

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

North American Electric Reliability Corporation)
)

Docket No. RD22-4-001

**NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION
INVERTER BASED RESOURCES WORK PLAN PROGRESS UPDATE**

On May 18, 2023, the Federal Energy Regulatory Commission (“Commission”), issued an order (“Order”)¹ approving the North American Electric Reliability Corporation (“NERC”) Work Plan filed on February 15, 2023, as amended on March 13, 2023,² to address registration of Inverter-Based Resources (“IBRs”) that are connected to the Bulk-Power System (“BPS”) but not within NERC’s definition of the bulk electric system (“BES”) (referred to hereafter as “non-BES IBRs”).³ As directed in the Order and prior IBR Order,⁴ NERC hereby submits the first progress update on activities by the ERO Enterprise (NERC and the Regional Entities⁵) to execute the Work Plan and initiate revisions to the NERC Registry Criteria⁶ to register owners and operators of non-BES IBRs that, in the aggregate, have a material impact on BPS reliability. NERC plans to post proposed Registry Criteria revisions on the NERC website for a 45-day formal comment in early September.

¹ *Order Approving Registration Work Plan*, 183 FERC ¶ 61,116 (2023) [hereinafter *Order*]; and *Registration of Inverter-Based Resources*, 181 FERC ¶ 61,124 (2022) [hereinafter *IBR Order*] (directing the Work Plan).

² *N. Am. Elec. Reliability Corp.*, Docket No. RD22-4-001 (Feb. 15, 2023) [hereinafter *Work Plan Filing*].

³ See, NERC, Glossary of Terms Used in NERC Reliability Standards, (updated Mar. 29, 2022), https://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary_of_Terms.pdf (NERC Glossary). The BES definition is a subset of the BPS. Reliability Standards support an adequate level of reliability of the BES. *Revisions to Elec. Reliability Org. Definition of Bulk Elec. Sys. & Rules of Proc.*, Order No. 773, 141 FERC ¶ 61,236 (2012), *order on reh’g*, Order No. 773-A, 143 FERC ¶ 61,053 (2013), *rev’d sub nom. People of the State of N.Y. v. FERC*, 783 F.3d 946 (2d Cir. 2015).

⁴ *Order* at PP 21 and 35; *IBR Order* at P 52 (directing NERC to provide Work Plan updates every 90 days detailing NERC’s progress toward identifying and registering owners and operators of non-BES IBRs).

⁵ The Regional Entities are (i) Midwest Reliability Organization (“MRO”); (ii) Northeast Power Coordinating Council, Inc. (“NPCC”); (iii) ReliabilityFirst Corporation (“ReliabilityFirst”); (iv) SERC Reliability Corporation (“SERC”); (v) Texas Reliability Entity, Inc. (“Texas RE”); and (vi) Western Electricity Coordinating Council (“WECC”).

⁶ The Registry Criteria are within NERC’s Rules of Procedure (“ROP”). Per ROP Appendices 5A and 5B, owners, operators, or users of the BPS are candidates for Registration in the NERC Compliance Registry.

I. WORK PLAN UPDATE AND PROPOSED APPROACH TO REGISTRATION

Over the past quarter, the ERO Enterprise developed initial draft revisions to its Rules of Procedure (“ROP”), in consultation with stakeholders, to ensure that the Registry Criteria addresses owners and operators of non-BES IBRs. The draft revisions build upon the parameters filed in NERC’s original Work Plan, by implementing additional, narrowing criteria, based on consideration of stakeholder comments and ERO Enterprise evaluation of which non-BES IBRs are material in aggregate to reliability of the BPS. In particular, the draft ROP revisions would apply to non-BES IBRs that (1) aggregates nameplate capacity to 20 MVA and greater connected at a common point of connection; and (2) connected at a voltage of 60 kV and above.⁷ NERC appreciates this opportunity to file this update in advance of the formal posting on NERC’s website in September.⁸

A. Draft Proposed Revisions to NERC’s ROP to Register non-BES IBRs

The following *underlined language in italics* provides a preview of the ROP Registry Criteria revisions that NERC plans to post in early September. The ROP posting would also include conforming and clean up edits. This excerpt is not intended to be comprehensive and is included to provide more detail on the direction of ROP revisions to facilitate collaboration and feedback.

Appendix 5B, Section II of the Registry Criteria:

Generator Owner: Entity that owns and maintains generating Facility(ies).

Note: As provided in Section IV below, an entity that owns and maintains non-BES inverter-based resource(s) shall be registered a Generator Owner – Inverter Based Resource (GO-IBR).

⁷ Owners and operators of BES IBRs would remain subject to registration as GO and GOPs.

