

190 FERC ¶ 61,099  
FEDERAL ENERGY REGULATORY COMMISSION  
WASHINGTON, DC 20426

February 20, 2025

In Reply Refer To:  
North American Electric Reliability Corporation  
Docket No. RD25-4-000

North American Electric Reliability Corporation  
1401 H Street NW  
Suite 410  
Washington, DC 20005

Attention: Lauren A. Perotti

Dear Ms. Perotti:

1. On December 17, 2024, the North American Electric Reliability Corporation (NERC) submitted a petition seeking approval of proposed Reliability Standard TPL-008-1 (Transmission System Planning Performance Requirements for Extreme Temperature Events).<sup>1</sup> Further, NERC seeks approval of the associated implementation plan, violation risk factors, and violation severity levels. NERC also seeks approval of a proposed definition of “extreme temperature assessment” for inclusion in the NERC Glossary of Terms Used in NERC Reliability Standards (NERC Glossary).<sup>2</sup> For the reasons discussed below, pursuant to section 215(d)(2) of the Federal Power Act (FPA),<sup>3</sup> we grant NERC’s petition.

2. In Order No. 896, the Commission directed NERC to submit a new or modified Reliability Standard that addresses the Commission’s identified concerns pertaining to transmission system planning for extreme heat and cold weather events that impact the Reliable Operation of the Bulk-Power System.<sup>4</sup> Specifically, the Commission directed NERC to develop a new or modified Reliability Standard that requires the following: (1) development of benchmark planning cases based on major prior extreme heat and

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<sup>1</sup> Petition at 1.

<sup>2</sup> *Id.* at 16.

<sup>3</sup> 16 U.S.C. § 824o(d)(2).

<sup>4</sup> *Transmission Sys. Plan. Performance Requirements for Extreme Weather*, Order No. 896, 183 FERC ¶ 61,191 (2023).

cold weather events and/or meteorological projections; (2) planning for extreme heat and cold weather events using steady state and transient stability analyses expanded to cover a range of extreme weather scenarios including the expected resource mix's availability during extreme heat and cold weather conditions; and (3) development of corrective action plans that mitigate certain instances where performance requirements for extreme heat and cold weather events are not met.<sup>5</sup>

3. In its petition, NERC asserts that proposed Reliability Standard TPL-008-1 is responsive to the Commission's directives in Order No. 896.<sup>6</sup> NERC further states that the proposed Reliability Standard "would advance the reliability of the Bulk-Power System by improving how entities plan for the impacts of extreme temperature events on their systems."<sup>7</sup> NERC explains that the proposed Reliability Standard, which focuses on improving how planning coordinators and transmission planners plan for extreme heat and extreme cold weather events, establishes a framework for the performance of periodic studies<sup>8</sup> of the wide-area impacts on the Bulk-Power System of extreme heat and extreme cold weather events.<sup>9</sup> These extreme temperature assessments would be developed from predefined benchmark temperature events established by NERC, based on its analysis of 43 years of historical meteorological data.<sup>10</sup>

4. NERC explains that proposed Reliability Standard TPL-008-1 would require planning entities in defined zones to coordinate with each other on the development of extreme temperature assessments at least once every five years.<sup>11</sup> If an extreme temperature assessment identifies certain instances where system performance requirements would not be met during extreme heat or extreme cold weather events, the proposed Reliability Standard would require applicable planning entities to develop

<sup>5</sup> *Id.* at P 6.

<sup>6</sup> Petition at 15.

<sup>7</sup> *Id.*

<sup>8</sup> NERC's petition refers to these periodic studies as "extreme temperature assessments," which NERC proposes to define in the NERC Glossary as a "[d]ocumented evaluation of future Bulk Electric System performance for extreme heat and extreme cold benchmark temperature events." *Id.* at 16.

<sup>9</sup> *Id.* at 14.

<sup>10</sup> *Id.* at 23. Conversely, subject to NERC approval, planning coordinators may develop and use benchmark temperature events that meet the criteria outlined in Requirements R2.1-R2.2 of the proposed Reliability Standard. *Id.* at 25.

