

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

Secure-the-Grid Coalition

)

Docket No. EL23-69-000

**MOTION TO INTERVENE AND COMMENTS OF THE NORTH AMERICAN
ELECTRIC RELIABILITY CORPORATION IN OPPOSITION TO PETITION FOR
RULEMAKING**

Pursuant to Rule 214 of the Federal Energy Regulatory Commission’s (“FERC” or “Commission”) Rules of Practice and Procedure¹ and the Commission’s Notice of Filing,² the North American Electric Reliability Corporation (“NERC”) moves to intervene and comment in opposition to the Petition for Rulemaking to Require Enhanced Standard for Determining Critical Infrastructure, Using Engineering Models to Define Critical Infrastructure Assets to be Subject to Enhanced Protection (“Petition”)³ filed by the Secure-the-Grid Coalition (“Petitioner”). The Petition was filed with the Federal Energy Regulatory Commission (“FERC” or “Commission”) under Rule 207 of the Commission’s Rules of Practice and Procedure in the above-captioned docket.⁴ The Petition requests that the Commission direct NERC to develop, within 90 days,⁵ an enhanced standard for determining “critical infrastructure that would be subjected to evaluation through the use of the most recently updated engineering models used in operations for the purpose

¹ 18 C.F.R. § 385.214.

² Notice of Filing, Docket No. EL23-69-000 (May 23, 2023).

³ Docket No. EL23-69-000 (May 15, 2023).

⁴ 18 C.F.R. § 385.207(a).

⁵ Petition at 2.

of determining which assets, if damaged, permanently destroyed, or otherwise rendered inoperable, would lead to uncontrolled separation, cascading outages or instability”.⁶

NERC respectfully requests that the Commission reject the Petition. NERC appreciates Petitioner’s concerns regarding potential physical security risks to the reliability of the Bulk-Power System (“BPS”); however, both the Commission and NERC are already considering similar physical security issues through a joint technical conference to be held later this summer and through a separate NERC Reliability Standards development project that will be commencing in the near future. The Petition does not allege any significant new circumstances nor does it raise factual issues that are not ripe for consideration through the current NERC initiatives addressing the physical security of the BPS. Since appropriate forums for considering the Petitioner’s ideas have already been, or are in the process of being established, development of a new rulemaking to address similar physical security issues is not necessary at this time.

I. BACKGROUND

NERC’s currently enforceable suite of Critical Infrastructure Protection (“CIP”) Reliability Standards employ a risk-based approach to Bulk Electric System (“BES”) physical and cyber security and mandate controls commensurate to the risk posed by threats and vulnerabilities to the reliable operation of the BES. Within the CIP Reliability Standards, CIP-014 addresses physical security and requires Transmission Owners (“TO”) and Transmission Operators (“TOP”) to identify and protect Transmission stations and Transmission substations, and their associated

⁶ *Id.* at 1.

primary control centers, that if rendered inoperable or damaged as a result of a physical attack could result in instability, uncontrolled separation, or Cascading within an Interconnection.⁷

CIP-014 requires applicable TOs to perform periodic risk assessments of their applicable Transmission stations and Transmission substations (collectively “substations”) to identify which of their applicable substations are “critical” to BPS reliability. The TO must then perform an evaluation of the potential physical security threats and vulnerabilities of a physical attack to each of their “critical” substations and develop and implement a documented physical security plan to address those threats and vulnerabilities. Additionally, for each primary control center that operationally controls an identified substation, the applicable TOP must perform an evaluation of the potential physical security threats and vulnerabilities of a physical attack to that control center and develop and implement a documented physical security plan to address those threats and vulnerabilities.

In light of an increase in reports of physical attacks on electric substations, on December 15, 2022, in Docket No. RD23-2-000,⁸ FERC issued an order directing NERC to evaluate the effectiveness of CIP-014 in mitigating the risks to the BPS associated with physical attacks. Specifically, FERC directed NERC to conduct a study evaluating: (1) the adequacy of the Applicability criteria set forth in the Physical Security Reliability Standard; (2) the adequacy of the required risk assessment set forth in the Physical Security Reliability Standard; and (3) whether a minimum level of physical security protections should be required for all BPS

⁷ Reliability Standard CIP-014-3 (Physical Security), <https://www.nerc.com/pa/Stand/Reliability%20Standards/CIP-014-3.pdf>.

