

135 FERC ¶ 61,040  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;  
Marc Spitzer, Philip D. Moeller,  
John R. Norris, and Cheryl A. LaFleur.

North American Electric Reliability Corporation

Docket No. RD11-4-000

ORDER APPROVING RELIABILITY STANDARD

(Issued April 21, 2011)

1. On February 11, 2011, the North American Electric Reliability Corporation (NERC), the Commission-certified Electric Reliability Organization (ERO), submitted a petition for Commission approval of Emergency Preparedness and Operations (EOP) Reliability Standard EOP-008-1 (Loss of Control Center Functionality). The Reliability Standard requires reliability coordinators, transmission operators, and balancing authorities to have an operating plan and facilities for backup functionality to ensure Bulk-Power System reliability in the event that a control center becomes inoperable. NERC also requests that the Commission approve the retirement of currently effective EOP-008-0 concurrent with the effectiveness of the Standard approved in this Order.

2. In this order, we approve Reliability Standard EOP-008-1, finding that the Reliability Standard is just, reasonable, not unduly discriminatory or preferential, and in the public interest. In addition, we approve the retirement of EOP-008-0 as requested by NERC. Also, we approve NERC's requested effective date, i.e., the date in which applicable entities are subject to mandatory compliance, of 24 months after the first day of the first quarter after approval.

**I. Background**

3. Currently-effective Reliability Standard EOP-008-0 (Plans for Loss of Control Center Functionality) contains a single Requirement R1, which provides "Each Reliability Coordinator, Transmission Operator and Balancing Authority shall have a plan to continue reliability operations in the event its control center becomes inoperable." Requirement R1 also identifies mandatory elements of the continuity plan.

4. On March 16, 2007, the Commission issued Order No. 693 approving 83 Reliability Standards proposed by NERC, including EOP Reliability Standard EOP-008-0.<sup>1</sup> In addition, pursuant to section 215(d)(5) of the FPA, the Commission directed the ERO to develop modifications to EOP-008-0 to address specific issues identified by the Commission. In particular, the Commission directed the ERO to develop a modification through the Reliability Standards development process that includes a Requirement that provides, as a minimum, for backup capabilities that are independent from the primary control center, capable to operate for a prolonged period corresponding to the time it would take to replace the primary control center, and provide a minimum set of tools and facilities to replicate the critical reliability functions of the primary control center.<sup>2</sup> The Commission directed that the extent of the backup capability should be consistent with the impact of the loss of the entity's primary control center on the reliability of the Bulk-Power System.

5. The Commission also directed that reliability coordinators have fully complete, dedicated backup control centers.<sup>3</sup> In addition, the Commission directed the ERO to modify the Reliability Standard to require that transmission operators and balancing authorities having operational control over significant portions of generation and load have minimum backup capabilities that replicate the critical reliability functions of the primary control center, but they may do so through contracting for these services instead of through dedicated backup control centers.<sup>4</sup>

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<sup>1</sup> *Mandatory Reliability Standards for the Bulk-Power System*, Order No. 693, FERC Stats. & Regs. ¶ 31,242, *order on reh'g*, Order No. 693-A, 120 FERC ¶ 61,053 (2007).

<sup>2</sup> *Id.* P 663, 672.

<sup>3</sup> *Id.* P 670

<sup>4</sup> *Id.* P 670, 672.

## II. NERC Petition

### A. NERC Description of the Benefits of Reliability Standard EOP-008-1

6. In its February 11, 2011 filing,<sup>5</sup> NERC requests Commission approval of proposed Reliability Standard EOP-008-1. NERC states that EOP-008-1 is intended to ensure that a plan is in place for backup functionality and that facilities and personnel are prepared to implement that plan. NERC states that the proposed Reliability Standard represents a significant revision and improvement to the current Standard by eliminating gaps, reducing ambiguity, eliminating fill-in the-blank components, and addressing the relevant Commission directives in Order No. 693.