⁸ There may be slight differences to the version posted for public comment in September. The version included in this Work Plan update reflect the version as of the filing date.

Generator Operator: The entity that operates generating Facility(ies) and performs the functions of supplying energy and Interconnected Operations Services.

Note: As provided in Section IV below, an entity that operates non-BES inverter-based resource(s) shall be registered as a Generator Operator – Inverter Based Resource (GOP-IBR).

Appendix 5B, Section IV of the Registry Criteria:

IV: An entity identified in the Notes to Generator Owner or Generator Operator Section II above shall be included in the Compliance Registry as a Generator Owner-Inverter-Based Resource (GO-IBR) and/or Generator Operator-Inverter-Based Resource (GOP-IBR) if the entity owns, maintains, or operates non-BES inverter based generating resources 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.

Footnote: Owners and operators of IBRs that meet the BES threshold shall be registered as a GO or GOP, as applicable. Entities that own and operate both BES and non-BES IBRs will be registered as both a GO and GO-IBR and/or a GOP and GOP-IBR, as applicable.

This structure would reflect GO-IBRs and GOP-IBRs as a new registered function according to tailored criteria based on the ERO Enterprise’s assessment of the impact of non-BES IBRs on BPS reliability. This structure would also be similar to NERC’s Appendix 5B Registry Criteria for: (i) Distribution Providers responsible for certain systems or programs designed, installed, and operated for the protection of the BES, and (ii) UFLS-Only Distribution Providers.⁹

B. Criteria Developed Based on Analysis and Stakeholder Feedback

Since the Commission issued the IBR Order, the ERO Enterprise has been working to ensure industry stakeholders are aware and engaged in the initiative to register non-BES IBRs. More details are provided below regarding criteria that were added to the original Work Plan

⁹ At this stage, the ERO Enterprise has determined that having two separate functions within the existing GO/GOP framework would be a more effective and efficient approach to address non-BES IBRs, rather than pursuing a single function or broader reorganization of the Registry Criteria. It would also be more consistent with the existing UFLS Distribution Provider structure.

parameters after ERO Enterprise review of comments in response to the Work Plan Filing,¹⁰ and other industry stakeholders' feedback. NERC solicited stakeholder feedback on its initial Work Plan parameters by collecting feedback from stakeholders during the regular course of business and through an informal comment process with the Compliance and Certification Committee ("CCC") and its Organization Registration and Certification Subcommittee ("ORCS"). NERC also held a conversation with the Solar Energy Industries Association ("SEIA") on August 3, 2023 and requested feedback. In particular, NERC presented earlier draft ROP revisions to the CCC and its ORCS on July 19, 2023 followed by an informal comment period. The ERO Enterprise is continuing to collect stakeholder feedback and looks forward to formal comments emailed to NERC after the posting on NERC's website in September.

As reflected in the excerpts copied in Section I, immediately above, the ERO Enterprise draft plans to introduce two additional, narrowing, criteria to what should constitute an owner or operator of non-BES IBRs eligible for registration. These criteria would ensure that the new Registry Criteria only applies to owners and operators of non-BES IBRs with (1) nameplate capacity that aggregates to 20 MVA and greater that (i) is connected at a common point of connection; and (2) is connected at a voltage of 60 kV and above. This section provides NERC's rationale behind these narrowing criteria.

¹⁰ *Order* at P 21 ("California Independent System Operator Corporation, Independent Market Monitor for PJM, and Old Dominion Electric Cooperative filed timely motions to intervene. American Clean Power Association and Solar Energy Industries Association (collectively, ACP and SEIA); American Public Power Association, Edison Electric Institute, the Large Public Power Council, and the Transmission Access Policy Study Group (collectively, Indicated Joint Trade Associations); Arizona Public Service Company (APS); National Rural Electric Cooperative Association (NRECA); and Pine Gate Renewables, LLC (Pine Gate) filed timely motions to intervene and comment.").

1. Aggregate Nameplate Capacity of Greater Than or Equal To 20 MVA at the Common Point of Connection

In comments on NERC’s Work Plan Filing and during stakeholder consultation, industry representatives have commented that NERC should “consider and address how to ‘aggregate’ separate facilities for purposes of applying the new rule.”¹¹ In response to such comments, NERC’s draft ROP revisions would include clarifying language that builds upon the earlier filed Work Plan parameters to specify that GO-IBR and GOP-IBR capacity must aggregate “at a common point of connection”¹² at greater than or equal to 60 kV.¹³ This will address industry recommendations and concerns¹⁴ of how an entity would meet the 20 MVA aggregate nameplate capacity threshold. Aggregation of capacity at a common point of connection would be consistent with how aggregate nameplate capacity is determined for dispersed power producing resources that fall within Inclusion I4 of the BES Definition.¹⁵

2. Capacity Connected at 60 KV and Above

Based on stakeholder feedback in this proceeding,¹⁶ informal collaboration, and feedback through the CCC, ORCS, and SEIA, NERC plans to propose the GO-IBR and GOP-IBR Registry

¹¹ NRECA Comments at 10.