⁸ *N. Am. Elec. Reliability Corp.*, 181 FERC ¶ 61,230 (2022) (“December 2022 Order”).

substations and their associated primary control centers.⁹ The Commission directed NERC to submit a report to the Commission detailing the study’s findings within 120 days.¹⁰

On April 14, 2023, NERC filed its report entitled *Evaluation of the Physical Security Reliability Standard and Physical Security Attacks to the Bulk Power System* (“Report”) with FERC in Docket No. RD23-2-001. FERC noticed the Report for public comment on April 17, 2023, with comments due May 15, 2023. Jim Robb, President and CEO of NERC, presented the findings of the Report at the April 20, 2023 Commission Open Meeting.

The Report did not recommend expansion of the CIP-014 Applicability criteria at this time upon finding that the objective of CIP-014 appropriately focuses limited industry resources on risks to the reliable operation of the BPS associated with physical security incidents at the most critical facilities.¹¹ Based on studies using available data, the Report concluded that the CIP-014 Applicability criteria is meeting that objective and is broad enough to capture the subset of applicable facilities that TOs should identify as “critical” pursuant to the risks assessment mandated by Requirement R1.¹² In addition, the Report did not find evidence that an expansion of the Applicability criteria would identify additional substations that would qualify as “critical” substations under the CIP- 014 Requirement R1 risk assessment.¹³

The Report noted that “supplementary data could show that additional substation configurations would warrant assessment under CIP-014”,¹⁴ thus, “NERC plans to continue

⁹ *Id.* P 1.

¹⁰ *Id.* P 8.

¹¹ Report at 4, 12.

¹² *Id.*

¹³ *Id.*

¹⁴ *Id.* at 4.

evaluating the adequacy of the Applicability criteria in meeting the objective of CIP-014.”¹⁵ In the Report, NERC committed to working with FERC to hold a joint technical conference to, “among other things, identify the type of substation configurations that should be studied to determine whether any additional substations should be included in the Applicability criteria. The technical conference would also help establish data needs for conducting those studies.”¹⁶

The Report also found that the language in Requirement R1 of CIP-014 should be refined to ensure that entities conduct effective risk assessments of their applicable substations. The Report noted that information from ERO Enterprise Compliance Monitoring and Enforcement Program indicated that there are inconsistent approaches to performing the risk assessment,¹⁷ i.e., in certain instances, Registered Entities failed to provide sufficient technical studies or justification for study decisions resulting in noncompliance.¹⁸ The Report concluded that the inconsistent approach to performing the risk assessment is largely due to a lack of specificity in the requirement language as to the nature and parameters of the risk assessment. Accordingly, the Report recommended that NERC initiate a Reliability Standards development project to evaluate changes to CIP-014 to provide additional clarity on the risk assessment.¹⁹ Specifically, the Reliability Standards development project would clarify: (1) the risk assessment methods for studying instability, uncontrolled separation, and Cascading; such as the expectations of dynamic studies to evaluate for instability; (2) the case(s) used for the assessment to be tailored to the Requirement R1 in-service window and correct any discrepancies between the study period, frequency of study,

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.* at 5, 18-24.

¹⁸ *Id.* at 5, 24.

¹⁹ *Id.*

and the base case a TO uses; (3) the documentation, posting, and usage of known criteria to identify instability, uncontrolled separation, or Cascading as part of the risk assessment;²⁰ and (4) the risk assessment to account for adjacent substations of differing ownership, and substations within line-of-sight to each other.²¹

