



BILLING CODE 6717-01-P
DEPARTMENT OF ENERGY
Federal Energy Regulatory Commission

18 CFR Part 40

[Docket No. RM17-12-000]

Emergency Preparedness and Operations Reliability Standards

AGENCY: Federal Energy Regulatory Commission.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Federal Energy Regulatory Commission proposes to approve Emergency Preparedness and Operations (EOP) Reliability Standards EOP-004-4 (Event Reporting), EOP-005-3 (System Restoration from Blackstart Resources), EOP-006-3 (System Restoration Coordination), and EOP-008-2 (Loss of Control Center Functionality).

DATES: Comments are due **[INSERT DATE 60 days after date of publication in the FEDERAL REGISTER]**.

ADDRESSES: Comments, identified by docket number, may be filed in the following ways:

- Electronic Filing through <http://www.ferc.gov>. Documents created electronically using word processing software should be filed in native applications or print-to-PDF format and not in a scanned format.

- Mail/Hand Delivery: Those unable to file electronically may mail or hand-deliver comments to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street, NE, Washington, DC 20426.

Instructions: For detailed instructions on submitting comments and additional information on the rulemaking process, see the Comment Procedures Section of this document.

FOR FURTHER INFORMATION CONTACT:

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SUPPLEMENTARY INFORMATION:

1. Under section 215 of the Federal Power Act (FPA),¹ the Commission proposes to approve proposed Emergency Preparedness and Operations (EOP) Reliability Standards EOP-004-4 (Event Reporting), EOP-005-3 (System Restoration from Blackstart Resources), EOP-006-3 (System Restoration Coordination), and EOP-008-2 (Loss of Control Center Functionality), submitted by the North American Electric Reliability Corporation (NERC), the Commission-certified Electric Reliability Organization (ERO). The proposed EOP Reliability Standards are intended to: (1) provide accurate reporting of events to NERC's event analysis group to analyze the impact on the reliability of the bulk electric system (EOP-004-4); (2) delineate the roles and responsibilities of entities that support system restoration from blackstart resources which generate power without the support of the grid (EOP-005-3); (3) clarify the procedures and coordination requirements for reliability coordinator personnel to execute system restoration processes (EOP-006-3); and (4) refine the required elements of an operating plan used to continue reliable operations of the bulk electric system if that primary control functionality is lost (EOP-008-2). The Commission also proposes to approve the associated violation risk factors, violation severity levels, implementation plans, and effective dates. In addition, the Commission proposes to retire currently-effective Reliability Standards EOP-004-3, EOP-005-2, EOP-006-2, and EOP-008-1 immediately prior to the effective dates of the

¹ 16 U.S.C. 824(o). The proposed Reliability Standards are available on the Commission's eLibrary document retrieval system in Docket No. RM17-12-000 and on the NERC website, www.nerc.com.

proposed EOP Reliability Standards.

I. Background

A. Regulatory Background

2. Section 215 of the FPA requires a Commission-certified ERO to develop mandatory and enforceable Reliability Standards that are subject to Commission review and approval. The Commission may approve, by rule or order, a proposed Reliability Standard or modification to a Reliability Standard if it determines that the Reliability Standard is just, reasonable, not unduly discriminatory or preferential and in the public interest.² Once approved, the Reliability Standards may be enforced by the ERO, subject to Commission oversight, or by the Commission independently.³ Pursuant to section 215 of the FPA, the Commission established a process to select and certify an ERO,⁴ and subsequently certified NERC.⁵ On March 16, 2007, the Commission issued Order No. 693, approving 83 of the 107 Reliability Standards filed by NERC, including the

² *Id.* 824o(d)(2).

³ *Id.* 824o(e).

⁴ *Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards*, Order No. 672, FERC Stats. & Regs. ¶ 31,204, *order on reh'g*, Order No. 672-A, FERC Stats. & Regs. ¶ 31,212 (2006).

⁵ *North American Electric Reliability Corp.*, 116 FERC ¶ 61,062, *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).

initial EOP Reliability Standards.⁶

B. NERC Petition

3. According to NERC, the proposed EOP Reliability Standards: (1) streamline the currently-effective EOP Standards; (2) remove redundancies and other unnecessary language while making the Reliability Standards more results-based;⁷ and (3) address the Commission's concern articulated in Order No. 749 regarding system restoration training.⁸ The proposed EOP Reliability Standards are summarized below.

⁶ *Mandatory Reliability Standards for the Bulk-Power System*, Order No. 693, 72 FR 16416 (Apr. 4, 2007), FERC Stats. & Regs. ¶ 31,242, at P 297, *order on reh'g*, Order No. 693-A, 120 FERC ¶ 61,053 (2007).

