Supporting Statement for FERC-725, Procedures for Electric Reliability Standards, as proposed by the FINAL RULE in Docket No. RM22-12

The Federal Energy Regulatory Commission (Commission or FERC) requests that the Office of Management and Budget (OMB) review and approve FERC-725 (Procedures for Electric Reliability Standards) this Final Rule in Docket No. RM22-12.

1. CIRCUMSTANCES THAT MAKE THE COLLECTION OF INFORMATION NECESSARY

The Energy Policy Act of 2005 added section 215 to the Federal Power Act (FPA),² enhancing the Commission's ability to strengthen the reliability of the interstate electric grid. Section 215 of the FPA aids the Commission's efforts to strengthen the reliability of the interstate grid by granting authority to provide for a system of mandatory Reliability Standards developed by the Electric Reliability Organization (ERO) and reviewed and approved by FERC.

On July 20, 2006, the Commission certified the North American Electric Reliability Corporation (NERC) as the ERO to oversee the reliability of the United States' portion of the interconnected North American Bulk-Power System, subject to Commission oversight.³ The ERO is responsible for developing and enforcing the mandatory Reliability Standards. The Reliability Standards apply to all entities registered with NERC.

The Commission has the authority to approve all ERO actions, to order the ERO to carry out its responsibilities under these statutory provisions, and (as appropriate) to enforce

¹ RM22-12 NOPR was originally submitted in FERC-725(1C) because 725 was held up at OMB. FERC-725(1C) (OMB Control No. 1902-0322) NOPR Issued 11/17/2022, Published 12/6/2022. The documents in Docket No. RM22-12 are posted in FERC's eLibrary as follows:

NOPR, at https://elibrary.ferc.gov/eLibrary/filedownload?fileid=4011CD98-DA3A-C01C-94F4-7E7881A00000

[•] News Release, at https://www.ferc.gov/news-events/news/ferc-proposes-ibr-standards-registration-improve-grid-reliability.

[•] Staff Presentation, at https://www.ferc.gov/news-events/news/joint-presentation-items-e-1-registration-inverter-based-resources-and-e-2.

² Section 215 was added by the Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 (2005) (codified at 42 USC 16451, et seq.).

³ N. Am. Elec. Reliability Corp., 116 FERC ¶ 61,062 (2006), order on reh'g and compliance, 117 FERC ¶ 61,126 (2006) aff'd sub nom. Alcoa Inc. v. FERC, 564 F.3d 1342 (D.C. Cir. 2009) (certifying NERC as the ERO responsible for the development and enforcement of mandatory Reliability Standards).

Reliability Standards. The ERO can delegate its enforcement responsibilities to a Regional Entity. Delegation is effective only after the Commission approves the delegation agreement. A Regional Entity can also propose a Reliability Standard to the ERO for submission to the Commission for approval.

More information on FERC's Electric Reliability program is posted at. https://www.ferc.gov/electric-reliability.

FINAL RULE in RM22-12. The Commission directsNERC, the Commission-certified ERO, to develop new or modified Reliability Standards that address several reliability gaps related to inverter-based resources (IBR) including: data sharing; model validation; planning and operational studies; and performance requirements. Further, the Commission directs NERC to submit to the Commission an informational filing within 90 days of issuance of the final rule in this proceeding that includes a detailed, comprehensive standards development and implementation plan to ensure all new or modified Reliability Standards necessary to address the IBR-related reliability gaps identified in the final rule are submitted to the Commission by November 4, 2026.

2. HOW, BY WHOM AND FOR WHAT PURPOSE IS THE INFORMATION TO BE USED AND THE CONSEQUENCES OF NOT COLLECTING THE INFORMATION

The FERC-725 will contain the following information collection elements.

Reliability Standards Development: ⁴ Under Section 215 of the FPA, the ERO is charged with developing Reliability Standards. Regional Entities may also develop regional specific standards.