Finally, the Report recommended further evaluation of the appropriate combination of reliability, resiliency, and security measures that would be effective in helping to mitigate the impact of physical security attacks via a joint technical conference with FERC to gather additional data on these matters and discuss whether and how those measures should be incorporated into NERC's mandatory Reliability Standards.²² The Report suggested that the technical conference could address, among other things: (1) the appropriate risk-based approach to identifying the objective of any minimum level of protections, risks to be mitigated, and industry resources necessary to meet such minimum requirements; (2) expanding the use of planning studies, conducted by Transmission Planners ("TPs") under Reliability Standard TPL-001 to evaluate physical security attacks, identify applicable study criteria, and contain a corrective action plan to mitigate inadequate performance against such criteria; (3) enhancing Operational Planning Assessments to include loss of assets (transmission or generation) from physical attacks; (4) enhancing TP and TO requirements to ensure spare equipment pool strategies are adaptive, in-sync, and provide sufficient wide area coverage; and (5) requiring Reliability Coordinators to develop and train to readiness scenarios reflecting a physical security incident with TOs, TOPs,

²⁰ *Id.* The criteria should also include defining "inoperable" or "damaged" substations such that the intent of the risk assessment is clear.

²¹ *Id.*

²² *Id.* at 5, 25.

Generator Owners, and Generator Operators.²³ The information learned during the technical conference would be used to determine the next steps, including potential Reliability Standards modifications.²⁴

On May 30, 2023, FERC and NERC issued a joint notice of a staff-led technical conference to be held on August 10, 2023.²⁵ The technical conference will be open to the public and will discuss physical security of the BPS, including the adequacy of existing physical security controls, challenges, and solutions.²⁶

II. MOTION TO INTERVENE

NERC has a substantial interest in this proceeding as the Petitioner seeks to have the Commission direct NERC to develop a Reliability Standard. By enacting the Energy Policy Act of 2005,²⁷ Congress entrusted the Commission with the duties of approving and enforcing rules to ensure the reliability of the BPS, and with the duties of certifying an Electric Reliability Organization (“ERO”) that would be charged with developing and enforcing mandatory Reliability Standards, subject to Commission approval. The Commission certified NERC as the ERO in 2006.²⁸

²³ *Id.* at 5-6.

²⁴ *Id.* at 6, 31.

²⁵ *N. Am. Elec. Reliability Corp.*, Docket No. RD23-2-000 (May 30, 2023) (“Notice of Joint Technical Conference”).

²⁶ *Id.*

²⁷ 16 U.S.C. § 824o.

²⁸ *N. Am. Elec. Reliability Corp.*, 116 FERC ¶ 61,062, *order on reh’g and compliance*, 117 FERC ¶ 61,126 (2006), *order on compliance*, 118 FERC ¶ 61,030, *order on compliance*, 118 FERC ¶ 61,190, *order on reh’g*, 119 FERC ¶ 61,046 (2007), *aff’d sub nom. Alcoa Inc. v. FERC*, 564 F.3d 1342 (D.C. Cir. 2009).

As the ERO, NERC's mission is to improve the reliability and security of the BPS in North America.²⁹ Under its FERC-approved Rules of Procedure, NERC develops Reliability Standards in accordance with Section 300 (Reliability Standards Development) of the NERC Rules of Procedure ("ROP") and the NERC Standard Processes Manual ("SPM").³⁰ NERC and the Regional Entities are responsible for monitoring, assessing, and enforcing compliance with Reliability Standards in the United States in accordance with Section 400 (Compliance Enforcement) of the ROP and the NERC Compliance Monitoring and Enforcement Program.³¹

No other party can adequately represent NERC's interests or adequately respond to the petition on NERC's behalf. Therefore, it is in the public interest to permit this intervention.

III. COMMENTS

a. **Petition Fails to Demonstrate a Sufficient Change in Circumstances to Merit a Rulemaking.**

The "Commission has rejected petitions and requests that it implement a rulemaking when the requesting party fails to show a sufficient change in circumstances or that there is a sufficient problem to merit a generic solution."³² The Petition should be rejected as it fails to demonstrate

²⁹ *See id.*

³⁰ The NERC Rules of Procedure are available at https://www.nerc.com/AboutNERC/RulesOfProcedure/NERC%20ROP%20effective%2020220825_with%20appendices.pdf. The NERC Standard Processes Manual is available at https://www.nerc.com/AboutNERC/RulesOfProcedure/Appendix_3A_SPM_Clean_Mar2019.pdf.

³¹ *Id.* The NERC Compliance Monitoring and Enforcement Program is available at https://www.nerc.com/AboutNERC/RulesOfProcedure/ROP_Appendix%204C_20220519.pdf.

