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

North American Electric Reliability	)
Corporation	)

**Docket No. RD23-1-000** 

### REPLY COMMENTS OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

The North American Electric Reliability Corporation ("NERC") submits the following reply comments in response to comments filed in this proceeding regarding NERC's petition for approval of Reliability Standards EOP-011-3 and EOP-012-1.<sup>1</sup> The commenters each raise concerns or seek clarification regarding the proposed Reliability Standards EOP-012-1 and EOP-011-3. NERC submits this reply to enhance the record by clarifying and completing the record on certain issues raised by commenters. In particular, NERC addresses its authority to develop Reliability Standards for the reliable operation of the bulk-power system during cold weather conditions under Section 215 of the Federal Power Act. NERC also reiterates its commitment to addressing the risks posed by the failure to properly prepare for cold weather conditions through strong, results-based Reliability Standards. NERC seeks leave to submit this reply and requests that the Commission waive, to the extent applicable, Rule 213(a)(2), 18 C.F.R. 385.213(a)(2), for this purpose.

<sup>&</sup>lt;sup>1</sup> These comments include Comments of the ISO/RTO Council, Comments of the Electric Power Supply Association ("ESPA") and PJM Power Providers Group ("P3"), Motion to Intervene and Comments of Invenergy, LLC, Comments of New England Power Generators Association, and Comments of the Texas Competitive Power Advocates, each filed in the above-captioned docket on December 8, 2022, and the Motion to Intervene and Comments of the Transmission Access Policy Study Group, filed in the above-captioned docket on December 1, 2022.

## I. Proposed Reliability Standards EOP-012-1 and EOP-011-3 are Consistent with NERC's Authority under Section 215 of the Federal Power Act

Proposed Reliability Standards EOP-012-1 and EOP-011-3 build upon the approved cold weather Reliability Standards EOP-011-2, TOP-003-5, and IRO-010-4 to provide a more comprehensive framework for generator cold weather preparedness, consistent with the recommendations of the FERC, NERC, and Regional Entity Joint Inquiry report examining the causes of the February 2021 event affecting Texas and the south central United States.<sup>2</sup> Consistent with Recommendation 1f of the Joint Inquiry Report, proposed Reliability Standard EOP-012-1 Requirements R1 and R2 would require new and existing generation units, respectively, to implement freeze protection measures so that they may operate reliably at the expected cold weather temperatures for their location.

Contrary to the assertions of ESPA, P3, and Invenergy, the freeze protection measures required in proposed Reliability Standard EOP-012-1 are within NERC's and the Commission's reliability authority under Section 215 of the Federal Power Act. ESPA and P3 urge the Commission to remand proposed Reliability Standard EOP-012-1 and direct NERC to replace Requirements R1 and R2 with a requirement for Balancing Authorities "to ensure sufficient qualities of weather resilient generation are available."<sup>3</sup> ESPA and P3 assert, among other things, that proposed Reliability Standard EOP-012-1 Requirements R1 and R2 exceed NERC's authority

<sup>&</sup>lt;sup>2</sup> FERC, NERC, Regional Entity Staff Report: *The February 2021 Cold Weather Outages in Texas and the South Central United States* (Nov. 2021), https://www.ferc.gov/media/february-2021-cold-weather-outagestexasand-south-central-united-states-ferc-nerc-and [hereinafter Joint Inquiry Report].

<sup>&</sup>lt;sup>3</sup> Comments of the Electric Power Supply Association and the PJM Power Providers Group, Docket No. RD23-1-000 (Dec. 8, 2022) at 2 [hereinafter ESPA/P3 Comments].

under Section 215 of the Federal Power Act.<sup>4</sup> Invenergy similarly questions NERC's authority to develop Reliability Standards to address freeze protection measures for existing generating units.<sup>5</sup>

NERC disagrees with the novel and limited interpretation of Section 215 offered by these commenters. Proposed Reliability Standard EOP-012-1 is within NERC's and the Commission's reliability authority as contemplated by Section 215 of the Federal Power Act and would advance the reliability of the bulk-power system in cold weather conditions. NERC respectfully requests the Commission approve proposed Reliability Standard EOP-012-1 as just, reasonable, not unduly discriminatory or preferential, and in the public interest, for the reasons stated more fully in NERC's petition.