The Commission implements its responsibilities related to FERC-725 [through 18 CFR Part 40. Without the FERC-725 information proposed in the FINAL RULE in RM22-12, the FERC, ERO, and Regional Entities will not have information to determine what measures should be taken to further ensure the reliability of the nation's electric grid. The proposed directive to the ERO to develop and submit to the Commission for approval one or more new or modified Reliability Standards, if adopted, would implement the Congressional mandate of the Energy Policy Act of 2005 to develop mandatory and enforceable Reliability Standards to better ensure the reliability of the nation's Bulk-Power System. Specifically, the proposal would ensure that the ERO develops and submits for approval new or modified Reliability Standards that would require certain facilities to operate in support of the reliable operation of the Bulk-Power

⁴ Reliability Standards Development covers standards development initiated by NERC, the Regional Entities, and industry, as well as standards the Commission may direct NERC to develop or modify.

System.

3. DESCRIBE ANY CONSIDERATION OF THE USE OF IMPROVED INFORMATION TECHNOLOGY TO REDUCE BURDEN AND THE TECHNICAL OR LEGAL OBSTACLES TO REDUCING BURDEN

All of the information that is reported to the Commission in this collection may be submitted electronically, through the Commission's eFiling system (as described at http://www.ferc.gov/docs-filing/efiling.asp).

4. DESCRIBE EFFORTS TO IDENTIFY DUPLICATION AND SHOW SPECIFICALLY WHY ANY SIMILAR INFORMATION ALREADY AVAILABLE CANNOT BE USED OR MODIFIED FOR USE FOR THE PURPOSE(S) DESCRIBED IN INSTRUCTION NO. 2.

Filing requirements are periodically reviewed as OMB review dates arise, or as the Commission may deem necessary in carrying out its responsibilities, in order to eliminate duplication and ensure that filing burden is minimized. The Commission believes there are no similar sources of information available that can be used or modified for these purposes.

5. METHODS USED TO MINIMIZE BURDEN IN COLLECTION OF INFORMATION INVOLVING SMALL ENTITIES

The Commission is proposing to direct NERC, the Commission-certified ERO, to develop new or modified Reliability Standards that address several reliability gaps related to IBRs including: data sharing; model validation; planning and operational studies; and performance requirements. NERC is not a small entity.

6. CONSEQUENCE TO FEDERAL PROGRAM IF COLLECTION WERE CONDUCTED LESS FREQUENTLY

This collection as discussed in the FINAL RULE in RM22-12 focuses on electric reliability IBR requirements that are not currently contained within any Reliability Standards. The Commission views these requirements as necessary for the reliable operation of the Bulk-Power System. Any reduction in collection frequency may diminish the ability of NERC, Regional Entities, or the Commission to support maintaining the reliable operation of the Bulk-Power System.

7. EXPLAIN ANY SPECIAL CIRCUMSTANCES RELATING TO THE INFORMATION

There are no special circumstances related to this collection.

8. DESCRIBE EFFORTS TO CONSULT OUTSIDE THE AGENCY: SUMMARIZE PUBLIC COMMENTS AND THE AGENCY'S RESPONSE TO THESE COMMENTS

The Commission published the NOPR in Docket No. RM22-12⁵ in the Federal Register and requested public comment. Comments are mentioned below. The final rule was issued October 19, 2023.⁶

Comments

NERC supports a directive to require a compliance filing within 90 days. NERC generally supports the Commission's proposal for a compliance filing, including a standards development plan. Nevertheless, NERC seeks clarification of the Commission's use of "implementation plan" and whether that phrase refers to the timeline for developing responsive new or modified Reliability Standards or the timeline for entity implementation of the approved new or modified Reliability Standards. NERC cautions that if implementation plan means "the time for an entity to implement a new or revised Reliability Standard," then it would be unable to provide meaningful information for Reliability Standards still in development because reasonable implementation periods are still under consideration through NERC's Commission-approved Reliability Standard development process.