³² *Morris v. N. Am. Elec. Reliability Corp.*, 153 FERC ¶ 61,266, at P 12 (2015) (citing *Tenaska Power Servs. Co. v. Midwest Indep. Transmission Sys. Operator, Inc.*, 107 FERC 61,308, at P 33 (2004) (rejecting request to implement a rulemaking, stating that the requesting party had not shown that circumstances had sufficiently changed as to warrant re-examining issues); *Midwest Indep. Transmission Sys. Operator, Inc.*, 104 FERC P 61,060, at P 21 (2003) (rejecting petition for rulemaking when there had not been a substantial change in circumstances), *aff'd*, 388 F.3d 903, 363 U.S. App. D.C. 382 (D.C. Cir. 2004); *Natural Gas Supply Ass'n*, 115 FERC P 61,327, at PP 10-11 (2006) (rejecting request for rulemaking to establish natural gas quality and interchangeability standards, stating that gas quality and interchangeability issues arise under discrete circumstances, and as there was no evidence of an industry wide problem, petitioner had not justified its specific nationwide standards); *Amoco Prod. Co.*, 26 FERC P

any significant change in circumstances to warrant a rulemaking. The Petition instead relies on similar facts and circumstances that gave rise to recent and ongoing NERC and FERC actions and public stakeholder processes. Specifically, the Petition references recent “media coverage of acts of vandalism and sabotage”; a “recent ‘outbreak’ of media attention to physical sabotage against electric substations, the targeting of electric grid equipment by criminals, thieves, and saboteurs”; and data provided to the Department of Energy [(“DOE”)] via its OE-417 reports demonstrate that physical attacks happen at a frequency of more than one per week across the North American electric grid.”³³ These types of events and the publicly available DOE report are consistent with the events and circumstances that led to the December Order, which explained that it was directing NERC to evaluate CIP-014 because “there has been an increase in reports of physical attacks on electric substations” in recent months, some of which resulted in customer outages.³⁴

At this time, NERC is diligently working to implement the Report’s recommendations through a variety of public stakeholder processes. These public stakeholder processes will consider a number of physical security issues with regard to the reliability of the BPS, including the issues raised by Petitioner. Petitioner has not demonstrated a significant change in circumstances or that there is a sufficient problem to merit a generic solution that would necessitate a rulemaking prior to and without the benefit of the public stakeholder processes.

61,271, at 61,624 (1984) (rejecting request to implement a rulemaking to amend the definition of minimum rate gas, stating there was insufficient evidence to support generic relief).

³³ Petition at 2.

³⁴ December 2022 Order, 181 FERC ¶ 61,230 at P 6. In particular, the Commission cited the December 3, 2022 physical attacks on substations in Moore County, North Carolina, the November 2022 incidents at several Pacific Northwest substations, and that Federal authorities disrupted recent planned attacks before they were perpetrated.

Moreover, the Petition does not present evidence of a significant change in circumstances or that there is a sufficient problem to merit a generic solution to support its request that a new enhanced Physical Reliability Standard should be filed within 90 days.³⁵ The joint FERC and NERC staff-led technical conference, scheduled for August, and NERC Reliability Standards development project, that will commence shortly, will both focus on the physical security of the BPS and are the direct result of the Report ordered by FERC to evaluate CIP-014 in light of recent attacks and threats to the BPS. These processes are underway and should be allowed to continue uninterrupted.

b. The August 2023 Joint FERC and NERC Technical Conference, the Upcoming NERC Reliability Standard Development Project for CIP-14, and the existing Standard Development Projects are the Appropriate Forums for Considering the Petition’s Proposals.

The Petition argues that an enhanced Physical Reliability Standard should be developed that would require “the regional authorities to use these amalgamated operating models to designate the critical assets that ensure the reliable flow of power, and lessen the risk of uncontrolled separation, instability, or cascading outages.”³⁶ The Petition further argues that the industry should “establish new metrics for Risk Assessments that incorporate real-world factors pertaining to the risks associated with physical sabotage, such as known asset vulnerabilities, attacker capabilities, and attacker intentions [One known “asset vulnerability” should be whether an applicable asset (such as a large power transformer) is vulnerable to ballistic attack and is currently unprotected against such attack]”.³⁷ Finally, the Petition contends that CIP-014 “is confined to what constitutes the BES, as declared in CIP-002.51a. Thus, we cannot seriously consider reformation or expansion of

³⁵ Petition at 2.