⁷ *North American Electric Reliability Corp.*, 138 FERC ¶ 61,193, at P 81 (March 2012 Order), *order on reh'g and clarification*, 139 FERC ¶ 61,168 (2012). The March 2012 Order approved a NERC process to identify requirements that could be removed from Reliability Standards without impacting the reliability of the interconnected transmission network.

⁸ *System Restoration Reliability Standards*, Order No. 749, 134 FERC ¶ 61,215, at PP 18, 24 (2011).

Proposed Reliability Standard EOP-004-4

4. Proposed Reliability Standard EOP-004-4 requires reporting of events by responsible entities. The reportable events under the proposed Reliability Standard are collected and used to examine the underlying causes of events; track subsequent corrective action to prevent recurrence of such events; and develop lessons learned for industry. While these events arise in the real-time operation time horizon and require action by responsible entities within one hour or less to preserve the reliability of the bulk electric system, Reliability Standard EOP-004-3 is not intended to require system operators to report the events during the real-time operation time horizon, but rather can be reported six to twenty four hours after the event.
5. NERC states that the proposed Reliability Standard modifications are designed to eliminate redundant reporting of a single event by multiple entities; assign reporting requirements to appropriate entities; clarify the threshold reporting for a given event; and where appropriate, align the reportable events and thresholds identified in Attachments 1 and 2 of the proposed Reliability Standard with the Department of Energy's (DOE) Form OE-417. NERC states that the proposed Reliability Standard improves the quality of information received by the ERO as well as the quality of analysis that the ERO produces from this information to assess the greatest risk to the bulk electric system.
6. Attachment 1 of the proposed Reliability Standard identifies the types and thresholds of reportable events that have the potential to impact the reliability of the bulk electric system. Attachment 2 is a reporting template for entities to report the types and thresholds of events identified in Attachment 1 to NERC. To the extent that DOE's

Form OE-417 reflects similar event types and thresholds of events as Attachment 2, responsible entities may submit Form OE-417 in lieu of Attachment 2.⁹

7. Under currently-effective Reliability Standard EOP-004-3, Attachment 1, reliability coordinators must report to NERC when they operate outside of their interconnection reliability operating limit (IROL) for greater than “T_v” (defined as less than or equal to 30 minutes). NERC proposes to eliminate the IROL violation reporting requirement in Attachment 1 of proposed Reliability Standard EOP-004-4 because, according to NERC, EOP-004 is primarily a tool for trending analysis and developing lessons learned and not designed to be a real-time tool.

8. NERC states that the standard drafting team concluded that any real-time reporting to NERC or Regional Entities (i.e., contemporaneous with the transmission operator’s notification of the IROL to the reliability coordinator) should be addressed in the TOP Reliability Standards, which deal with the real-time operations time horizon. In its petition, NERC identifies Reliability Standard TOP-001-3 (Transmission Operations) as the appropriate Reliability Standard for reporting such real-time events. NERC states that the purpose of Reliability Standard TOP-001-3 is to prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of an interconnection by ensuring prompt action to prevent or mitigate such occurrences. Specifically, Reliability Standard TOP-001-3, Requirement R12 provides that “[e]ach

⁹ Under the current practice, the ERO will accept DOE’s Form OE-417 report in lieu of Attachment 2 to Reliability Standard EOP-004-3 to the extent a given event type and threshold align.

Transmission Operator shall not operate outside any identified Interconnection Reliability Operating Limit (IROL) for a continuous duration exceeding its associated T_v .” Separately, NERC identifies Reliability Standard TOP-007-0 (Reporting System Operating Limit (SOL) and IROL Violations), Requirement R2, which states that “[f]ollowing a Contingency or other event that results in an IROL violation, the Transmission Operator shall return its transmission system to within IROL as soon as possible, but not longer than 30 minutes.” Finally, NERC cites Requirement R3 of Reliability Standard IRO-009-2 (Reliability Coordinator Actions to Operate within IROLs), which states that “[e]ach Reliability Coordinator shall act or direct others to act so that the magnitude and duration of an IROL exceedance is mitigated within the IROL T_v , as identified in the Reliability Coordinator’s Real-time monitoring or Real-time Assessment.”

Proposed Reliability Standard EOP-005-3

9. The purpose of proposed Reliability Standard EOP-005-3 is to ensure plans, facilities, and personnel are prepared to enable system restoration from blackstart resources to ensure reliability is maintained during restoration and priority is placed on restoring the interconnection. NERC states that proposed Reliability Standard EOP-005-3 improves the existing version of the Reliability Standard by: (1) emphasizing the need for transmission operators to develop and use restoration plans relating to blackstart resources; (2) retiring redundant or administrative requirements; and (3) clarifying requirements for revising and testing restoration plans.

