UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

North American Electric Reliability Corporation	**)**	**Docket Nos. RM15-7-000**
	)	**RM15-12-000**
	)	**RM15-13-000**

COMMENTS OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION IN RESPONSE TO NOTICE OF PROPOSED RULEMAKING

On June 18, 2015, the Federal Energy Regulatory Commission ("Commission") issued a Notice of Proposed Rulemaking ("NOPR")[1] proposing to approve Reliability Standard EOP-011-1 (*Emergency Operations*), Reliability Standard PRC-010-1 (*Undervoltage Load Shedding*), the revised definition "Energy Emergency," the revised definition of Undervoltage Load Shedding Program ("UVLS Program"), the revised definition of Remedial Action Scheme ("RAS"), retirement of certain currently-effective Reliability Standards, and the related implementation plans and associated violation risk factors ("VRF") and violation severity levels ("VSL"), as submitted by the North American Electric Reliability Corporation ("NERC") in the above-captioned proceedings (the "Filings").[2] NERC supports the Commission's NOPR and submits these comments ("Comments") to: (a) clarify why exclusion of Load Serving Entities ("LSEs") from responsible Functional Entities under proposed Reliability Standard EOP-011-1 will not adversely impact reliability; (b) resolve the questions raised in the NOPR regarding the reference to "BES subsystems" and related diagram; and (c) demonstrate that, consistent with the

[1] *Revisions to Emergency Operations Reliability Standards; Revisions to Undervoltage Load Shedding Reliability Standards; Revisions to the Definition of "Remedial Action Scheme" and Related Reliability Standards*, 151 FERC ¶ 61,230 (2015) ("NOPR").

[2] Unless otherwise designated, capitalized terms shall have the meaning set forth in the *Glossary of Terms Used in NERC Reliability Standards* ("NERC Glossary of Terms"), *available at* http://www.nerc.com/files/Glossary_of_Terms.pdf.

NOPR, Reliability Standard PRC-022-1 should be retired upon implementation of the undervoltage load shedding ("UVLS") revisions pending in this proceeding and in the UVLS Phase II Petition pending under Docket No. RD15-5-000.[3]

These clarifications address the concerns referenced in the NOPR. NERC requests that, consistent with the NOPR, the Commission approve the proposals included within the Filings and concurrently approve the proposals included within the UVLS Phase II Petition for an integrated and coordinated approach to UVLS Programs. In support of these Comments and the Filings, NERC provides the following:

I. COMMENTS

As the Commission states in the NOPR, "the modified Reliability Standards provide greater clarity, and the consolidated EOP and PRC standards will provide additional efficiencies for responsible entities."[4] The NOPR also provides that, "[t]he Commission agrees with NERC that proposed Reliability Standard PRC-010-1 will improve system reliability by establishing an integrated and coordinated approach to the design, evaluation, and reliable operation of UVLS Programs."[5]

To address all questions in the NOPR regarding the Filings, these Comments:

> (a) clarify that exclusion of LSEs from the scope of responsible Functional Entities under proposed Reliability Standard EOP-011-1 will not adversely impact reliability, because (i) the only requirement assigned to LSEs under currently effective Reliability Standard EOP-002-3.1, Requirement R9, will be eliminated in proposed Reliability Standard EOP-011-1 due to intervening technological changes that have made the requirement unnecessary; and (ii) any remaining, informal, role currently performed by LSEs under Reliability Standard EOP-003-

[3] *Petition of the North American Electric Reliability Corporation For Approval Of Proposed Reliability Standards PRC-004-5 and PRC-010-2*, Docket No. RD15-5-000 (filed June 8, 2015) ("UVLS Phase II Petition").

[4] NOPR, at P 23.

[5] NOPR, at P 26. *Id.*, at PP 5 and 19 (reflecting that NERC proposed consolidating Reliability Standards EOP-001-2.1b, EOP-002-3.1, and EOP-003-2 into proposed Reliability Standard EOP-011-1 and consolidating Reliability Standards PRC-020-1, PRC-021-1, and PRC-022-1 into the updated version of Reliability Standard PRC-010).