# a. Proposed Reliability Standard EOP-012-1 is Within the Scope of NERC's and FERC's Authority under Section 215 of the Federal Power Act.

Proposed Reliability Standard EOP-012-1 is within the scope of the authority Congress granted the Commission and the Commission-certified Electric Reliability Organization in Section 215 of the Federal Power Act. Section 215 provides a three-part framework for analyzing whether a proposed reliability standard is within NERC's authority under the statute. First, the proposed reliability standard must apply to a user, owner, or operator of the bulk-power system.<sup>6</sup> Second, the proposed reliability standard must provide for the reliable operation of the bulk-power system.

<sup>&</sup>lt;sup>4</sup> *Id.* at 4.

<sup>&</sup>lt;sup>5</sup> Motion to Intervene and Comments of Invenergy LLC, Docket No. RD23-1-000 (Dec. 8, 2022) at 13 ("Moreover, it is not even clear that NERC has the authority under Section 215 of the Federal Power Act to mandate retrofits on existing generators since a reliability standard can only include requirements "for the operation of existing bulk-power system facilities . . . and the design *of planned additions or modifications* to such facilities to the extent necessary to provide for the reliable operation of the bulk-power system." (emphasis in original))

<sup>&</sup>lt;sup>6</sup> 16 U.S.C. 824o(b)(1), Jurisdiction and Applicability ("The Commission shall have jurisdiction, within the United States, over the ERO certified by the Commission under subsection (c), any regional entities, and all users, owners and operators of the bulk-power system, including but not limited to the entities described in section 824(f) of this title, for purposes of approving reliability standards established under this section and enforcing compliance with this section. All users, owners and operators of the bulk-power system shall comply with reliability standards that take effect under this section."). *See also* 18 C.F.R. § 39.2.

Third, the proposed reliability standard may include operational or design requirements, but may not address matters expressly excluded in the statute that were historically left to the jurisdiction of the states. As discussed more fully below, proposed Reliability Standard EOP-012-1 meets the requirements of each element of this framework and is therefore within the reliability authority specified under Section 215 of the Federal Power Act.<sup>7</sup>

As to the first element of this framework, proposed Reliability Standard EOP-012-1 would apply to users, owners, or operators of the bulk-power system. Section 215 of the Federal Power Act defines the "bulk-power system" as:

- (A) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and
- (B) electric energy from generation facilities needed to maintain transmission system reliability.

The term does not include facilities used in the local distribution of electric energy.<sup>8</sup>

Proposed Reliability Standard EOP-012-1 would apply to those Generator Owners and Generator Operators who are registered with NERC under NERC's Commission-approved registration criteria for registering users, owners, and operators of the bulk-power system for standards compliance purposes.<sup>9</sup> In the context of the bulk-power system definition provided above, this includes both "facilities and control systems necessary for operating an interconnected

<sup>&</sup>lt;sup>7</sup> NERC clarifies that proposed Reliability Standard EOP-011-3 also meets this framework, however, the commenters do not appear to have raised concerns regarding the statutory validity of that standard. Also, as the commenters focus their concerns largely on NERC's authority to develop Requirements R1 and R2 related to generator freeze protection measures, NERC's response focuses on NERC's authority to develop those particular requirements.

<sup>&</sup>lt;sup>8</sup> 16 U.S.C. § 824o(a)(1); see also 18 C.F.R. § 39.1.

<sup>&</sup>lt;sup>9</sup> See Appendix 5B to the NERC Rules of Procedure, Statement of Compliance Registry Criteria.

energy transmission network (or any portion thereof)," and "electric energy from generation facilities needed to maintain transmission system reliability."