Indicated Trade Associations suggest directing NERC to include in its work plan a comparison to its ongoing IBR-related standards projects' scopes and how each relates to the directives in the final rule. Indicated Trade Associations caution against losing the work already completed. Indicated Trade Associations and IRC point to existing NERC projects addressing reliability gaps pertaining to IBR data sharing that could be leveraged to address the proposed directives, including Project 2020-06 (Verifications of Models and Data for Generators), Project 2022-02 (Modifications to Reliability Standards TPL-

⁵ The NOPR was issued 11/17/2022 and posted in eLibrary at <u>eLibrary |</u> <u>Document Information (ferc.gov)</u>. The NOPR was published in the Federal Register on December 6, 2022 (87 FR 74541).

⁶ Reliability Standards to Address Inverter-Based Resources, Final Rule, 185 FERC ¶ 61,042 (2023).

⁷ NERC Initial Comments at 23.

⁸ *Id*.

⁹ *Id.* at 23-24.

¹⁰ Indicated Trade Associations Initial Comments at 2.

¹¹ *Id*. at 5.

001-5.1 and MOD-032-1), and Project 2021-04 (Modifications to Reliability Standard PRC-002-2). 12

SCE/PG&E, while broadly supportive of the Commission's goals, recommend initiating a pilot program as a first step before progressing to directives for new or modified Reliability Standards. SCE/PG&E recommend that the pilot program should study: (1) changes by the CAISO to address IBRs and consider whether they translate to national standards; (2) interconnection tariff revisions under review at the California Public Utilities Commission under California Electric Rule 21; and (3) systems with high-IBR penetrations and what information is available to distribution providers, generator owners, generator operators, transmission owners, and transmission operators within these footprints. SCE/PG&E assert that NERC could take advantage of ongoing state actions to ensure reliable operation and to coordinate with the states so there are no conflicting obligations. ¹⁴

NERC, AEP, Bonneville, CAISO, and Ohio FEA generally support the idea of a staggered standard development plan but provide some recommendations to adjust the schedule to take advantage of NERC's ongoing standard development projects. NERC directs an alternate timeline whereby it would submit proposed new or modified Reliability Standards addressing: (1) comprehensive ride through requirements (including frequency, voltage, post-disturbance ramp rates, and phase lock loop synchronization), post-event performance validation, and disturbance monitoring data within 12 months of Commission approval of the plan; (2) data sharing issues, other than disturbance monitoring data, and data and model validation for registered and unregistered IBRs and IBR-DERs in the aggregate within 24 months of Commission approval of the plan; and (3) planning and operational studies for registered and unregistered IBRs and IBR-DERs in the aggregate within 36 months of Commission approval of the plan. 15 NERC explains that its alternate timeline would leverage existing and planned activities more efficiently and address higher priority risks more expeditiously, while allowing sufficient time to develop consensus approaches on other issues.16

AEP and CAISO support the Commission's proposed staggered approach but suggest modifying the proposal to include all aspects of ride through performance (i.e., phase lock loop synchronization and post-disturbance ramp rates) in the first stage. ¹⁷ Further, as NERC is working on addressing currently unregistered IBR generator owners and

¹² *Id.* at 6; IRC Initial Comments at 3.

¹³ SCE/PG&E Initial Comments at 9-11.

¹⁴ *Id.* at 10.

¹⁵ NERC Initial Comments at 26-30.

¹⁶ *Id.* at 24.