7. Discussing the benefits of EOP-008-1, NERC states that the Reliability Standard: (1) delineates what must be included in a plan for backup functionality; (2) includes a provision for managing the risk to the Bulk-Power System during the transition from primary to backup functionality; (3) requires reliability coordinators to have a dedicated facility for its backup functionality; (4) provides that transmission operators and balancing authorities can have either a dedicated facility or may contract for services to provide backup functionality; (5) address the need for formal review and approval of the plan for backup functionality; (6) mandates independence of the primary and backup capabilities; (7) requires testing of the plan; and (8) establishes a procedure for creating a plan to re-establish backup capability following a catastrophic situation.<sup>6</sup> In addition, NERC discusses how EOP-008-1 satisfies the factors set forth in Order No. 672 for analyzing whether a Reliability Standard is just, reasonable, not unduly discriminatory or preferential, and in the public interest.<sup>7</sup>

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<sup>5</sup> *North American Electric Reliability Corp.*, February 11, 2011 Petition of the North American Electric Reliability Corporation for Approval of One Emergency Preparedness and Operations Reliability Standard EOP-008-1 and Retirement of One Existing Reliability Standard EOP-008-0 (NERC Petition).

<sup>6</sup> NERC Petition at 4. Pursuant to 18 CFR 40.3 (2010), the ERO must post on its website currently effective Reliability Standards. NERC has posted Reliability Standard EOP-008-1 on the NERC website at <http://www.nerc.com/page.php?cid=2|20>.

<sup>7</sup> NERC Petition at 8-18. *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).

## **B. Reliability Standard EOP-008-1**

8. Reliability Standard EOP-008-1 contains eight Requirements for the stated purpose of ensuring continued reliable operations of the bulk electric system in the event that a control center becomes inoperable. Requirement R1 requires each applicable entity to have a current operating plan describing the manner in which it will continue to meet its functional obligations in the event that its primary control center functionality is lost. Requirement R2 instructs each applicable entity to have a copy of its current plan for backup functionality at its primary control center and at the location providing backup functionality. Requirement R3 mandates that each reliability coordinator have a backup control center that provides functionality sufficient to maintain compliance with all Reliability Standards that depend on primary control center functionality.

9. Reliability Standard EOP-008-1, Requirement R4 directs balancing authorities and transmission operators to have a backup functionality, either through a facility or contracted services, to maintain compliance with all Reliability Standards that depend on their primary control center functionality. Requirement R5 requires each applicable entity to review annually and approve its plan for backup functionality, and Requirement R7 requires each applicable entity to annually test and document the results of its plan demonstrating the transition time between the simulated loss of the primary control center and the full implementation of the backup functionality. Requirement R6 mandates that primary and backup functionality cannot depend on each other. Finally, each reliability coordinator, balancing authority or transmission operator that experiences a loss of either primary or backup functionality anticipated to last for more than six months must, in accordance with Requirement R8, provide a plan to its Regional Entity within six calendar months of the date when functionality is lost showing how it will re-establish such functionality.

## **III. Notice of Filing, Interventions and Comments**

10. On February 16, 2011, notice of NERC's filing was published in the *Federal Register* with interventions and protests due on or before March 4, 2011.<sup>8</sup> Motions to intervene were timely filed by American Municipal Power, Inc. (AMP) and Modesto Irrigation District (MID). The ISO/RTO Council (ISO/RTO) timely filed a motion to intervene and comments supporting the adoption of proposed Reliability Standard EOP-008-1 and the concurrent retirement of EOP-008-0. Pursuant to Rule 214 of the

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<sup>8</sup> 76 Fed. Reg. 13,345.

Commission's Rules of Practice and Procedure,<sup>9</sup> the timely, unopposed motions to intervene serve to make AMP, MID, and ISO/RTO parties to this proceeding.

#### IV. Discussion

11. The Commission approves Reliability Standard EOP-008-1 as just, reasonable, not unduly discriminatory or preferential and in the public interest.<sup>10</sup> By providing detailed requirements for what must be included in a plan to meet functional obligations in the event a primary control center is lost, by now requiring formal, annual approval of such plans, and by specifically requiring reliability coordinators to have backup facilities and transmission operators and balancing authorities to have backup functionality, EOP-008-1 represents a significant improvement to the currently effective Reliability Standard. The revised Standard addresses the relevant directives in Order No. 693 and specifically requires, among other things, independent backup capabilities, capable of operating for a prolonged period, and providing functionality sufficient to maintain compliance with all Reliability Standards that depend on primary control functionality.