As to the second element of the framework, proposed Reliability Standard EOP-012-1 would provide for the reliable operation of the bulk-power system, as required by the statutory definition of "reliability standard". Section 215(a)(3) of the Federal Power Act defines a "reliability standard" as follows:

The term "reliability standard" means a requirement, approved by the Commission under this section, to provide for reliable operation of the bulk-power system. The term includes requirements for the operation of existing bulk-power system facilities, including cybersecurity protection, and the design of planned additions or modifications to such facilities to the extent necessary to provide for reliable operation of the bulk-power system, but the term does not include any requirement to enlarge such facilities or to construct new transmission capacity or generation capacity.<sup>10</sup>

Section 215(a)(4) of the Federal Power Act defines the term "reliable operation" as follows:

The term "reliable operation" means operating the elements of the bulk-power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance, including a cybersecurity incident, or unanticipated failure of system elements.<sup>11</sup>

The record before the Commission amply demonstrates that the generator freeze protection

requirements in proposed Reliability Standard EOP-012-1 would provide for the reliable operation of the bulk-power system. Not only would they provide for the reliable operation of the bulk-power system, they are *necessary*. The February 2021 Event was the fourth cold weather reliability event in a decade that was caused, in large part, by the failure of generating units to prepare for cold weather. During this event, over 44% of the total generation outages were due to freezing issues;

<sup>&</sup>lt;sup>10</sup> 16 U.S.C. § 824o(a)(3); see also 18 C.F.R. § 39.1.

<sup>&</sup>lt;sup>11</sup> 16 U.S.C. § 824o(a)(4); see also 18 C.F.R. § 39.1.

notably, 81% of these freeze-related outages occurred at temperatures above the generating unit's stated ambient design temperature.<sup>12</sup> Widespread generation outages contributed to energy and transmission emergencies in a significant portion of the south central United States, and the ERCOT system came dangerously close to a complete blackout. To maintain the stability of the system, system operators in three Reliability Coordinator footprints ordered what ultimately became the largest controlled firm load shed event in U.S. history.<sup>13</sup>

Proposed Requirements R1 and R2 would address the causes of the February 2021 event directly by requiring Generator Owners who operate in freezing temperatures to implement freeze protection measures on their generating units or declare the constraints that prevent them from doing so. Requirement R1 would apply to new generation coming online after the effective date of the requirement, and Requirement R2 would apply to existing generation. This is so these generating units can support bulk-power system reliability in the winter weather conditions they will face at their location.

As to the third element of the framework, proposed Reliability Standard EOP-012-1 contains requirements that are within the scope of what a "reliability standard" may include, as provided in the definition of "reliability standard" cited above. The term "reliability standard" has express inclusions ("the term includes...") and express exclusions ("the term does not include..."). The term "reliability standard" expressly includes requirements for the operation of existing facilities and the design of planned additions or modifications to such facilities as needed to provide for the reliable operation of the bulk-power system. The term "reliability standard"

<sup>&</sup>lt;sup>12</sup> See discussion in NERC's Petition at 16-17 (citing Joint Inquiry Report at 11-17).

<sup>&</sup>lt;sup>13</sup> See id. at 13 (citing Joint Inquiry Report at 9-10).

expressly excludes requirements to enlarge existing facilities and requirements "to construct new transmission capacity or generation capacity."

Proposed Reliability Standard EOP-012-1 Requirements R1 and R2 are requirements that are within the scope of what a "reliability standard" may address as specified in Section 215. The proposed requirements may call for operational or design measures, depending on the approach chosen by the individual Generator Owner to implementing freeze protection measures or implementing corrective actions as required by the standard. The proposed Reliability Standard provides significant flexibility on the freeze protection or corrective action approaches that may be considered. Under no reasonable reading, however, could proposed Requirements R1 or R2 be interpreted as requiring the "enlargement" of existing facilities, as that term is commonly understood, or as calling for the construction of new generation capacity. The proposed requirements should ensure that more existing generation capacity is available during expected cold weather conditions to support bulk-power system reliability, instead of being forced offline due to preventable and foreseeable freezing issues. This does not mean, however, that the proposed requirements are calling for the enlargement of existing facilities or construction of new generation capacity.

In summary, proposed Reliability Standard EOP-012-1 is within the scope of a "reliability standard" as provided by the plain meaning of Section 215 of the Federal Power Act. It is therefore within the Commission's authority to approve the standard as proposed by NERC.