¹² NERC’s Work Plan filing explains the rationale behind the 20 MVA.

¹³ Ownership would not be a condition of aggregation.

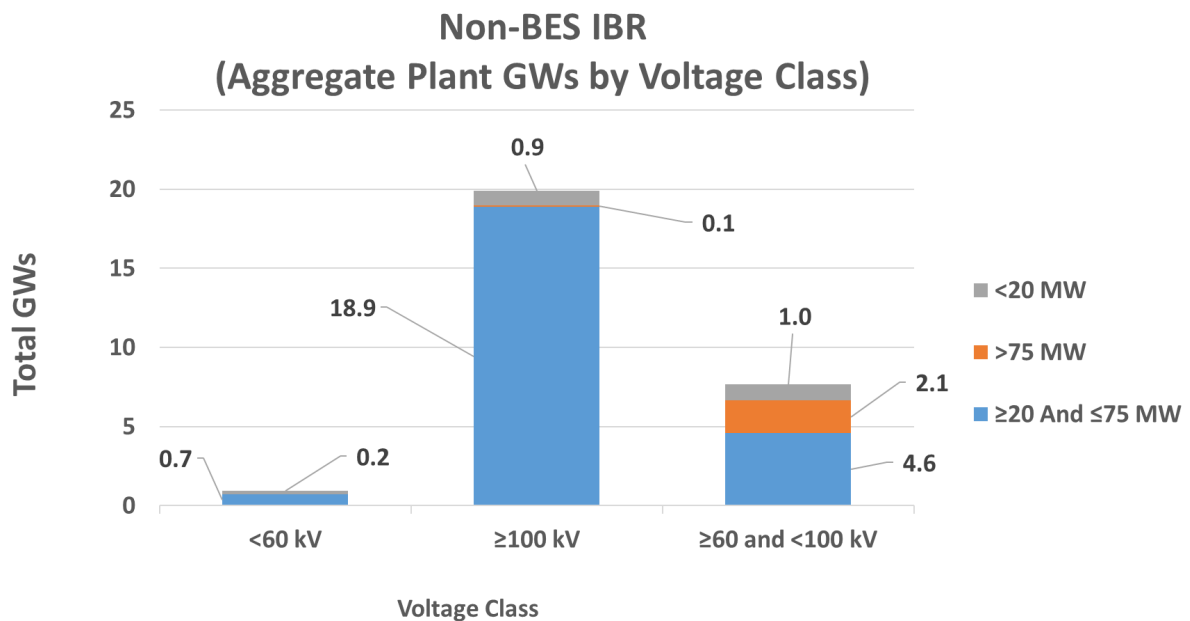
¹⁴ NRECA Comments at 10 (“NERC and stakeholders will be able to consider and address how to “aggregate” separate facilities for purposes of applying the new rule. This would include determining whether any geographical or other limits should apply to the aggregation and whether the nameplate capacity refers to the capacity of the generator or the inverter.”).

¹⁵ *E.g.* NERC is continuing to evaluate the BES Definition and Reliability Standards generally, consistent with discussion in Docket No. RM22-12-000. NERC ROP revisions to the Registry Criteria would pertain to which users, owners, and operators of the BPS are candidates for registration; NERC Glossary of Terms – Bulk Electric System I4 (Dispersed power producing resources that aggregate to a total capacity greater than 75 MVA (gross nameplate rating), and that are connected through a system designed primarily for delivering such capacity to a common point of connection at a voltage of 100 kV or above. Thus, the facilities designated as BES are: a) The individual resources, and b) The system designed primarily for delivering capacity from the point where those resources aggregate to greater than 75 MVA to a common point of connection at a voltage of 100 kV or above.)

¹⁶ *E.g.* NRECA Comments at 10 (“NERC and stakeholders will be able to address how NERC’s proposed registration function criteria for GO-IBRs interconnected at voltages less than 100 kV will be designed.”); Indicated Joint Trade Associations Comments at 3 (“But the Work Plan’s description of the GO-IBR category is not limited to BPS-connected IBRs... any new GO-IBR registration category can and should be framed in a way that does not inadvertently sweep in large numbers of IBR-DERs.”).

Criteria applicable to owners and operators of non-BES IBRs 20 MVA aggregate nameplate capacity connected at 60 kV and above. ERO Enterprise analysis determined that a 60 kV threshold was appropriate, because it would ensure that non-BES IBRs which are material to BES reliability are subject to registration while excluding IBRs that are a part of the distribution system (“IBR-DER”).