¹⁷ AEP Initial Comments at 5; CAISO Initial Comments at 5.

operators, AEP recommends addressing the interconnected issues related to registered and unregistered IBR and IBR-DER data sharing, validation, and studies after the remaining directives in the three-year time frame.¹⁸

Bonneville believes that the three-year proposed timeline should be extended to five years. Bonneville explains that the proposed directives for data sharing, model validation, and studies will "require extensive industry collaboration" and that a five-year timeline will ensure that NERC and industry have adequate time to develop the standards, especially as Bonneville notes there will be an increase in generation interconnection requests and corresponding need for additional model validation. ²⁰

Ohio FEA anticipates that using a staggered standards development timeline will provide additional opportunities for stakeholders to participate in the development of the new or modified Reliability Standards and recommends robust comment periods at each stage in the staggered approach.²¹

ACP/SEIA caution that, although supportive of ride through requirements, one year to develop such standards is a short time when compared with how long it typically takes to develop Reliability Standards and may be infeasible if NERC does not use its existing standards development projects to comply with the rule.²²

Comments Determination

Pursuant to § 39.2(d) of the Commission's regulations,²³ we modify the NOPR proposal and direct NERC to submit an informational filing within 90 days of the issuance of the final rule in this proceeding. Further, pursuant to section 215(d)(5)(g) of the FPA, we direct NERC to submit new or modified Reliability Standards addressing the reliability concerns outlined herein by certain deadlines, detailed further below.

NERC's informational filing should include a detailed, comprehensive standards development plan and explanation of how NERC will prioritize the development of new or modified Reliability Standards directed in this rule. We agree with NERC and Indicated Trade Associations, among others, that there are existing projects that can be

¹⁸ AEP Initial Comments at 6.

¹⁹ Bonneville Initial Comments at 1.

²⁰ *Id.* at 3.

²¹ Ohio FEA Initial Comments at 7.

²² ACP/SEIA Initial Comments at 4.

²³ 18 CFR 39.2(d).

leveraged to address our directives in a timely manner.²⁴ Therefore, NERC should take into account the risk posed to the reliability of the Bulk-Power System, standard development projects already underway, resource constraints, its ongoing registration of Bulk-Power System-connected IBR generator owners and operators, and other factors as necessary.²⁵ As we recognized in the NOPR, data models and validation build and rely upon the data sharing directives. Similarly, the planning and operational study directives require the use of validated models and data sharing.²⁶

In its comments, NERC provides an alternate timeline it explains would leverage its existing and planned activities more efficiently. It references initiatives already underway and highlights several ongoing standards development projects that could be adjusted to address the directives in this final rule. As NERC explains in its comments, a standards development plan provides visibility to both the Commission and stakeholders on how NERC will address the important reliability issues identified in this final rule. In the interest of time, however, and as NERC appears to have already extended considerable effort in thinking through how it would address IBR-related gaps through its Reliability Standard projects, we do not find it necessary to approve NERC's final work plan.

As requested by NERC, we clarify that the Commission's reference to "implementation" in the NOPR means the date on which the new or modified Reliability Standards would become mandatory and enforceable for relevant registered entities. But we find persuasive NERC's assertion that that the implementation plan is better developed standard-by-standard through NERC's Commission approved Reliability Standard development process. Therefore, we decline to direct NERC to include in its informational filing the dates by which all of the new or modified Reliability Standards would be mandatory and effective.

Although we are not directing NERC to include implementation dates in its informational filing and are leaving determination of the proposed effective dates to the standards development process, we are concerned that the lack of a time limit for implementation could allow identified issues to remain unresolved for a significant and indefinite period. Therefore, we emphasize that industry has been aware of and alerted to the need to address the impacts of IBRs on the Bulk-Power System since at least 2016. The number of events, NERC Alerts, reports, whitepapers, guidelines, and ongoing standards projects more than demonstrate the need for the expeditious implementation of new or modified Reliability Standards addressing IBR data sharing, data and model validation, planning and operational studies, and performance requirements. Thus, in that light, the

²⁴ See, e.g., NERC Initial Comments at 22; Indicated Trades Associations Initial Comments at 8 (discussing NERC Project 2020-02 Modifications to PRC-024 (Generator Ride-through) and its updated scope to address IBR ride through performance).

