IBR connects to the BPS. The owner who provides the BPS interconnection to the IBR facility can provide candidates with applicable Regional Entity information. Note that some candidates may have facilities in multiple Regional Entity footprints. The candidate's small generator interconnection agreement

¹¹ https://www.nerc.com/comm/SC/Documents/Appendix_3A_StandardsProcessesManual.pdf

(SGIA) has this information listed as the Transmission Provider. NERC and the Regional Entities also plan to work with entities throughout 2024 (and thereafter to the extent necessary) as entities evaluate whether GO-IBR and GOP-IBR Registry Criteria would apply and to determine the appropriate Regional Entity.

Question: How does a candidate start the registration process?

Answer: NERC will be working through trade organizations and other avenues to inform potential candidates during the remainder of 2023. Starting in 2024, there will also be outreach to provide engagement opportunities and guide candidates through the registration process. Please see the *ERO Enterprise 101 Informational Package*¹² meanwhile for more detail regarding the ERO Enterprise.

Question: What is the Electricity Information Sharing and Analysis Center (E-ISAC) and how does it benefit my organization?

Answer: The E-ISAC reduces risk to the electricity industry across North America by providing quality information and analysis on cyber and physical threats. E-ISAC membership allows access to a secure Portal which serves as the central information hub for accessing and sharing critical security information. Through the Portal, users can voluntarily post and exchange information about cyber and physical incidents with full control of how they share it. E-ISAC members also have access to a 24/7 Watch, cyber and physical security products, reports, and white papers, and as well as webinars, industry engagement programs, grid security exercises, and conferences. Registered Entities are expected to join the E-ISAC as it is an extremely important tool for risk mitigation and ensuring the reliability, resilience, and security of the BPS. For more information about E-ISAC membership, please visit the E-ISAC Website¹³ or contact the E-ISAC via [email](#).

¹² <https://www.nerc.com/pa/comp/RegistrationReferenceDocsDL/ERO%20Enterprise%20101%20Informational%20Package.pdf>

¹³ <https://www.eisac.com/s/>