The following graph demonstrates that the majority of impactful non-BES IBRs which were analyzed by the ERO Enterprise are connected at a voltage of 60 kV and above.¹⁷

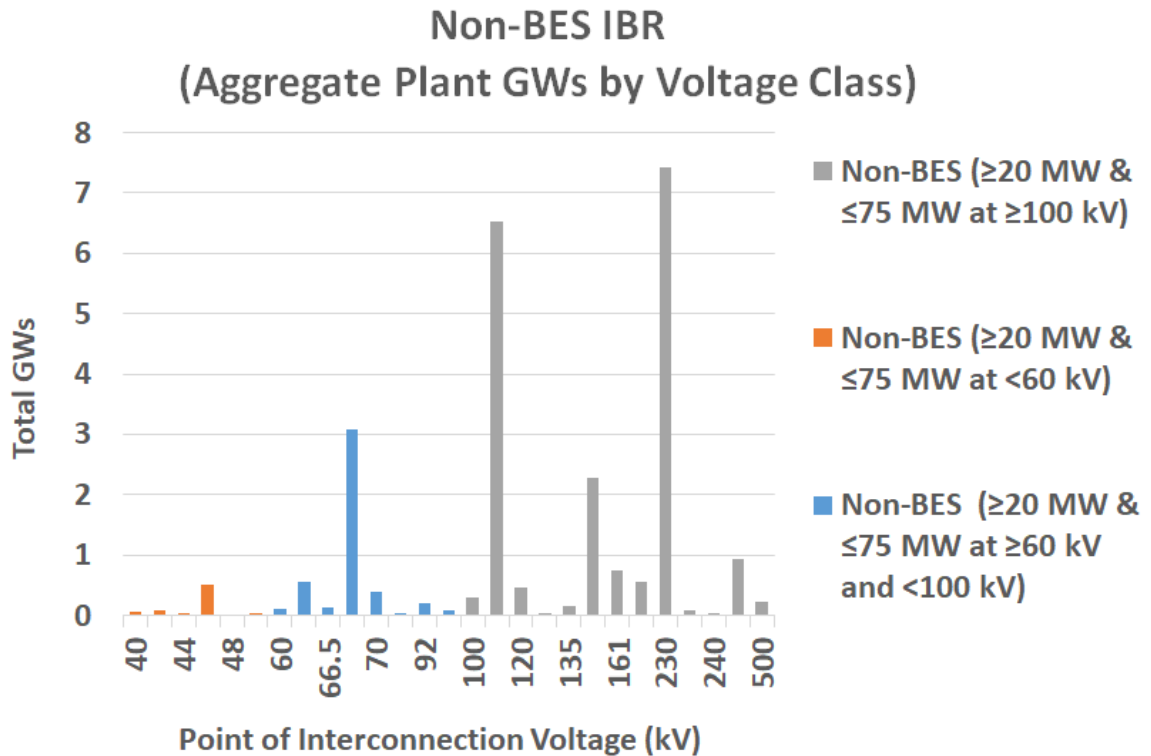


NERC acknowledges that instituting a 60 kV threshold would slightly reduce the overall percentage of unregistered IBRs that will meet GO-IBR criteria.¹⁸

¹⁷ The data in the graphs are based on publicly available Form 860 information reported to the U.S. Energy Information Administration. This data was analyzed to identify historical BPS resource capacity trends from individual generation units as well as aggregate plant data up to and including year 2021.

¹⁸ E.g. *Work Plan Filing* at 7; NERC, *Analysis of the Changing Mix of Generating Resources on the BPS*, in *Work Plan Filing* attach. 2, at 6.

Establishing the voltage threshold to greater than or equal to 60 kV¹⁹ would reduce the non-BES IBR capacity that the ERO Enterprise seeks to address through this proceeding by 0.9 GW from 14% to 13.5%. Thus, when this 13.5% of additional IBR capacity is added to the 84% that is subject to applicable Reliability Standards at present, NERC’s proposed criteria would still result in approximately 97.5% of IBRs²⁰ becoming subject to NERC Registration and compliance with applicable Reliability Standards.²¹ On balance, this appears a reasonable adjustment to avoid inadvertent registration of IBR-DERs.



¹⁹ The original proposal in the Work Plan Filing proposed did not establish a low voltage threshold for those non-BES IBRs connected at less than 100 kV.

²⁰ *Analysis of the Changing Mix of Generating Resources on the BPS* at 8 (showing that the original proposal without low voltage threshold would have resulted in 98% IBRs being registered).