2.1 will be performed Balancing Authorities ("BAs"), as better situated to performing those roles;

(b) resolve the questions raised in the NOPR regarding "BES subsystems" by clarifying that the term and associated diagram intended to convey that, consistent with the definition UVLS Program, when a UVLS system in an area of the BES is in place to mitigate conditions impacting the BES in a manner "leading to voltage instability, voltage collapse, or Cascading"[6] it is a UVLS Program subject to proposed Reliability Standard PRC-010-1 (or a RAS if centrally controlled). Conversely, the guidance intended to clarify that where the system is *not* intended to mitigate conditions impacting the BES in a manner "leading to voltage instability, voltage collapse, or Cascading," then proposed Reliability Standard PRC-010-1 does not apply; and

(c) demonstrate that retirement of Reliability Standard PRC-022-1 is appropriate upon implementation of the proposals reflected in the Filings and the pending UVLS Phase II Petition, because the UVLS Phase II Petition proposes a standard addressing Misoperations to close the perceived gap arising due to retirement of Reliability Standard PRC-022-1.

Therefore, for the reasons described below and in the Filings, approval of the Filings as proposed and supplemented by the UVLS Phase II Petition is just, reasonable, not unduly discriminatory or preferential, and in the public interest.

A. Clarifications Regarding Former LSE Obligations Under Proposed Reliability Standard EOP-011-1

The NOPR noted that currently effective Reliability Standard EOP-002-3.1 includes LSEs within the scope of responsible Functional Entities, whereas proposed Reliability Standard EOP-011-1 (to replace EOP-002-3.1) will not. The NOPR explained that this:

raises questions on who would perform the roles traditionally performed by load-serving entities. For instance, NERC's Functional Model indicates that a load-serving entity has real-time responsibility to receive requests from a balancing authority to voluntarily curtail load and communicate such requests for voluntary load curtailment to end-use customers as directed by the balancing authority. In addition, NERC's Functional Model indicates that a balancing authority has a real-time function to coordinate the use of controllable loads with load-serving entities. The Commission notes that NERC is required to make a compliance

[6] Glossary (reflecting the definition of UVLS Program).

> filing in July 2015 in Docket No. RR15-4-000. The Commission's decision on that filing will guide our action on this question in this proceeding.[7]

To answer these questions, consistent with the discussion of proposed Reliability Standard EOP-011-1 in the RBR Compliance Filing, NERC clarifies below why there will be no gap in reliability due to exclusion of LSEs from the Functional Entities responsible under proposed Reliability Standard EOP-011-1.[8]

First, the only requirement under currently-effective Reliability Standard EOP-002-3.1 that applied to LSEs is under Requirement R9. The Standard Drafting Team did not incorporate Requirement R9 into proposed Reliability Standard EOP-011-1, because Requirement R9 has become obsolete due to technological changes. In particular, Requirement R9 was in place to allow a Transmission Service Provider to change the priority of a service request, through informing the Reliability Coordinator, to avoid curtailment of service by Transmission Loading Relief ("TLR"). That process had been the only way to accomplish the change to the priority of a service request, because Tagging Specifications did not allow such a change to profiles. Now, NAESB WEQ E-tag Specification v1811 R3.6.1.3 has modified the process, enabling Transmission Service Providers to change the priority. That technological change made it appropriate to eliminate Requirement R9, consistent with Paragraph 81 of the Commission's March 2012 Order.[9] Elimination of Requirement R9 of Reliability Standard EOP-002-3.1, due to the change in technology on E-tagging, eliminated the only requirement applicable to LSEs.

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7 NOPR, at n. 36.

8 *See, Compliance Filing of the North American Electric Reliability Corporation and Petition For Approval of Rules of Procedure Revisions,* Docket No. RR15-4-000, at pp. 11-13 (filed Jul. 17, 2015) ("RBR Compliance Filing").

9 *See,* EOP-011-1 Application Guidelines, at p. 16 (explaining that elimination of R9 was consistent with Paragraph 81). *North American Electric Reliability Corporation,* 138 FERC ¶ 61,193, at P 81 (2012) ("March 2012 Order").

Therefore, no gap in coverage would arise due to exclusion of LSEs from the scope of Functional Entities responsible under proposed Reliability Standard EOP-011-1.