<sup>11</sup> *Id.* at 14-15, 19.

and share corrective action plans that would remedy the identified problem.<sup>12</sup> If non-consequential load shed is identified as an element of a corrective action plan, the proposed Reliability Standard would require the applicable planning entity to consider and document alternative corrective measures that would avoid load shed.<sup>13</sup> The proposed Reliability Standard would also require planning entities to share their corrective action plans with, and solicit feedback from, the applicable regulatory authorities or governing bodies responsible for retail electric service.<sup>14</sup>

5. NERC proposes an implementation plan consisting of phased-in compliance dates over a five-year period. NERC asserts that this implementation plan “balances the urgency in the need to implement the proposed Reliability Standard against the reasonableness of the time allowed for those who must comply to develop the necessary processes and capabilities to perform these new wide-area extreme temperature studies.”<sup>15</sup>

6. Notice of NERC’s December 17, 2024 petition was published in the *Federal Register*, 89 Fed. Reg. 105038 (Dec. 26, 2024), with interventions and protests due on or before January 17, 2025. Ameren Services Company filed a timely motion to intervene. Pursuant to Rule 214 of the Commission’s Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2024), the timely, unopposed motion to intervene serves to make the above entity a party to this proceeding. No comments or protests were submitted.

7. Pursuant to section 215(d)(2) of the FPA, we approve proposed Reliability Standard TPL-008-1 as just and reasonable and not unduly discriminatory or preferential and in the public interest.<sup>16</sup> We approve the proposed Reliability Standard’s associated violation risk factors and violation severity levels and the proposed implementation plan. We also approve NERC’s proposed definition of “extreme temperature assessment” for inclusion in the NERC Glossary.

8. We find that proposed Reliability Standard TPL-008-1 satisfies the Commission’s directives from Order No. 896 to submit a new or modified Reliability Standard that addresses concerns pertaining to transmission system planning for extreme heat and extreme cold weather events that impact the Reliable Operation of the Bulk-Power System. Although system planning measures alone will not eliminate the reliability

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<sup>12</sup> *Id.* at 14-15.

<sup>13</sup> *Id.* at 47-48.

<sup>14</sup> *Id.*

<sup>15</sup> *Id.* at 59-60.

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

risk associated with extreme heat and extreme cold events, we find that Reliability Standard TPL-008-1 will help prepare the Bulk-Power System for extreme weather events in the long term and, together with the requirements in the Cold Weather Reliability Standards,<sup>17</sup> will work to mitigate the near-term reliability impacts of extreme weather events.

9. Given the increasing frequency and intensity of extreme weather events, we agree with NERC that the use of *future* meteorological projections for developing benchmark temperature events could advance accurate system planning.<sup>18</sup> We expect NERC to continue working to expand its benchmark temperature event library to cover future meteorological projections.<sup>19</sup> Further, we strongly encourage planning entities that can comply with the requirements of Reliability Standard TPL-008-1 earlier than the mandatory and enforceable dates to do so.

### **Information Collection Statement**

10. The FERC-725N information collection requirements are subject to review by the Office of Management and Budget (OMB) under section 3507(d) of the Paperwork Reduction Act of 1995. OMB's regulations require approval of certain information collection requirements imposed by agency rules. Upon approval of a collection of information, OMB will assign an OMB control number and expiration date. Respondents subject to the filing requirements will not be penalized for failing to respond to these collections of information unless the collections of information display a valid OMB control number. The Commission solicits comments on the need for this information, whether the information will have practical utility, the accuracy of the burden estimates, ways to enhance the quality, utility, and clarity of the information to be collected or retained, and any suggested methods for minimizing respondents' burden, including the use of automated information techniques.

11. The Commission bases its paperwork burden estimates on the additional paperwork burden presented by the proposed new Reliability Standard TPL-008-1. The new defined term "extreme temperature assessment" is not expected to generate any new burden as it is a definition used within the body of Reliability Standards. Reliability Standards are objective-based and allow entities to choose compliance approaches best tailored to their systems. Additionally, proposed Reliability Standard

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<sup>17</sup> See Reliability Standard EOP-011-2 (Emergency Preparedness and Operations); Reliability Standard EOP-012-2 (Extreme Cold Weather Preparedness and Operations); Reliability Standard IRO-010-4 (Reliability Coordinator Data Specification and Collection); Reliability Standard TOP-003-5 (Operational Reliability Data).