Proposed Reliability Standards EOP-006-3

10. The purpose of proposed Reliability Standard EOP-006-3 is to establish how personnel should prepare, execute, and coordinate system restoration processes to maintain reliability and to restore the Interconnection. NERC states that proposed Reliability Standard EOP-006-3 improves upon the existing version of the standard by emphasizing the need for reliability coordinators to develop and use their restoration plans and clarifying requirements for training and coordination of restoration plans amongst reliability coordinators.

Proposed Reliability Standard EOP-008-2

11. The purpose of proposed Reliability Standard EOP-008-2 is to ensure continued reliable operations of the bulk electric system if a control center becomes inoperable. NERC states that proposed Reliability Standard EOP-008-2 improves upon the existing Reliability Standard by clarifying the required contents of an operating plan used by reliability coordinators, balancing authorities and transmission operators.

II. Discussion

12. Pursuant to section 215(d) of the FPA, the Commission proposes to approve the proposed EOP Reliability Standards as just, reasonable, not unduly discriminatory or preferential and in the public interest. The Commission also proposes to approve the associated violation risk factors, violation severity levels, implementation plans, and effective dates. Further, the Commission proposes to retire currently-effective Reliability Standards EOP-004-3, EOP-005-2, EOP-006-2, and EOP-008-1 immediately prior to the effective dates of the proposed EOP Reliability Standards.

13. Proposed Reliability Standard EOP-004-4 will enhance reliability by assigning reporting to appropriate entities; and clarifying the threshold reporting for a given event. In addition, aligning the reportable events and thresholds identified in Attachment 1 of the proposed Reliability Standard with DOE's Form OE-417 should improve the quality of information received by NERC and the quality of analysis that NERC produces to assess the greatest risks to the bulk electric system. Further, proposed Reliability Standard EOP-004-4 promotes efficiency and clarity by eliminating redundant reporting of a single event by multiple entities.
14. Proposed Reliability Standards EOP-005-3, EOP-006-3, and EOP-008-2 will enhance reliability by delineating the roles and responsibilities of entities that support system restoration from blackstart resources; clarifying the procedures and coordination requirements for reliability coordinator personnel to execute system restoration processes; and refining operating plan elements if primary control functionality is lost.
15. Finally, while we are not persuaded that the three Reliability Standards identified by NERC require the reporting of IROL information,¹⁰ we propose to accept NERC's

¹⁰ While Reliability Standard TOP-007-0, Requirement R1 mandates reporting of SOL and IROL violations, that Reliability Standard was retired recently. *Transmission Operations Reliability Standards and Interconnection Reliability Operations and Coordination Reliability Standards*, Order No. 817, 153 FERC ¶ 61,178 (2015). Reliability Standard TOP-001-3, Requirement R12 requires transmission operators not to operate outside of IROL T_v. The requirement's associated compliance measure, however, only requires transmission operators to "make available evidence to show that for any occasion in which it operated outside any identified [IROL], the continuous duration did not exceed its associated IROL T_v."¹⁰ While this information may be similar to what would be found in an IROL T_v exceedance report under currently-effective

(continued...)

proposed retirement of currently-effective Reliability Standard EOP-004-3. Currently NERC voluntarily shares IROL T_v exceedance information with Commission staff so that Commission staff can monitor the transmission system and identify reliability trends. We understand that NERC will continue to receive IROL T_v exceedance information and share it with Commission staff even after the proposed retirement of EOP-004-3.

III. Information Collection Statement

16. The Office of Management and Budget (OMB) regulations require that OMB approve certain reporting and recordkeeping (collections of information) imposed by an agency.¹¹ Upon approval of a collection(s) of information, OMB will assign an OMB control number and expiration date. Respondents subject to the filing requirements of this rule will not be penalized for failing to respond to these collections of information unless the collections of information display a valid OMB control number.

17. The Commission is submitting these reporting and recordkeeping requirements to OMB for its review and approval under section 3507(d) of the Paper Reduction Act of 1995, 44 U.S.C. 3507(d) (2012). Comments are solicited on the Commission's need for this information, whether the information will have practical utility, the accuracy of the provided burden estimate, ways to enhance the quality, utility, and clarity of the

Reliability Standard EOP-004-3, Reliability Standard TOP-001-3 does not require responsible entities to report the exceedance. The same can be said of Reliability Standard IRO-009-2.