 $^{^{25}}$ See IBR Registration Order, 181 FERC ¶ 61,124.

²⁶ NOPR, 181 FERC ¶ 61,125 at P 74.

²⁷ NERC Initial Comments at 21-22.

Commission will consider the justness and reasonableness of each new or modified Reliability Standard's implementation plan when it is submitted for Commission approval. Further, we believe that there is a need to have all of the directed Reliability Standards effective and enforceable well in advance of 2030 and direct NERC to ensure that the associated implementation plans sequentially stagger the effective and enforceable dates to ensure an orderly industry transition for complying with the IBR directives in this final rule prior to that date.

We decline to direct NERC to implement a pilot program to better analyze the impact of IBRs on the Bulk-Power System as requested by SCE/PG&E. While there may be merit in conducting a pilot program for systems with high-IBR penetrations to better understand what information is available to distribution providers, generator owners, generator operators, transmission owners, and transmission operators within these footprints, we leave to NERC's discretion the value of such a study; and in any case such a pilot program must not impact the prioritization or timely completion of the directed Reliability Standards.

We agree with NERC, CAISO, and AEP that the stages should be modified from the NOPR proposal to group the ride through directives and the development of new or modified Reliability Standards for data sharing and model validation to inform the standard development for planning and operational studies.

Therefore, as we are persuaded by commenters' suggestions regarding the proposed staggered groupings for new or modified Reliability Standards, we modify the NOPR proposal to adopt NERC's proposed staggered grouping that would result in NERC submitting new or modified Reliability Standards in three stages. NERC's standards development plan submitted as a part of its informational filing must ensure that NERC submits new or modified Reliability Standards by the following deadlines. First, by November 4, 2024, NERC must submit new or modified Reliability Standards that establish IBR performance requirements, including requirements addressing frequency and voltage ride through, post-disturbance ramp rates, phase lock loop synchronization, and other known causes of IBR tripping or momentary cessation (section IV.E.). NERC must also submit, by November 4, 2024, new or modified Reliability Standards that require disturbance monitoring data sharing and post-event performance validation for registered IBRs (section IV.B.2.). Second, by November 4, 2025, NERC must submit new or modified Reliability Standards addressing the interrelated directives concerning: (1) data sharing for registered IBRs (section IV.B.1), unregistered IBRs (section IV.B.3.), and IBR-DERs in the aggregate (section IV.B.3.); and (2) data and model validation for registered IBRs, unregistered IBRs, and IBR-DERs in the aggregate (section IV.C.). Finally, by November 4, 2026, NERC must submit new or modified Reliability Standards addressing planning and operational studies for registered IBRs, unregistered IBRs, and IBR-DERs in the aggregate (section IV.D.). We continue to believe this staggered

²⁸ See Order No. 672, 114 FERC ¶ 61,104 at P 333 ("In considering whether a proposed Reliability Standard is just and reasonable, the Commission will consider also the timetable for implementation of the new requirements, including how the proposal balances any urgency in the need to implement it against the reasonableness of the time allowed for those who must comply.").

approach to standard development is necessary based on the scope of work anticipated and that specific target dates will provide a valuable tool and incentive to NERC to timely address the directives in this final rule.

NERC may expedite its standards development plan and submit new or modified Reliability Standards prior to the deadlines. We decline to extend the three-year staggered approach to a five-year staggered approach as requested by Bonneville due to the pressing nature of the Commission's concerns discussed above, such as IBR momentary cessation occurring in the aggregate today that can lead to instability, systemwide uncontrolled separation, and voltage collapse.

9. EXPLAIN ANY PAYMENT OR GIFTS TO RESPONDENTS

There are no payments or gifts to respondents.