²¹ As noted above, Reliability Standards are being evaluated under a separate proceeding. Docket No. RM22-12-000.

As a result, introducing a 60 kV threshold for non-BES IBRs connected at less than 100 kV, as part of the Registry Criteria for GO-IBRs and GOP-IBRs, would meet the Commission's directive to register owners and operators of non-BES IBRs that in the aggregate, materially impact the reliable operation of the BPS.

II. CONCLUSION

The ERO Enterprise looks forward to continuing to work with industry stakeholders to (i) develop Registry Criteria that address owners and operators of non-BES IBRs, and (ii) later integrate new registrants subject to Commission approval of the eventual ROP filing in this proceeding. As stated above, NERC also plans to post the proposed ROP revisions to the NERC website for a 45-day formal comment period in September. The attached, updated, Work Plan reflects the ERO Enterprise's intended program for preparing, filing, and implementing ROP revisions to address registration of the owners and operators of non-BES IBRs. (**Attachment 1**) The attached Communication Plan filed with the original Work Plan reflects the ERO Enterprise's program for continued stakeholder coordination. (**Attachment 2**)²² For the reasons set forth above, NERC respectfully requests that the Commission accept this Work Plan update.

²² This attachment is the same Communication Plan included in the Work Plan Filing.

Respectfully submitted,

/s/ Candice Castaneda

Candice Castaneda

Senior Counsel

Alain Rigaud

Associate Counsel

North American Electric Reliability Corporation

1401 H Street, N.W., Suite 410

Washington, D.C. 20005

202-400-3000

candice.castaneda@nerc.net

alain.rigaud@nerc.net

Counsel for the North American Electric Reliability Corporation

Date: August 16, 2023

Attachment 1

NERC Work Plan Progress Update
August 16, 2023

Registration of Inverter Based Resources – Docket No. RD22-4-000
NERC Work Plan Progress Update
August 16, 2023

On November 17, 2022, in order to respond to concerns regarding the reliability impacts from inverter-based resources (IBRs)¹ on the Bulk Power System² (BPS), the Federal Energy Regulatory Commission (FERC or Commission) directed the North American Electric Reliability Corporation (NERC) to submit a work plan to address registration of IBRs.³ Regulatory consideration differs based on whether the IBRs meet NERC’s Bulk Electric System (BES) definition and are registered with NERC for compliance purposes (registered IBRs), whether the IBRs are connected directly to the BPS but are not registered with NERC (unregistered IBRs), or whether the IBRs are distributed energy resources (i.e. connected to the distribution system) (IBR-DER). The Commission directed NERC to file a Work Plan within 90 days detailing how the ERO Enterprise plans to identify and register owners and operators of unregistered IBRs.

The Commission stated that the work plan should include the following:

- Explanation of how NERC will modify its processes to address unregistered IBRs (whether by working with stakeholders to change the BES definition, a change to its registration program, or some other solution) within 12 months of approval of the work plan, and
- Implementation milestones ensuring that owners and operators meeting the new registration criteria are identified within 24 months of the approval date of the work plan, and
- Implementation milestones ensuring that owners and operators meeting the new registration criteria are registered and thereby required to comply with applicable Reliability Standards within 36 months of the approval date of the work plan.

On May 18, 2023, the Commission accepted NERC’s Work Plan and directed NERC to provide updates every 90 days detailing progress to date. This document reflects the updated Work Plan.

Section I. Introduction

NERC recognizes that the landscape of the electric power system across North America is experiencing a substantial transformation. Conventional generation fueled in large part by coal, nuclear, and, in recent years, natural gas turbines are being rapidly replaced by decentralized generation consisting of IBRs. These energy resources are primarily battery energy storage systems (BESS), solar photovoltaic (i.e., solar PV), and wind that are installed on the BPS and distribution systems. As stated in NERC’s recent document

¹ The Order states “This order uses the term IBRs 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. This order does not address IBRs connected to the distribution system.”

² The Bulk Power System (BPS) is defined in the Glossary of Terms Used in NERC Reliability Standards as: (A) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and (B) electric energy from generation facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy. (Note that the terms “Bulk-Power System” or “Bulk Power System” shall have the same meaning.)

³ *Registration of Inverter-Based Resources*, 181 FERC ¶ 61,124 (2022) [hereinafter *IBR Order*].

Inverter-Based Resource Strategy Ensuring Reliability of the Bulk Power System with Increased Levels of BPS-Connected IBRs⁴ (IBR strategy), “[t]he rapid interconnection of bulk power system (BPS)-connected inverter-based resources (IBR) is the most significant driver of grid transformation and poses a high risk to BPS reliability.”