³⁶ *Id.* at 7-8.

³⁷ *Id.*

CIP-014-003 [sic] without first considering the electric assets that can, if damaged, permanently destroyed, or otherwise rendered inoperable, lead to uncontrolled separation, cascading outages or instability.”³⁸

To address the recommendations in the Report, NERC is in the process of commencing public stakeholder processes that address areas of concern to Petitioner. First, consistent with recommendations from the Report, NERC is preparing to launch a Reliability Standards development project to address revisions to CIP-014 Requirement R1 to ensure that entities conduct effective risk assessments of their applicable substations.³⁹ This includes consideration of risk assessment methods for studying instability, uncontrolled separation, and Cascading; such as the expectations of dynamic studies to evaluate for instability.⁴⁰ Second, NERC is working with FERC staff to conduct a joint NERC and FERC staff-led technical conference on August 10, 2023⁴¹ to consider topics such as (1) identifying the type of substation configurations that should be studied to determine whether any additional substations should be included in the Applicability criteria,⁴² and (2) evaluating the appropriate combination of reliability, resiliency, and security measures that would be effective in helping to mitigate the impact of physical security attacks.⁴³ This joint technical conference will gather additional data and discuss whether, and how, any findings should be incorporated into NERC’s mandatory Reliability Standards.⁴⁴

³⁸ *Id.* at 6.

³⁹ Report at 5, 24.

⁴⁰ *Id.*

⁴¹ Joint Notice of Technical Conference in Docket No RD23-2-000.

⁴² Report at 4, 12.

⁴³ *Id.* at 5-6, 30-31.

⁴⁴ *Id.* at 6, 31.

With regard to Petitioner’s concerns regarding the alignment between CIP-002.5.1a and CIP-014, there is already a standard development project in progress addressing potential changes to language in CIP-002 and CIP-014, NERC Reliability Standard Project 2021-03 (“Project 2021-03”).⁴⁵ Project 2021-03 addresses the responsibility of Reliability Coordinators, Planning Coordinators (“PC”), and TPs in identifying Facilities that warrant CIP-014 consideration, it focuses on addressing TP and PC functions language relating to inclusion of Facilities critical to the derivation of Interconnection Reliability Operating Limits.⁴⁶

Petitioner has filed comments in response to the Report that has given rise to both the Reliability Standards development project for CIP-014 and the joint FERC and NERC technical conference.⁴⁷ These forums, along with Project 2021-03, are already considering physical security issues that are similar to those set forth in the Petition and provide appropriate public processes for considering the Petitioner’s concerns.

⁴⁵ Project 2021-03 – CIP-002 Communications Protocol Converters, webpage is available at <https://www.nerc.com/pa/Stand/Pages/Project%202021-03%20CIP-002%20Transmission%20Owner%20Control%20Centers.aspx>.

⁴⁶ Report at 16.

⁴⁷ Secure-the-Grid Coalition Comments in FERC Docket Nos. RD23-2-000, AD21-15-000 (filed May 15, 2023).

III. CONCLUSION

For the reasons stated above, NERC respectfully requests the Commission reject the Petition. The current NERC initiatives to evaluate and consider physical security issues, including both a joint FERC and NERC technical conference and NERC Reliability Standards development projects provide appropriate forums for considering Petitioner's concerns. In addition, the Petition has not demonstrated a sufficient change in circumstances that would warrant either abandoning the processes that are already underway or creating a new competing rulemaking process. Therefore, the Commission does not need to direct a rulemaking at this time.

Respectfully submitted,

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Date: June 13, 2023

CERTIFICATE OF SERVICE

I hereby certify that I have served a copy of the foregoing document upon all parties listed on the official service lists compiled by the Secretary in Docket No. EL23-069-000.

Dated at Washington, DC this 13th day of June, 2023.

/s/ Sarah P. Crawford _____

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