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

**North American Electric Reliability)
Corporation)**

Docket No. RR24-2-000

**COMPLIANCE FILING OF THE
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION IN RESPONSE TO
THE ORDER APPROVING REVISIONS TO NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION RULES OF PROCEDURE AND REQUIRING
COMPLIANCE FILING**

Marisa Hecht
Senior Counsel
North American Electric Reliability
Corporation
1401 H Street, N.W., Suite 410
Washington, D.C. 20005
(202) 400-3000
marisa.hecht@nerc.net

*Counsel for the North American Electric
Reliability Corporation*

August 26, 2024

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The North American Electric Reliability Corporation (“NERC”) hereby submits this compliance filing in accordance with the Federal Energy Regulatory Commission’s (“FERC” or the “Commission”) June 27, 2024 Order (“IBR ROP Order”)¹ approving revisions to the NERC Rules of Procedure (“ROP”) addressing registry criteria for inverter-based resources (“IBRs”) and directing a compliance filing. NERC requests that the Commission accept this compliance filing in satisfaction of this directive. This compliance filing clarifies that the term “generating resources” as used in the ROP Appendices 2 and 5B definitions of Generator Operator (“GOP”) and Generator Owner (“GO”) includes those IBRs that provide energy for load, including resources that are battery energy storage systems (“BESS”) or fuel cells.² Section I provides background information on relevant FERC dockets and Section II provides NERC’s response to the directive.

¹ *N. Am. Elec. Reliability Corp.*, Order Approving Revisions to North American Electric Reliability Corporation Rules of Proc. and Requiring Compliance Filing, 187 FERC ¶ 61,196 at P 43 (2024) [hereinafter *IBR ROP Order*].

² Unless otherwise designated, all capitalized terms shall have the meaning set forth in Appendix 2 to the NERC ROP, available at https://www.nerc.com/AboutNERC/RulesOfProcedure/Appendix%20%20eff%2020240627_signed.pdf.

I. BACKGROUND

On November 17, 2022, FERC directed NERC to submit a work plan to address registration of IBRs³ on the Bulk Power System⁴ (“BPS”).⁵ The Commission directed NERC to file a Work Plan within 90 days detailing how the ERO Enterprise planned to identify and register owners and operators of IBRs to add to the NERC Compliance Registry. Consistent with that directive, NERC filed a Work Plan,⁶ updated with an amendment to the Work Plan,⁷ for Commission approval. On May 18, 2023, the Commission approved the Work Plan and directed NERC to provide updates on the execution of the Work Plan every 90 days.⁸

As part of the Work Plan, NERC developed revisions to the NERC ROP to incorporate a new category of entities that own or operate non-BES IBRs into the NERC Registry Criteria. To that end, NERC updated the GO and GOP Registry Criteria to include a new category (“Category 2 GOs” and “Category 2 GOPs”) for non-BES inverter based generating resources that either have or contribute to an aggregate nameplate capacity of greater than or equal to 20 MVA, connected through a system designed primarily for delivering such capacity to a common point of connection

³ 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.” *Registration of Inverter-Based Resources*, 181 FERC ¶ 61,124 (2022) at P 1 n.1 [hereinafter *IBR Order*].

⁴ 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.)

⁵ *IBR Order, supra*.

⁶ *N. Am. Elec. Reliability Corp.*, Request for Approval of the Inverter Based Resources Work Plan and Request for Expedited Review, Docket No. RD22-4-001 (Feb. 15, 2023).

⁷ *N. Am. Elec. Reliability Corp.*, Amendment to Inverter-Based Resources Work Plan and Errata to Whitepaper, Docket No. RD22-4-001 (Mar. 13, 2023) [hereinafter *Work Plan Errata*].

⁸ *N. Am. Elec. Reliability Corp.*, Order Approving Registration Work Plan, 183 FERC ¶ 61,116 (2023). NERC files Work Plan progress updates in Docket No. RD22-4-001.

at a voltage greater than or equal to 60 kV.⁹ NERC filed the proposed revisions on March 19, 2024 for Commission approval.¹⁰ The Commission approved the revisions on June 27, 2024 and directed the instant filing.¹¹

Specifically, the Commission directed NERC to submit a compliance filing explaining whether the NERC Registry Criteria would apply to the registration of owners and operators of BESS resources, fuel cells, and all other IBR technologies, and if not, what NERC’s plan is to include such resources.¹² The Commission noted that the NERC ROP revisions referred to “non-BES inverter based *generating* resources.”¹³ Moreover, the Commission cited to a NERC quick reference guide where one sentence includes Type 3 and Type 4 wind power plans and solar photovoltaic resources as inverter-based *generating* resources and the following sentence does not include the term “generating” when stating that BESS is also considered an inverter-based resource.¹⁴ As a result, the Commission requested further clarification that “generating” resources includes BESS, fuel cells, and other inverter-based resources.