#### b. The Commenters Argue for an Overly Narrow Interpretation of Section 215 that Would Constrain NERC's Ability to Effectively Address Reliability Risks.

Despite the reliability need for proposed Reliability Standard EOP-012-1 Requirements R1 and R2 and NERC's broad statutory authority, ESPA and P3 assert that the proposed requirements "fall outside the scope of Section 215 of the Federal Power Act." They contend that "Congress did not intend for FPA Section 215 to permit a Reliability Standard that requires [Generator Owners] to make physical modifications to their existing facilities in the manner NERC has outlined."<sup>14</sup> They concede that "NERC can order some modifications to ensure that facilities operate *as expected*," as demonstrated by other approved Reliability Standards, and NERC can require entities to develop and implement Corrective Action Plans for freezing issues as provided in proposed EOP-012-1 Requirements R6 and R7.<sup>15</sup> However, they contend that NERC cannot require entities to undertake modifications which change a resource's equipment limits, as they assert Requirements R1 and R2 would do.<sup>16</sup>

ESPA's and P3's interpretation of Section 215 is overly narrow and constrained, and it is not consistent with the broad reliability authority Congress provided in Section 215. ESPA and P3 argue for a much more narrow definition of "reliability standard" than the plain meaning explained above. They appear to argue that the definition of "reliable operation," as used in the definition of what a "reliability standard" includes, actually infers an additional exclusion to the definition of "reliability standard" beyond those expressly enumerated by Congress; specifically, that a "reliability standard" may not require physical modifications that would change a resource's equipment limits.<sup>17</sup>

They are wrong. Proposed Reliability Standard EOP-012-1 Requirements R1 and R2 address generator freeze protection measures. The commenters fail to prove that these requirements would be prohibited under the Section 215 definition of "reliable operation," a definition that contemplates operation within thermal, voltage, or stability limits so that

<sup>&</sup>lt;sup>14</sup> ESPA/P3 Comments at 5.

<sup>&</sup>lt;sup>15</sup> ESPA/P3 comments at 5-6 (emphasis in original).

I6 Id.

<sup>&</sup>lt;sup>17</sup> ESPA/P3 Comments at 6.

unexpected events on the system will not result in instability, uncontrolled separation, or cascading. However, even assuming *arguendo* that proposed EOP-012-1 could be viewed as requiring changes to generating unit "resource limits," this interpretation of Section 215 would nevertheless conflict with the well-established principle that "the legislature says in statute what it means and means in a statute what it says there."<sup>18</sup> Congress defined what the term "reliability standard" includes, and what the term "reliability standard" does not include. Congress did not limit the definition of "reliability standard" in the manner suggested by ESPA and P3, by barring development of reliability standards that could be construed to change a resource's equipment limits. Nor would such a limitation make much sense in the broader context of ensuring grid reliability under Section 215.

To the contrary, nothing in Section 215, including the definition of "reliability standard", bars NERC from requiring entities to make modifications to existing facilities, if those requirements provide for the reliable operation of the bulk-power system and do not call for the enlargement of existing facilities or the construction of new capacity. Moreover, nothing in the definition of "reliability standard" prohibits NERC from requiring entities to design their new facilities to meet certain criteria, as Requirement R1 proposes to do. To the contrary, the definition expressly provides that "reliability standards" may address design for "planned additions," which can reasonably be read to include design requirements for new generation capacity under development.

<sup>&</sup>lt;sup>18</sup> See Connecticut Nat. Bank v. Germain, 503 U.S. 249, 253-254 (1992) (citing United States v. Ron Pair Enterprises, Inc., 489 U. S. 235, 241–242 (1989); United States v. Goldenberg, 168 U. S. 95, 102–103 (1897); Oneale v. Thornton, 6 Cranch 53, 68 (1810)).