Evidence examined by NERC and the six Regional Entities (together the ERO Enterprise) over the 2017 – 2021 five-year timeframe reveals that the total capacity supplied by fossil-fired and nuclear resources on the BPS has decreased by 29 GW and the total generation supplied by IBRs has increased by 73 GW. IBRs accounted for over 15% of total resource capacity on the BPS in 2021 but only 84% of these IBRs are registered with NERC. Further, the large majority of the non-registered IBR capacity on the BPS is located at plants 20 MW and greater – approx. 24.3 GW (2021), and this total is expected to continue its rapid increase in the foreseeable future.⁵

As recognized by the IBR Order, this transformation has created a present and ongoing risk to the Reliable Operation of the BES. As a result, the ERO Enterprise plans to develop revisions to its Registration Criteria as reflected in Sections 500, Appendix 5A, and Appendix 5B of the NERC Rules of Procedure (ROP) under the milestones set forth below.

Section II. Proposed Registration Criteria Revisions for BPS Connected Generator Owners

NERC plans to modify its process to encompass presently unregistered IBRs through changes to its registration program. In particular, NERC proposes to revise its Registry Criteria under the ROP by including a new function comprised by owners of unregistered IBRs interconnected to the BPS as these resources and their owners have a material aggregate impact on reliability of the BES. Proposed revisions to the Registry Criteria would be developed through the process applicable under the ROP, NERC Bylaws, and applicable Commission regulation.

The following underlined language in italics provide a preview of the ROP Registry Criteria revisions that NERC plans to post in early September. Conforming and clean up edits accompanying such revisions would be presented in the ROP posting in NERC’s website. This excerpt is not intended to be comprehensive, and is included to provide more detail on the direction of ROP revisions to facilitate collaboration and feedback.

Appendix 5B, Section II of the Registry Criteria

Generator Owner: Entity that owns and maintains generating Facility(ies).

Note: As provided in Section IV below, an entity that owns and maintains non-BES inverter-based resource(s) shall be registered a Generator Owner – Inverter Based Resource (GO-IBR).

Generator Operator: The entity that operates generating Facility(ies)and performs the functions of supplying energy and Interconnected Operations Services.

⁴ Available at: https://www.nerc.com/comm/Documents/NERC_IBR_Strategy.pdf

⁵ To help avoid potential confusion, NERC clarifies that in referring to IBRs, this Work Plan does not include distributed energy resources. Rather it only includes IBRs that are interconnected to the BPS. Nonetheless, NERC is reviewing potential impacts associated with DERs on the BPS.

Note: As provided in Section IV below, an entity that operates non-BES inverter-based resource(s) shall be registered as a Generator Operator – Inverter Based Resource (GOP-IBR).

Appendix 5B, Section IV of the Registry Criteria:

IV: An entity identified in the Notes to Generator Owner or Generator Operator Section II above shall be included in the Compliance Registry as a Generator Owner-Inverter-Based Resource (GO-IBR) and/or Generator Operator-Inverter-Based Resource (GOP-IBR) if the entity owns, maintains, or operates non-BES inverter based generating resources 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.

Footnote: Owners and operators of IBRs that meet the BES threshold shall be registered as a GO or GOP, as applicable. Entities that own and operate both BES and non-BES IBRs will be registered as both a GO and GO-IBR and/or a GOP and GOP-IBR, as applicable.

Registering GO-IBR and GOP-IBR entities will lead to application of results-based Reliability Standards to address issues such as facility interconnection, data sharing, modeling, ride-through, and performance. As elaborated in the IBR Order, “Unregistered IBRs often have small individual generation capacities, are connected to the Bulk-Power System at less than 100 kV transmission or sub-transmission voltages, and do not meet one of the inclusions in the BES definition.”⁶ As the Commission concludes, “events and disturbances have shown that IBRs, regardless of size and transmission or sub-transmission voltage, have a material impact on Bulk-Power System reliability....until unregistered IBRs are registered, they will not be required to comply with the Reliability Standards.”⁷

Please see the accompanying transmittal for more details regarding the rationale underlying the present proposal.

Section III. Milestones to Implement Work Plan⁸

In addition to the milestones below, the ERO Enterprise will also continue to consider whether revisions to the BES Definition might also support continued reliability of the BPS as the grid transforms. NERC will update the milestones as appropriate in future update filings.

The Commission approved the work plan on May 18, 2023. Within 12 months of this date, NERC will do the following to revise its Registration Program:

TIMEFRAME	ACTIVITIES	STATUS
Month 1 (June 2023)	<ul style="list-style-type: none">• ERO Enterprise to complete review and draft proposed revisions of	<ul style="list-style-type: none">• Completed draft ROP revisions

⁶ IBR Order, at P 23. See also, *id.*, at P 32-33.