Second, BAs will perform those roles traditionally performed by LSEs in connection with EOP-002-3.1. Those roles include the less formal activities (*i.e.*, activities not included in a Reliability Standard requirement) performed by LSEs as noted under Attachment 1 of EOP-002-3.1 and referenced in n. 36 of the NOPR.[10] These roles have been reassigned to the Functional Entity in the best position to perform them. As highlighted in the NOPR, under NERC's Functional Model, LSEs currently receive requests from "a balancing authority to voluntarily curtail load and communicate such requests for voluntary load curtailment to end-use customers as directed by the balancing authority," and "a balancing authority has a real-time function to coordinate the use of controllable loads with load-serving entities."[11] In contrast, as underscored in the Mapping Document for proposed Reliability Standard EOP-011-1 and the Application Guidelines, "LSEs have no Real-time reliability functionality with respect to EEAs [Energy Emergency Alerts]."[12] The Commission-approved Glossary definition of "Operating Instruction," which becomes effective July 1, 2016, is "[a] command by operating personnel responsible for the Real-time operation of the interconnected [BES] to change or preserve the state, status, output, or input of an Element of the [BES] or Facility of the [BES] System."[13] Likewise, the Functional Model states that non-voluntary load shedding is generally

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10 *See*, EOP-002-3.1, at Attachment 1.

11 NOPR, at n. 36.

12 *See*, *Petition of the North American Electric Reliability Corporation for Approval of Proposed Reliability Standard EOP-011-1-Emergency Operations*, Docket No. RM15-7-000, at Exhibit D, Mapping Document, at p. 33 (filed Dec. 29, 2014); *and id.*, at Exhibit A, Application Guidelines, at p. 16.

13 Glossary (emphasis added). *See also*, *Communications Reliability Standards*, Order No. 808, 151 FERC ¶ 61,039 (2015).

implemented in real-time to address imminent reliability concerns.[14] While the LSEs reach out to end-use customers and demand or request that they make their load available for curtailment during real-time load shedding, Distribution Providers are tasked with responding to Operating Instructions from the BA or Transmission Operator. Similarly, the Functional Model states that the "since implementation is often of urgent nature, a decision process involving the end-use customers and communication via the Load-Serving Entity is usually bypassed."[15] Therefore, it is more appropriate for BAs to assume the roles traditionally performed by LSEs in connection with EOP-002-3.1, as proposed in the Filings. [16] As a result, excluding LSEs from the scope of responsible Functional Entities under proposed Reliability Standard EOP-011-1 is just, reasonable, and consistent with reliability of the BES.

B. Clarifications Regarding Term "BES subsystem" And Diagram

The NOPR raised two questions regarding NERC's references to "BES subsystems." In particular, the Commission "seeks clarification regarding the use of the term 'BES subsystem,' since the term is not defined in the NERC Glossary."[17] In addition, the Commission requests clarification whether NERC's diagram of a "BES subsystem … illustrating a UVLS system that would not be included in the definition of UVLS Program if the consequences of the contingency do not impact the BES….illustrates a centrally controlled UVLS and would therefore be considered a Remedial Action Scheme."[18] NERC clarifies below that this term "BES subsystem" and accompanying diagram intended to demonstrate that whether PRC-010-1 applies

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[14] *See*, *NERC Functional Model Technical Document (Version 5)*, at p. 63 (last updated May 12, 2010), *available at* http://www.nerc.com/pa/Stand/Functional%20Model%20Archive%201/FM_Technical_Document_V5_2009Dec1.pdf.

[15] *Id.*

[16] *See also*, RBR Compliance Filing, at pp. 11-13 (also discussing this reassignment of roles in more depth).

[17] NOPR, at P 27.

[18] *Id*.

to a UVLS system depends on whether the UVLS system is used to mitigate undervoltage conditions impacting areas of the BES, "leading to voltage instability, voltage collapse, or Cascading."

As stated in the Guidelines and Technical Basis for PRC-010-1 when introducing the diagram and term BES subsystem:

> [t]o ensure that the applicability of the standard is to only those undervoltage-based load shedding systems whose performance has an impact on system reliability, a UVLS Program must mitigate risk of one or more of the following: voltage instability, voltage collapse, or Cascading impacting the BES.[19]

The term "BES subsystem" is a shorthand reference to an area of the BES that a Registered Entity is responsible for, consistent with its obligations under mandatory Reliability Standards. This reference does not revise the Commission-approved definition of "Bulk Electric System" or create a new term.[20] In addition, the diagram is not intended to necessarily illustrate a centrally controlled UVLS (considered a RAS), but to illustrate how Registered Entities should evaluate whether the term UVLS Program and proposed Reliability Standard PRC-010-1 applies to a UVLS system.