ESPA and P3 concede that NERC may require certain measures from generators, such as "requiring physical barriers, Information Technology/Operational Technology hardware, etc."<sup>19</sup> For example, multiple Commission-approved Reliability Standards address the operation and maintenance of generator-owned equipment in support of bulk-power system reliability.<sup>20</sup> The Commission-approved CIP Reliability Standards require Generator Owners and Generator Operators to implement physical and cyber access controls based on the impact their associated facilities, systems, and equipment could pose to the reliable operation of the bulk electric system if their BES Cyber Systems were destroyed, degraded, misused, or otherwise rendered unavailable. Proposed Reliability Standard EOP-012-1 Requirements R1 and R2 would require generators to implement freeze protection measures so that their facilities are reliable in the cold weather conditions experience shows us they face, and avoid the negative bulk-power system impacts experience shows us results from the failure to prepare. ESPA and P3 fail to explain how requirements to implement freeze protection measures are materially different in nature or kind from the types of reliability measures they concede NERC may require and which the Commission has approved in the past.

The concerns regarding the jurisdiction of NERC to develop proposed Reliability Standard EOP-012-1 Requirements R1 and R2 appear to be rooted, at least in part, in concerns regarding the interaction between the proposed requirements and the availability of cost recovery in the organized markets.<sup>21</sup> These are two separate and distinct inquiries, only one of which can be fully

<sup>&</sup>lt;sup>19</sup> See ESPA/P3 Comments at 6.

<sup>&</sup>lt;sup>20</sup> See, e.g., Reliability Standard PRC-005-6 (Protection System, Automatic Reclosing, and Sudden Pressure Relaying Maintenance); Reliability Standard PRC-025-2 (Generator Relay Loadability); Reliability Standard VAR-002-4.1 (Generator Operation for Maintaining Network Voltage Schedules).

<sup>&</sup>lt;sup>21</sup> See, e.g., ESPA/P3 Comments at 7-9. Other commenters, while not directly challenging NERC's jurisdiction to develop proposed Reliability Standard EOP-012-1, also express concerns regarding cost recovery issues. See Comments of Texas Competitive Power Advocates (Dec. 8, 2022) at 5, 7-8.

addressed in this proceeding. The first inquiry has already been addressed - the proposed standard is within the scope of a "reliability standard" under Section 215 of the Federal Power Act. The second inquiry involves market-related considerations; particularly whether cost recovery mechanisms should be created for any necessary compliance expenditures. Cost recovery concerns are outside the scope of what a reliability standard may address. The Commission should decline to remand a proposed reliability standard that is needed for reliability, is within the scope of Section 215, and fully adheres to the Commission's competition guidance in Order No. 672<sup>22</sup> solely due to concerns relating to the availability of cost recovery.

In conclusion, proposed Reliability Standard EOP-012-1 is a valid "reliability standard" as defined by Section 215 of the Federal Power Act. The Commission may approve it under that section. For reasons stated more fully in NERC's petition, NERC respectfully requests the Commission approve proposed Reliability Standards EOP-012-1 and EOP-011-3 as just, reasonable, not unduly discriminatory, and in the public interest.

## II. NERC Remains Committed to Developing Strong Reliability Standards for Cold Weather Preparedness.

Several commenters have submitted comments in this proceeding raising concerns regarding, or seeking clarification of, various aspects of proposed Reliability Standard EOP-012-1. For example, issues have been raised regarding the cold weather temperature criteria used in the

<sup>&</sup>lt;sup>22</sup> Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards, Order No. 672, 114 FERC ¶ 61,104, order on reh'g, Order No. 672-A, 114 FERC ¶ 61,328 (2006) Order No. 672 at P 332 ("The ERO should attempt to develop a proposed Reliability Standard that has no undue negative effect on competition. Among other possible considerations, a proposed Reliability Standard should not unreasonably restrict available transmission capability on the Bulk-Power System beyond any restriction necessary for reliability and should not limit use of the Bulk-Power System in an unduly preferential manner. It should not create an undue advantage for one competitor over another.) See also id. at 378 ("In approving a Reliability Standard, we will ensure that it does not have the implicit effect of either favoring or thwarting either bilateral or organized markets. At the same time, we will also ensure that a proposed Reliability Standard does not unduly favor either individual participants or certain classes of participants, as required by the statute.").