¹¹ 5 CFR 1320.11.

information to be collected, and any suggested methods for minimizing the respondent's burden, including the use of automated information techniques.

18. This Notice of Proposed Rulemaking proposes to approve revisions to Reliability Standards EOP-004-4 (Event Reporting), EOP-005-3 (System Restoration from Blackstart Resources), EOP-006-3 (System Restoration Coordination), and EOP-008-2 (Loss of Control Center Functionality).

19. Public Reporting Burden: Our estimate below regarding the number of respondents is based on the NERC Compliance Registry as of April 7, 2017. The following estimates relate to the requirements for this Notice of Proposed Rulemaking in Docket No. RM17-12-000.

RM17-12-000 (Emergency Preparedness and Operations Reliability Standards)						
	Number of Respondents (1)	Annual Number of Responses per Respondent (2)	Total Number of Responses (1)*(2)=(3)	Average Burden & Cost Per Response ¹² (4)	Total Annual Burden & Total Annual Cost ¹³ (3)*(4)=(5)	Cost per Respondent (\$) (5)÷(1)
EOP-008-2						

¹² Eng.: engineering; R.K.: record-keeping.

¹³ The estimates for cost per hour are based on 2015 wage figures and derived as follows:

\$64.29/hour, the average salary plus benefits per engineer (from Bureau of Labor Statistics at https://www.bls.gov/oes/current/naics2_22.htm);

\$37.75/hour, the average salary plus benefits per information and record clerks (from Bureau of Labor Statistics at https://www.bls.gov/oes/current/naics2_22.htm)

The results of calculations are rounded to the nearest dollar within the burden table.

One-time Review and Revision of Plan	215	1	215	20 hrs. (Eng.); \$1,286	4,300 hrs. (Eng.); \$276,447	\$1,286 (Eng.)
Updating, Approving, and Maintaining Records	215	1	215	6 hrs. (Eng.); \$386 2 hrs. (R.K.); \$76	1,290 hrs. (Eng.); \$82,934 430 hrs. (R.K.); \$16,233	\$386 (Eng.); \$76 (R.K.)
One-time Contracting	27	1	27	120 hrs. (Eng.) \$7,715	3,240 hrs. \$208,300 (Eng.)	\$7,715 (Eng.)
EOP-005-3 & EOP-006-3						
RC Data Retention	26	2	52	8 hrs. (R.K.) \$514	416 hrs. (R.K.); \$26,745	\$514 (R.K.)
TOP Reporting Data	176	1	176	116 hrs. (Eng.); \$7,458 16 hrs. (R.K.); \$604	20,416 hrs. (Eng.); \$1,312,545 2,816 hrs. (R.K.); \$106,304	\$7,458 (Eng.); \$604 (R.K.)
GOP Testing	230	1	230	80 hrs. (Eng.); \$5,143	18,400 hrs. (Eng.); \$1,182,936	\$5,143 (Eng.)
TO and DP Training	678	1	678	8 hrs. (Eng.); \$514	5,424 hrs. (Eng.); \$348,709	\$514 (Eng.)
EOP-004-4						
One-Time Review and Revision of Plan	1,400	1	1,400	2 hrs. (Eng.); \$129	2,800 hrs. (Eng.) \$180,012	\$129
Reporting Events	350	1	350	0.17 hrs. (Eng.); \$11	59.5 hrs. (Eng.); \$3,825	\$11
TOTAL			3,343		55,929.5 (Eng.) 3,662 (R.K.) \$3,595,708 (Eng.) \$149,282 (R.K.)	

Title: FERC-725S (Mandatory Reliability Standards).¹⁴

Action: Proposed Collection of Information.

OMB Control No.: 1902-0270.

Respondents: Businesses or other for-profit institutions; not-for-profit institutions.

Frequency of Responses: Annually.

Necessity of the Information: Proposed Reliability Standards EOP-004-4, EOP-005-3, EOP-006-3, and EOP-008-2 are intended to provide accurate reporting of events to NERC's event analysis group to analyze the impact on the reliability of the bulk electric system (EOP-004-4); delineate the roles and responsibilities of entities that support system restoration from blackstart resources (EOP-005-3); clarify the procedures and coordination requirements for reliability coordinator personnel to execute system restoration processes (EOP-006-3); and refine the required elements of an operating plan used to continue reliable operations of the bulk electric system if that primary control functionality is lost (EOP-008-2).

Internal Review: The Commission has assured itself, by means of its internal review, that there is specific, objective support for the burden estimates associated with the information requirements.