12. Reliability Standard EOP-008-1 requires that all applicable entities have backup functionality. Reliability coordinators in particular must have full backup control centers while balancing authorities and transmission operators may elect to attain backup functionality either by a dedicated facility or by contracted service. This distinction recognizes the comparative difference in the scope of responsibility for a reliability coordinator versus a balancing authority or transmission operator, and the Standard satisfies the Commission directives in this regard.<sup>11</sup>

13. Additionally, we note that Requirement R1 (section 1.5) permits a transition time between the loss of the primary control center and full implementation of backup functionality of up to two hours. NERC states that, in the standards development process, some stakeholders commented that the two hour transition period was too long, others considered it too short, and some argued that the timeframe seemed to weaken the current requirement.<sup>12</sup> According to NERC, the standards drafting team "attempted to

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<sup>9</sup> 18 CFR. 385.214.

<sup>10</sup> 16 U.S.C. 824(d)(2).

<sup>11</sup> See Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 670.

<sup>12</sup> NERC Petition at 37-38.

develop a reasonable number that would allow for a backup control center to be placed sufficiently far away so that the chances of a single catastrophe affecting both sites were minimal, versus having it so far away that there may be a serious gap in reliability during the intervening time before the backup is operational.”<sup>13</sup>

14. The Commission is concerned that the two hour transition period may expose the grid to increased reliability risk without control functionality. For this reason it is imperative that full backup functionality occur as soon as possible after the loss of primary control functionality. Nonetheless, until data from drills, exercises and tests can support a specific time period, the Commission approves the Reliability Standard but notes it may revisit this transition timeframe once the applicable entities have developed experience operating under this new Standard.

15. Accordingly, the Commission approves Reliability Standard EOP-008-1, effective the first day of the first calendar quarter twenty-four months after Commission approval. Further, as requested by NERC, we approve the retirement of currently-effective Reliability Standard EOP-008-0 concurrent with the implementation date of EOP-008-1.

### **III. Violation Risk Factors/Violation Security Levels**

16. To determine a base penalty amount for a violation of a Requirement within a Reliability Standard, NERC must first determine an initial range for the base penalty amount. To do so, NERC assigns a violation risk factor to each Requirement and sub-Requirement of a Reliability Standard that relates to the expected or potential impact of a violation of the Requirement on the reliability of the Bulk-Power System. The Commission has established guidelines for evaluating the validity of each violation risk factor assignment.<sup>14</sup>

17. NERC also will assign each Requirement and sub-Requirement one of four violation severity levels – low, moderate, high, and severe – as measurements for the degree to which the Requirement was violated in a specific circumstance. On

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<sup>13</sup> *Id.*

<sup>14</sup> See *North American Electric Reliability Corp.*, 119 FERC ¶ 61,145, order on *reh'g*, 120 FERC ¶ 61,145, at P 8-13 (2007).

June 19, 2008, the Commission issued an order establishing four guidelines for the development of violation severity levels.<sup>15</sup>

18. With respect to Reliability Standard EOP-008-1, NERC has assigned violation risk factors only to the main Requirements and did not propose violation risk factors for any of the sub-Requirements.<sup>16</sup> NERC noted that such practice is consistent with NERC's August 10, 2009 informational filing regarding the assignment of violation risk factors and violation severity levels.<sup>17</sup>

19. On May 5, 2010, NERC incorporated by reference into Docket No. RR08-4-005,<sup>18</sup> its August 10, 2009 Information Filing in which NERC proposes assigning violation risk factors and violation severity levels only to the main Requirements in each Reliability Standard, and not to the sub-Requirements. Because the assignment of violation risk factors and violation severity levels for EOP-008-1 is made in accordance with NERC's pending petition, the Commission defers discussion of the proposed violation risk factors and violation severity levels until after the Commission issues a final order acting on NERC's petition in Docket No. RR08-4-005.

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<sup>15</sup> *North American Electric Reliability Corp.*, 123 FERC ¶ 61,284, at P 20-35, *order on reh'g & compliance*, 125 FERC ¶ 61,212 (2008).

<sup>16</sup> We note that in *Version Two Facilities Design, Connections and Maintenance Reliability Standards*, Order No. 722, 126 FERC ¶ 61,255, at P 45 (2009), the ERO proposed to develop violation risk factors and violation severity levels for Requirements but not sub-requirements. The Commission denied the proposal as "premature" and, instead, encouraged the ERO to "develop a new and comprehensive approach that would better facilitate the assignment of violation severity levels and violation risk factors." As directed, on March 5, 2010, NERC submitted a comprehensive approach that is currently pending with the Commission in Docket No. RR08-4-005.