⁷ IBR Order, at P 30.

⁸ Throughout this period and as directed in the IBR Order, once the Commission approves the proposed work plan, NERC would also submit progress updates every 90 days thereafter. Please also refer to NERC’s filings in Docket No. RM22-12-000 for more information regarding matters pertaining to IBR affiliated Reliability Standards.

TIMEFRAME	ACTIVITIES	STATUS
	Section 500 and Appendices 5A and 5B of the ROP.	<ul style="list-style-type: none"> Stakeholder meeting with industry volunteers June 2, 2023.
Month 2 (July 2023)	<ul style="list-style-type: none"> ERO Enterprise to coordinate with the Organization Registration and Certification Subcommittee (ORCS) of the Compliance and Certification Committee (CCC) on proposed revisions.⁹ ERO Enterprise to present proposed revisions to the CCC 	<ul style="list-style-type: none"> Presented proposed revisions to CCC/ORCS July 19 Received comments from ORCS on proposed ROP revisions
Month 3 (August 2023)	<ul style="list-style-type: none"> ERO Enterprise to present proposed revisions to other key stakeholder organizations in North America. NERC to present proposed revisions to the MRC. NERC to file work plan update with FERC. 	<ul style="list-style-type: none"> Presented proposed revisions to SEIA leadership on August 3, 2023. File Work Plan Update August 16, 2023. Present/Discuss ROP revisions at the Board meeting.
Month 4-5 (September – October 2023)	<ul style="list-style-type: none"> ERO Enterprise to complete revisions to initial draft ROP proposal to address informal stakeholder feedback NERC to post ROP revisions for public comment period on NERC website for 45 days. 	<ul style="list-style-type: none"> NERC anticipates posting the proposed ROP revisions on the NERC website the first week of September
Month 6 (November 2023)	<ul style="list-style-type: none"> If necessary, ERO Enterprise completes further revisions to the ROP to address comments. ERO Enterprise to prepare matrix summarizing proposal, comments, and responses thereto. NERC to file work plan update with FERC. 	<ul style="list-style-type: none"> TBD
Month 7 (December 2023)	<ul style="list-style-type: none"> ERO Enterprise to request NERC Board of Trustees (Board) approval to file ROP revisions with FERC. <p>OR</p>	<ul style="list-style-type: none"> TBD

⁹ The CCC and ORCS work plans for 2023 contemplate providing comments on proposed revisions to the ROP related to IBRs and the Registration Program.

TIMEFRAME	ACTIVITIES	STATUS
	<ul style="list-style-type: none"> If deemed necessary in NERC’s discretion, post ROP revisions for second public comment period for 30 days.¹⁰ 	
Month 8-10 (January – March 2024)	<ul style="list-style-type: none"> NERC to file the proposed ROP revisions with FERC, subject to Board approval, and Request expedited notice, comment, and review over a 3-month period. 	<ul style="list-style-type: none"> TBD
Month 11-12 (April – May 2024)	<ul style="list-style-type: none"> ERO Enterprise to consider GO-IBR applicable Reliability Standards including a possible subset list of Standards, as appropriate. 	<ul style="list-style-type: none"> TBD

Within 24 months of Commission approval of the work plan (by May 18, 2024), NERC will do the following to identify GO-IBR candidates for registration that meet the updated Registry Criteria:

TIMEFRAME	ACTIVITIES
Month 12-13	<ul style="list-style-type: none"> ERO Enterprise to cross reference Energy Information Administration (EIA) Form 860 Database with the NERC Compliance Registry (NCR) to identify unregistered owners of IBRs as potential GO-IBR candidates. NERC to initiate information technology (IT) updates to extent necessary. ERO Enterprise to issue requests for information to Reliability Coordinators, Planning Coordinators, Transmission Owners, Transmission Planners, and Distribution Providers regarding GO-IBR entities in their footprints. ERO Enterprise to issue bulletins and other communication materials announcing the GO-IBR function and obligation to register. NERC to file work plan update with FERC.
Month 13-14	<ul style="list-style-type: none"> ERO Enterprise to compare identified unregistered owners of IBRs to the GO-IBR Registry Criteria to identify GO-IBR candidates.

¹⁰ If NERC determines a second posting is appropriate, it may present the revised ROP revisions thereafter to the Board via a special meeting.