proposed standard,<sup>23</sup> the standard's recognition of commercial and other constraints that may prevent an entity from implementing freeze protection measures to provide the capability required by the proposed standard,<sup>24</sup> clarification of the standard's applicability,<sup>25</sup> and concerns regarding winterization capability requirements.<sup>26</sup> NERC respectfully refers the Commission to NERC's petition, including the record of development for the proposed Reliability Standard, which provides a more fulsome explanation for the standard drafting team's determination regarding each of the elements and requirements for proposed Reliability Standard EOP-012-1. This includes how the standard drafting team balanced the sometimes competing opinions on issues raised to date and worked to develop resource-neutral Reliability Standards appropriate for continent-wide application. NERC's petition provides a sound technical basis for approving the proposed standard as filed by NERC.

NERC is committed to developing Reliability Standards that provide strong and effective protections against the demonstrated reliability risks posed by the failure to properly prepare for extreme cold weather and appreciates the comments submitted in this proceeding. As NERC noted in its petition, NERC is currently in the second phase of standard development work to address

<sup>&</sup>lt;sup>23</sup> See, e.g., Comments of ISO/RTO Council (Dec. 8, 2022) at 4-11 (expressing concern that the proposed Extreme Cold Weather Temperature may not be stringent enough). *Compare* Comments of Invenergy LLC (Dec. 8, 2022) at 7, 11 (suggesting that the proposed Extreme Cold Weather Temperature may be too stringent for solar generators that do not operate in colder nighttime temperatures and may be more onerous than necessary for reliability); and Comments of Texas Competitive Power Advocates (Dec. 8, 2022) at 5 (stating that the proposed Extreme Cold Weather Temperature is "more onerous" than the proposed Texas winterization standard).

<sup>&</sup>lt;sup>24</sup> See, e.g., Comments of ISO/RTO Council (Dec. 8, 2022) at 9-10 (asserting that the "commercial" exception is overly broad). *Compare* Comments of Texas Competitive Power Advocates (Dec. 8, 2022) at 5, 7-8 (suggesting the commercial exception be expanded to include economic considerations where cost recovery is not available) and Comments of Invenergy LLC (Dec. 8, 2022) at 11 (suggesting the standard be revised to exempt generators from Corrective Action Plan requirements where technical, commercial, or operational constraints have already been declared). *See also* Motion to Intervene and Comments of the New England Power Generators Association, Inc. (Dec. 8, 2022) at 8 (requesting clarification from NERC on what constitutes a "constraint" for compliance purposes).

<sup>&</sup>lt;sup>25</sup> See Comments of Invenergy LLC (Dec. 8, 2022) at 4.

<sup>&</sup>lt;sup>26</sup> See, e.g., Comments of Invenergy LLC (Dec. 8, 2022) at 8-9; Comments of Texas Competitive Power Advocates (Dec. 8, 2022) at 5.

remaining recommendations from the February 2021 event report. This work is scheduled to complete by October 2023. The standard drafting team is presently considering many of the issues raised in the comments during the second phase of development, and NERC may propose further changes to enhance the clarity or effectiveness of the EOP-012 standard later in 2023. NERC encourages the commenters in this proceeding to continue participating in NERC's open and balanced, consensus-driven standards development process so that their issues and concerns may be given full consideration in standards drafting.

Recognizing that work remains to be done, proposed Reliability Standard EOP-012-1 and EOP-011-3 mark an important step forward in improving the reliability of the bulk-power system during extreme cold weather conditions. For the reasons stated in NERC's petition and these reply comments, NERC respectfully requests that the Commission approve the proposed Reliability Standards as just, reasonable, not unduly discriminatory, and in the public interest.

#### Respectfully submitted,

<u>/s/Lauren A. Perotti</u> Lauren A. Perotti Senior Counsel North American Electric Reliability Corporation 1401 H St, N.W., Suite 410 Washington, D.C. 20005 202-400-3000 Lauren.perotti@nerc.net

Counsel for the North American Electric Reliability Corporation

Date: December 16, 2022