10. DESCRIBE ANY ASSURANCE OF CONFIDENTIALITY PROVIDED TO RESPONDENTS

The Commission generally does not consider the data to be confidential. However, certain actions have confidentiality provisions which prevent the disclosure of information relating to enforcement actions and Critical Energy/Electric Infrastructure Information (CEII).²⁹ A request for material to be treated as CEII or privileged may be made under 18 CFR Part 388.

18 C.F.R. 388.112 provides that, "any person submitting a document to the Commission may request privileged treatment by claiming that some or all of the information contained in a particular document is exempt from the mandatory public disclosure requirements of the Freedom of Information Act, 5 U.S.C. 552, and should be withheld from public disclosure."

11. PROVIDE ADDITIONAL JUSTIFICATION FOR ANY QUESTIONS OF A SENSITIVE NATURE, SUCH AS SEXUAL BEHAVIOR AND ATTITUDES, RELIGIOUS BELIEFS, AND OTHER MATTERS THAT ARE COMMONLY CONSIDERED PRIVATE

The Commission does not consider any of the questions to be sensitive or private.

12. ESTIMATED BURDEN OF COLLECTION OF INFORMATION

The reporting requirements and burden for. RM22-12 are already included in FERC-725 under the ERO's responsibility for Reliability Standards Development.³⁰

For more information on the Commission's CEII program (and submitting and accessing CEII materials), see https://www.ferc.gov/legal/ceii-foia/ceii.asp.

³⁰ The OMB-approved figures for FERC-725 include 1,829 responses and 1,134,938 burden hours for standards development by the ERO.

13. ESTIMATE OF TOTAL ANNUAL COST OF BURDEN TO RESPONDENTS

All costs are related to the placeholder burden hour and are discussed in Questions 12 and 15.

14. ESTIMATED ANNUALIZED COST TO FEDERAL GOVERNMENT

| | Number of Employees (FTEs) | Estimated Annual Federal Cost |
|---------------------------------------|-------------------------------|----------------------------------|
| PRA ³¹ Administration Cost | | \$8,268 |
| Data Processing and | 25 | \$4,966,675 |
| Analysis | | |
| FERC Total | | \$5,004,943 |

The Paperwork Reduction Act (PRA) Administrative Cost (updated Ausgust 2023) is the average annual FERC cost associated with preparing, issuing, and submitting materials necessary to comply with the PRA for rulemakings, orders, or any other vehicle used to create, modify, extend, or discontinue an information collection. It also includes the cost of publishing the necessary notices in the Federal Register.

15. REASONS FOR CHANGES IN BURDEN INCLUDING THE NEED FOR ANY INCREASE

The burden and requirements for the Final Rule in Docket No. RM22-12 are already covered by FERC-725. The final rule does not impose a new mandate above and beyond the Commission's directive to NERC to submit new or modified Reliability Standards that address specific matters pertaining to the impacts of IBRs on the reliable operation of the Bulk-Power System are covered by, and already included in, the existing OMB-approved information collection FERC-725 (Certification of Electric Reliability Organization; Procedures for Electric Reliability Standards; OMB Control No. 1902-0225), under Reliability Standards Development. In this final rule, we direct NERC to develop new or modify the currently effective Reliability Standards to address these issues and, when these Reliability Standards are submitted to the Commission for approval, to explain in the accompanying petition how the issues are addressed in the proposed new or modified Reliability Standards. NERC may propose to develop new or modified Reliability Standards that address our concerns in an equally efficient and effective manner; however, NERC's proposal should explain how the new or modified Reliability Standards address the Commission's concerns discussed in this final rule.

16. TIME SCHEDULE FOR PUBLICATION OF DATA

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³¹ Paperwork Reduction Act of 1995 (PRA).

There are no plans for tabulation, statistical analysis or publication. The data are used for regulatory purposes only.

17. DISPLAY OF EXPIRATION DATE

The expiration date is displayed in a table posted on ferc.gov at https://www.ferc.gov/information-collections.

18. EXCEPTIONS TO THE CERTIFICATION STATEMENT

There are no exceptions.