TIMEFRAME	ACTIVITIES
	<ul style="list-style-type: none"> • ERO Enterprise to develop approach for implementation of GO-IBR registration and applicable Reliability Standards, including a possible subset list of Standards, as appropriate. • ERO Enterprise to send communication to GO-IBR candidates for Registration. • ERO Enterprise to issue notice of webinar on Registration for the GO-IBR function.
Month 14-20	<ul style="list-style-type: none"> • ERO Enterprise to hold workshops across Regional Entities and at NERC regarding GO-IBR registration and implementation. • NERC to file work plan update(s) with FERC.
Month 20-22	<ul style="list-style-type: none"> • ERO Enterprise to examine any updates to EIA Form 860 Database. • NERC to file work plan update with FERC.
Month 23-24	<ul style="list-style-type: none"> • ERO Enterprise to send communication to any newly identified unregistered GO-IBR candidates, as needed. • NERC to continue IT transitions as necessary.

Within 36 months of Commission approval of the work plan, NERC will do the following to register GO-IBR candidates:

TIMEFRAME	ACTIVITIES
Month 25-26	<ul style="list-style-type: none"> • ERO Enterprise to hold training for GO-IBR entities on the Centralized Organization Registration ERO System (CORES).¹¹ • ERO Enterprise to provide ERO Enterprise 101 Informational Package, ERO Enterprise Entity Onboarding Checklist, and guidance. • NERC to file work plan update with FERC.
Month 26-27	<ul style="list-style-type: none"> • NERC to complete IT transition for expansion of registration for the GO-IBR entities.
Month 27-36	<ul style="list-style-type: none"> • NERC to file work plan update(s) with FERC. • ERO Enterprise to issue notification letters to new GO-IBR entities that will

¹¹ The ERO Enterprise anticipates the need to update its IT, external facing communications, and systems to accommodate the registration of GO-IBR entities. This may impact the milestones reported on during 90-day progress reports.

TIMEFRAME	ACTIVITIES
	provide notice of GO-IBR registration and responsibility for compliance with applicable NERC Reliability Standards.

Attachment 2
Communication Plan

Communication Plan

Generator Owner – Inverter-Based Resources

Communication Goals

NERC plans the following overarching communication strategies to begin identifying and informing Generator Owner (GO) Inverter-Based Resources (IBR) candidates of the proposed GO-IBR functional registration. This proposed communication plan includes activities during the three phases of activity outlined in the Work Plan filed with the Commission in Docket No. RD22-4-000.

The communication plan would help ensure that all stakeholders (including non-registered entities) become informed and engaged with the ERO Enterprise. The following table outlines the overarching communication activities to support the GO-IBR registration work plan.

TIMEFRAME	ACTIVITIES
Month 1-6	<ul style="list-style-type: none"> • Communicate to industry stakeholder groups* based on approved work plan activities that support the overall effort. • Seek feedback from generation industry. • Seek feedback from IBR industry associations. • Host informational webinar(s) regarding the work plan to make revisions the NERC ROP, including an overview of the ERO organization, Reliability Standards, and current activities. • Host informational webinar(s) regarding proposed ROP revisions to generation industry and trade associations.
Month 6-12	<ul style="list-style-type: none"> • Host informational session(s) on proposed ROP revisions.
Month 12-14	<ul style="list-style-type: none"> • Issue requests for information to Reliability Coordinators, Planning Coordinators, Transmission Owners, Transmission Planners, and Distribution Providers regarding GO-IBR entities in their footprints. • Issue bulletins and other communication materials announcing the GO-IBR function and obligation to register, including the list of applicable Reliability Standards, or a subset list, as appropriate.
Month 14-24	<ul style="list-style-type: none"> • Hold workshops across Regional Entities and at NERC regarding GO-IBR registration and implementation. • Share ERO Enterprise 101 Informational Package, ERO Enterprise Entity Onboarding Checklist, and onboarding guidance with newly identified GO-IBR candidates. • Send communication(s) to any newly identified GO-IBR candidates, as needed.
Months 24-36	<ul style="list-style-type: none"> • Issue notification letters to new GO-IBR entities that will provide notice of GO-IBR registration and responsibility for compliance with applicable NERC Reliability Standards.

***Stakeholders**

The following is an example list of the stakeholders that the ERO Enterprise may communicate with during the various activities associated with the work plan.

- American Clean Power Association (APC)
- American Public Power Association (APPA)
- American Wind Energy Association (AWEA)
- Canada Energy Regulator (CER)
- CAMPUT
- Electricity Canada (EC)
- Electric Producers (EPSA)
- Edison Electric Institute (EEl)
- Electric Power Supply Association (EPSA)
- Energy Systems Integration Group (ESIG)
- National Association of Regulatory Utility Commissioners (NARUC)
- National Rural Electrification Cooperative Association (NRECA)
- North American Generator Forum (NAGF)
- North American Transmission Forum (NATF)
- Regional Transmission Organizations (RTO) & Independent System Operators (ISO)
- Solar Energy Industries Association (SEIA)
- Transmission Access Policy Study Group (TAPS)