<sup>17</sup> NERC Petition at 16 - 17.

<sup>18</sup> Docket No. RR08-4-005 comprises NERC's March 5, 2010 Violation Severity Level Compliance Filing submitted in response to Order No. 722. *See* Order No. 722, 126 FERC ¶ 61,255 at P 45.

#### **IV. Information Collection Statement**

20. The Office of Management and Budget (OMB) regulations require approval of certain information collection requirements imposed by agency action.<sup>19</sup> Upon approval of a collection(s) of information, OMB will assign an OMB control number and an expiration date. Respondents subject to the filing requirements of this Order will not be penalized for failing to respond to these collections of information unless the collections of information display a valid OMB control number.

21. The Commission is submitting these reporting and recordkeeping requirements to OMB for its review and approval under section 3507(d) of the Paperwork Reduction Act. Comments are solicited on the Commission's need for this information, whether the information will have practical utility, the accuracy of provided burden estimates, ways to enhance the quality, utility, and clarity of the information to be collected, and any suggested methods for minimizing the respondent's burden, including the use of automated information techniques.

22. Rather than creating entirely new obligations with respect to the loss of control center functionality, Reliability Standard EOP-008-1 upgrades the existing planning requirements contained in EOP-008-0 and specifically requires reliability coordinators, balancing authorities and transmission operators to have backup functionality. Thus, this Order does not impose entirely new burdens on the effected entities. For example, EOP-008-0 requires each applicable entity to have a plan to continue reliable operations in the event its control center becomes inoperable and to conduct reviews and tests, at least annually, to ensure viability of the plan. This Order, however, imposes new requirements regarding the approval, placement, documentation and updating of plans as well as requires entities that may not already possessing backup functionality to obtain, possibly through contractual arrangements, backup capabilities.

23. Burden Estimate: Our estimate below regarding the number of respondents is based on the NERC compliance registry as of February 17, 2011. According to the registry, there are 23 reliability coordinators, 120 balancing authorities and 176 transmission operators that will be involved in providing information. Under NERC's compliance registration program, however, entities may be registered for multiple functions or, particularly in the case of reliability coordinators, registered for the same function with multiple regional entities, so these numbers incorporate some double

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<sup>19</sup> 5 CFR 1320.11.

counting. The net number of entities responding will be 215, consisting of 17 reliability coordinators, 94 entities registered as both balancing authorities and transmission operators, and 104 entities registered solely as either a balancing authority or a transmission operator. This Order will require applicable entities to revise their plans and document compliance with the Reliability Standard’s requirements. For those balancing authorities and transmission operators that do not already comply with the Standard’s requirement for backup functionality, they will, at a minimum, be required to contract for such services. We understand that all reliability coordinators currently have backup control centers and estimate that approximately 27 entities will have to procure backup functionality. The estimated burden for the requirements in this Order follow:

FERC-725A Data Collection	No. of Respondents (A)	No. of Annual Responses Per Respondent (B)	Hours Per Respondent Per Response (C)	Total Annual Hours ( A x B x C )
Review and possible revision of plan (one-time)	215	1	20	4300
Updating, approving , and maintaining records	215	1	Compliance: 6	1290
			Recordkeeping: 2	430
Balancing authorities and transmission operators contracting for backup functionality (one-time)	27	1	120	3240
Total one-time				7540
Total Recurring				1720

Total				9260
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Information Collection Costs: The Commission seeks comments on the costs to comply with these requirements and recordkeeping burden associated with Reliability Standard EOP-008-1.