II. NERC COMPLIANCE FILING

NERC confirms that “generating resources” within the ROP revisions includes all inverter-based resources that provide energy for load and meet the NERC Registry Criteria, irrespective of fuel type or whether the resource is a BESS. The NERC Petition and other NERC filings on registration of IBRs support this inclusion. For instance, Exhibit A-1 to the NERC Petition states,

⁹ NERC ROP Appendix 2 at p. 12 and Appendix 5B at p. 5. The NERC ROP is available at https://www.nerc.com/AboutNERC/RulesOfProcedure/NERC%20ROP%20effective%2020240627_with%20appendices_signed.pdf.

¹⁰ *N. Am. Elec. Reliability Corp.*, Request for Approval of Proposed Revisions to the Rules of Procedure to Address Unregistered Inverter Based Resources and Request for Expedited Review, Docket No. RR24-2-000 (Mar. 19, 2024) [hereinafter *NERC Petition*].

¹¹ *IBR ROP Order*, *supra*.

¹² *Id.* at P 43.

¹³ *Id.* at P 42 (emphasis added).

¹⁴ *Id.* at P 42 n.99. The quick reference guide is included as Exhibit A-2 to the NERC request for approval of the proposed ROP revisions.

“NERC expects the 60 kV threshold to result in 97.5% of BPS-connected IBRs to be subject to NERC registration and compliance with applicable Reliability Standards.”¹⁵ This statement cites a white paper that NERC submitted in Docket No. RD22-4-000 as part of the Work Plan Errata. Within that white paper, entitled “Analysis of the Changing Mix of Generating Resources on the BPS,” IBRs are referred to as “decentralized *generation*” [emphasis added] consisting of primarily “[b]attery energy storage systems (BESS), solar photovoltaic (i.e., solar PV), and wind that are installed on the [BPS]. . . .”¹⁶ Moreover, the white paper recommends that the revised Registry Criteria generator function focus is on “IBRs and will include BESS, solar PV, and wind.”¹⁷ As such, this indicates the 97.5% of BPS-connected IBRs mentioned in the NERC Petition contemplates that BESS and other IBRs that provide energy for load are considered generating resources, and those entities owning or operating such resources would be candidates for registration as GOs and GOPs.

Furthermore, NERC clarifies that this is consistent with its statements in the quick reference guide cited in the IBR ROP Order as prompting this compliance filing.¹⁸ As noted in Section I above, the IBR ROP Order directed this compliance filing in part due to the use of “generating” in the first sentence of the following statement in Exhibit A-2 of the NERC IBR ROP Filing: “In most cases, inverter-based generating resources refer to Type 3 and Type 4 wind power plants and solar photovoltaic (PV) resources. Battery energy storage is also considered an inverter-based resource.”¹⁹ NERC notes that this statement is not intended to mean that *only* Type 3 and Type 4 wind and solar PV resources are “generating.” Rather, the statement means that “in most

¹⁵ *NERC Petition, supra*, Exhibit A-1 at p. 4.

¹⁶ *Work Plan Errata, supra*, Attach. 2 at p. 1.

¹⁷ *Id.* Attach. 2 at p. 8.

¹⁸ *IBR ROP Order, supra*, at P 42 n.99. The quick reference guide is included as Exhibit A-2 to the NERC request for approval of the proposed ROP revisions.

¹⁹ *NERC Petition, supra*, Exhibit A-2 at p. 1.

cases,” generating resources will be one of those types, but those are not the only types of generating resources. Therefore, the second sentence is not intended to separate BESS, or other types of IBRs, from “generating” resources.

NERC further clarifies, however, the use of “generating,” while inclusive of all types of IBRs that provide energy for load, excludes those resources that only perform transmission functions. As an example, the criterion excludes a battery used in a Remedial Action Scheme that relieves congestion on the transmission system and is not a resource for load but rather a transmission asset (e.g., static synchronous compensators (i.e. STATCOMs) and static VAR compensators (i.e. SVCs)). These resources do not pose the same impact to the reliability of the BPS as IBR generation. Accordingly, the revised Registry Criteria uses “generating” to ensure only those IBRs that provide energy for load are included on the NERC Compliance Registry as resources qualifying entities as GOs and GOPs.

III. CONCLUSION

For the reasons set forth above, NERC respectfully requests that the Commission accept this compliance filing in satisfaction of the directive in the IBR ROP Order.

Respectfully submitted,

/s/ Marisa Hecht

Marisa Hecht

Senior Counsel

North American Electric Reliability Corporation

1401 H Street, N.W., Suite 410

Washington, D.C. 20005

(202) 400-3000

marisa.hecht@nerc.net

Counsel for the North American Electric Reliability Corporation

Date: August 26, 2024

CERTIFICATE OF SERVICE

I hereby certify I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C., this 26th day of August 2024.

/s/ Marisa Hecht

Marisa Hecht
Senior Counsel
North American Electric Reliability
Corporation
1401 H Street, N.W., Suite 410
Washington, D.C. 20005
(202) 400-3000
marisa.hecht@nerc.net

*Counsel for the North American Electric
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