¹⁴ The revisions to EOP-004-4, EOP-005-3, EOP-006-3, and EOP-008-2 Reliability Standards will result in paperwork burden being accounted for in FERC-725S (OMB Control No. 1902-0270). These standards will replace previous versions whose paperwork burden was previously approved in FERC-725A (OMB Control No. 1902-0244). The burden proposed here will only be added to FERC-725S and will be temporarily duplicated by previously approved burden in FERC-725A.

20. Interested persons may obtain information on the reporting requirements by contacting the following: Federal Energy Regulatory Commission, 888 First Street, NE Washington, DC 20426 [Attention: Ellen Brown, Office of the Executive Director, e-mail: DataClearance@ferc.gov, phone: (202) 502-8663, fax: (202) 273-0873].

21. For submitting comments concerning the collection(s) of information and the associated burden estimate(s), please send your comments to the Commission and to the Office of Management and Budget, Office of Information and Regulatory Affairs, Washington, DC 20503 [Attention: Desk Officer for the Federal Energy Regulatory Commission, phone: (202) 395-4638, fax: (202) 395-7285]. For security reasons, comments to OMB should be submitted by e-mail to: oir_submission@omb.eop.gov. Comments submitted to OMB should include 1902-0270 and Docket Number RM17-12-000.

IV. Environmental Analysis

22. The Commission is required to prepare an Environmental Assessment or an Environmental Impact Statement for any action that may have a significant adverse effect on the human environment.¹⁵ The Commission has categorically excluded certain actions from this requirement as not having a significant effect on the human environment. Included in the exclusion are rules that are clarifying, corrective, or procedural or that do

¹⁵ *Regulations Implementing the National Environmental Policy Act of 1969*, Order No. 486, FERC Stats. & Regs. ¶ 30,783 (1987).

not substantially change the effect of the regulations being amended.¹⁶ The actions proposed here fall within this categorical exclusion in the Commission's regulations.

V. Regulatory Flexibility Act

23. The Regulatory Flexibility Act of 1980 (RFA)¹⁷ generally requires a description and analysis of proposed rules that will have significant economic impact on a substantial number of small entities. Because the burden discussed above is being accounted for in FERC-725S these standards will replace previous versions whose paperwork burden was previously approved in FERC-725A. The burden will only be added to FERC-725S and will be temporarily duplicated by previously approved burden in FERC-725A.

Accordingly, the Commission certifies that the proposed Reliability Standards will not have a significant economic impact on a substantial number of small entities.

VI. Comment Procedures

24. The Commission invites interested persons to submit comments on the matters and issues proposed in this notice to be adopted, including any related matters or alternative proposals that commenters may wish to discuss. Comments are due [**INSERT DATE 60 days after date of publication in the FEDERAL REGISTER**]. Comments must refer to Docket No. RM17-12-000, and must include the commenter's name, the organization they represent, if applicable, and their address in their comments.

¹⁶ 18 CFR 380.4(a)(2)(ii).

¹⁷ 5 U.S.C. 601-612.

25. The Commission encourages comments to be filed electronically via the eFiling link on the Commission's web site at <http://www.ferc.gov>. The Commission accepts most standard word processing formats. Documents created electronically using word processing software should be filed in native applications or print-to-PDF format and not in a scanned format. Commenters filing electronically do not need to make a paper filing.

26. Commenters that are not able to file comments electronically must send an original of their comments to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street NE, Washington, DC 20426.

27. All comments will be placed in the Commission's public files and may be viewed, printed, or downloaded remotely as described in the Document Availability section below. Commenters on this proposal are not required to serve copies of their comments on other commenters.

VII. Document Availability

28. In addition to publishing the full text of this document in the Federal Register, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through the Commission's Home Page (<http://www.ferc.gov>) and in the Commission's Public Reference Room during normal business hours (8:30 a.m. to 5:00 p.m. Eastern time) at 888 First Street, NE, Room 2A, Washington, DC 20426.

29. From the Commission's Home Page on the Internet, this information is available on eLibrary. The full text of this document is available on eLibrary in PDF and

Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number of this document, excluding the last three digits, in the docket number field.

30. User assistance is available for eLibrary and the Commission's website during normal business hours from the Commission's Online Support at (202) 502-6652 (toll free at 1-866-208-3676) or e-mail at ferconlinesupport@ferc.gov, or the Public Reference Room at (202) 502-8371, TTY (202) 502-8659. E-mail the Public Reference Room at public.referenceroom@ferc.gov.

By direction of the Commission.

Dated: September 20, 2017.

Nathaniel J. Davis, Sr.,
Deputy Secretary.

[FR Doc. 2017-20552 Filed: 9/25/2017 8:45 am; Publication Date: 9/26/2017]