- Total Annual Hours for Collection: (Compliance/Documentation + Contracting) = 9260 hours.
- Total One-Time Compliance Cost = 7540 hours @ \$120/hour = \$904,800.
- Total Reoccurring Compliance Cost = 1720 hours @ \$120/hour = \$206,400.
- Total Recordkeeping Cost = 430 hours @ \$28/hour = \$10,240
- Total First Year Cost = \$1,121,440.
- Title: Mandatory Reliability Standards for the Bulk-Power System
- Action: FERC 725A, Proposed Modification to FERC-725A.
- OMB Control No: 1902-0244
- Respondents: Business or other for profit, and/or not for profit institutions.
- Frequency of Responses: On occasion.
- Necessity of the Information: This Order approves revised Reliability Standard that modifies an existing requirement regarding preparing for the loss of control center functionality. Reliability Standard EOP-008-1 requires entities to revise and authorize operating plans for backup control center functionality. It also requires some entities to procure such backup functionality, and in every case imposes requirements to retain records.

24. Interested persons may obtain information on the reporting requirements by contacting: 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]. Comments on the requirements of this order may also be sent to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503 [Attention: Desk Officer for the Federal Energy Regulatory Commission]. For security reasons, comments should be sent by e-mail to OMB at oira\_submission@omb.eop.gov. Please reference OMB Control Number 1902-0244 and the docket number of this Order in your submission.

## V. Environmental Analysis

25. 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.<sup>20</sup> The action taken in the Order falls within the categorical exclusion in the Commission's regulations for orders that are clarifying, corrective or procedural, for information gathering, analysis, and dissemination.<sup>21</sup> Accordingly, neither an environmental impact statement nor an environmental assessment is required.

## VI. Regulatory Flexibility Act

26. The Regulatory Flexibility Act of 1980 (RFA)<sup>22</sup> generally requires a description and analysis of orders that will have significant economic impact on a substantial number of small entities. The RFA mandates consideration of regulatory alternatives that accomplish the stated objectives of a proposed order and that minimize any significant economic impact on a substantial number of small entities. The Small Business Administration's (SBA) Office of Size Standards develops the numerical definition of a small business.<sup>23</sup> The SBA has established a size standard for electric utilities, stating that a firm is small if, including its affiliates, it is primarily engaged in the transmission, generation and/or distribution of electric energy for sale and its total electric output for the preceding twelve months did not exceed four million megawatt-hours.<sup>24</sup>

27. Comparison of the NERC compliance registry with data submitted to the Energy Information Administration on Form EIA-861 indicates that perhaps as many as 54 balancing authorities and transmission operators to which the requirements of this Reliability Standard will apply will be deemed small entities. Reliability Standard EOP-008-1 clarifies the elements of a plan for the loss of control center functionality, imposes

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<sup>20</sup> *Regulations Implementing the National Environmental Policy Act*, Order No. 486, 52 FR 47897 (Dec. 17, 1987), FERC Stats. & Regs., Regulations Preambles 1986-1990 ¶ 30,783 (1987).

<sup>21</sup> 18 CFR 380.4(a)(5).

<sup>22</sup> 5 U.S.C. 601-12.

<sup>23</sup> 13 CFR 121.101.

<sup>24</sup> 13 CFR 121.201, Sector 22, Utilities & n. 1.

approval and updating requirements for such plans, and requires balancing authorities and transmission operators to have backup control center functionality. Of the 54 small entities, each will incur the compliance and recordkeeping costs of \$3,176 associated with revising, approving, maintaining and updating their plans for loss of control center operability, but only that subset of small entities that has not already obtained backup control center functionality, which we estimate to be 27 entities, will face the one-time additional \$14,400 burden of contracting for such functionality. The Commission estimates that, in addition to the cost of contracting, the first year's cost of obtaining backup functionality will be approximately \$210,000 with each subsequent year costing \$60,000. In aggregate, the Commission estimates that this Reliability Standard may impose on small entities that do not currently have backup functionality an initial cost of perhaps \$227,576 with the cost of subsequent years being reduced to \$60,776. Accordingly, the cost of Reliability Standard EOP-008-1 should not present a significant operating cost to a substantial number of small entities.

28. Based on this understanding, the Commission certifies that this Reliability Standard will not have a significant economic impact on a substantial number of small entities. Accordingly, no regulatory flexibility analysis is required.

## **VII. Effective Date**

29. This order will become effective [insert date 60 days from publication in **FEDERAL REGISTER**].

### The Commission Orders:

(A) Reliability Standard EOP-008-1, submitted by the North American Electric Reliability Corporation, is hereby approved, as discussed in the body of this order.

(B) Reliability Standard EOP-008-0 is hereby retired upon implementation of EOP-008-1, as discussed in the body of this order.

By the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.