<sup>18</sup> Petition at 23.

<sup>19</sup> See Order No. 896, 183 FERC ¶ 61,191 at P 36 n.70.

TPL-008-1, Requirement R1 identifies each responsible entity that shall complete its responsibilities such that the extreme temperature assessment is completed at least once every five calendar years. The NERC Compliance Registry, as of November 20, 2024, identifies unique U.S. entities that are subject to mandatory compliance with proposed Reliability Standard TPL-008-1, as 62 planning coordinators (PC) and 204 transmission planners (TP). Based on these assumptions, we estimate the following reporting burden:

<b>Proposed Burden TPL-008-1 Docket No. RD25-4</b>					
<b>Reliability Standard</b>	<b>Type and Number of Entity<sup>20</sup> (1)</b>	<b>Number of Annual Responses Per Entity (2)</b>	<b>Total Number of Responses (1)*(2)=(3)</b>	<b>Average Number of Burden Hours per Response<sup>21</sup> (4)</b>	<b>Total Burden Hours (3)*(4)=(5)</b>
<b>Annual Collection TPL-008-1 FERC-725N</b>					
<b>Annual review and record retention</b>	62 (PC)	1	62	88 hrs. \$ 70.67/hr	5,456 hrs. \$385,576
	204 (TP)	1	204	56 hrs. \$ 70.67/hr	11,424 hrs. \$807,334
<b>Total for TPL-008-1</b>			<b>266</b>		<b>16,880 hrs. \$1,192,910</b>

12. The annual responses and burden hours for proposed Reliability Standard TPL-008-1 will be 266 responses; 16,880 hours.

13. The annual cost burden is \$1,192,910.00 for proposed Reliability Standard TPL-008-1.

14. Title: Mandatory Reliability Standards: TPL Reliability Standards.

15. Action: Revision to FERC-725N information collection.

16. OMB Control No.: 1902-0264.

<sup>20</sup> Number of entities data taken from the NERC compliance registry, dated November 20, 2024.

<sup>21</sup> The estimated hourly cost (salary plus benefits) is a combination based on the Bureau of Labor Statistics (BLS), as of 2024, for 75% of the average of an Electrical Engineer (17-2071) \$79.31/hr.,  $79.31 \times .75 = 59.4825$  (\$59.48-rounded) (\$59.48/hour) and 25% of an Information and Record Clerk (43-4199) \$44.74/hr.,  $44.74 \times .25 = 11.185$  (\$11.19 rounded) (\$11.19/hour), for a total ( $59.48 + 11.19 = 70.67$ /hour).

17. Respondents: Businesses or other for-profit institutions; not-for-profit institutions.
18. Frequency of Responses: On occasion.
19. Necessity of the Information: This order approves the Reliability Standard pertaining to transmission system planning performance requirements for extreme temperature events. As discussed above, the Commission proposes to approve proposed Reliability Standard TPL-008-1 pursuant to section 215(d)(2) of the FPA because it establishes transmission system planning performance requirements to help ensure that the Bulk-Power System will operate reliably during extreme heat and extreme cold temperature events.
20. Internal Review: The Commission has reviewed the proposed Reliability Standard and made a determination that its action is necessary to implement section 215 of the FPA.
21. 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: Kayla Williams, Office of the Executive Director, email: DataClearance@ferc.gov, phone: (202) 502-6468.
22. 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: oira\_submission@omb.eop.gov. Comments submitted to OMB should include Docket Number RD25-4-000 and OMB Control Number 1902-0264.
23. 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>).
24. 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 excluding the last three digits of this document in the docket number field.
25. 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 email at [ferconlinesupport@ferc.gov](mailto: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](mailto:public.referenceroom@ferc.gov).

26. All submissions must be formatted and filed in accordance with submission guidelines at: <http://www.ferc.gov/help/submission-guide.asp>. For user assistance, contact FERC Online Support by e-mail at [ferconlinesupport@ferc.gov](mailto:ferconlinesupport@ferc.gov), or by phone at: (866) 208-3676 (toll-free), or (202) 502-8659 for TTY.

By direction of the Commission.

Carlos D. Clay,  
Deputy Secretary.