If a UVLS system in a Registered Entity's area of the BES (the BES subsystem) is "used to mitigate undervoltage conditions impacting the Bulk Electric System (BES), leading to voltage instability, voltage collapse, or Cascading," then the system would fall under the definition UVLS Program (or RAS if centrally controlled) and scope of Reliability Standard PRC-010-1. For example, Texas Reliability Entity, Inc. has stated that, "...the [Lower Rio

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[19] Proposed Reliability Standard PRC-010-1, attached Guidelines and Technical Basis, at p. 12 (including this statement immediately prior to the paragraph providing the diagram).

[20] *Revisions to Electric Reliability Organization Definition of Bulk Electric System and Rules of Procedure*, Order No. 773, 141 FERC ¶ 61,236 (2012); *order on reh'g*, Order No. 773-A, 143 FERC ¶ 61,053 (2013), *order on reh'g and clarification*, 144 FERC ¶ 61,174 (2013), *aff'd sub nom., New York* v. *FERC*, 783 F.3d 946 (2d. Cir. 2015).

Grande] Valley area has Under Voltage Load Shedding (UVLS) relays in place to prevent voltage instability...."[21] As this system is in place to prevent voltage instability on the BES, it is an example of a UVLS Program under the scope of the standard.

C. Reliability Standard PRC-022-1 Should Be Retired Consistent With The NOPR

The NOPR "propose[s] that Reliability Standard PRC-022-1 remain in effect until an acceptable replacement standard is approved and implemented[,]" that will address requirements in PRC-022-1 regarding Misoperations.[22] This is consistent with NERC's intention in these above-captioned proceedings and the UVLS Phase II Petition. As noted in the NOPR, "on June 9, 2015, NERC filed proposed Reliability Standards PRC-010-2 and PRC-004-5, which include requirements and applicability criteria pertaining to UVLS misoperations."[23]

NERC submitted the UVLS Phase II Petition as a follow-up to the above-captioned Filings, to ensure implementation of a replacement standard clearly addressing Misoperations, as in Reliability Standard PRC-022-1.[24] Specifically, in the UVLS Phase II Petition, NERC requested that the Commission approve Reliability Standards PRC-004-5 and PRC-010-2 concurrently with the Commission's action in these above-captioned proceeding to ensure an integrated and coordinated approach to UVLS Programs and fill the gap in Reliability Standard coverage that might be perceived through retirement of PRC-022-1.[25]

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[21] *Texas Reliability Entity, Inc. Event Analysis,* Event: October 8, 2014 Lower Rio Grande Valley Load Shed, at p. 3 (Dec. 15, 2014).

[22] NOPR, at P 29.

[23] NOPR, at n. 44.

[24] The UVLS Phase II Petition explained that these efforts to address Misoperation of UVLS as currently addressed in Reliability Standard PRC-022-1 were segregated to a new phase of UVLS Reliability Standard development (in Project 2008-02.2) due to coordination with other projects. *See e.g.,* UVLS Phase II Petition, at Section I.

[25] *Id.*, at Section I (summarizing the UVLS Phase II Petition) and Section V (summarizing the requested effective date and implementation of the proposals concurrent with those in the above-captioned Filings).

The UVLS Phase II Petition explained that:

> Proposed Reliability Standard PRC-010-2 updates pending Reliability Standard PRC-010-1 by explicitly addressing the operations/non-operation (i.e., Misoperation) of UVLS Equipment to avoid a gap in coverage due to retirement of Reliability Standard PRC-022-1. The proposed Reliability Standard achieves this by expressly referencing performance (i.e., operation/non-operation) of the UVLS Program equipment at Requirement R4 with a conforming update to Requirement R5 to specifically reference the assessment performed in Requirement R4.[26]

Thus, the Phase II Petition, together with the Filings, address misoperation and operation of UVLS Programs without a gap in coverage.[27]

Therefore, retirement of PRC-022-1 is appropriate upon implementation of the UVLS revisions discussed in the NOPR and the UVLS Phase II Petition. NERC requests that the Commission approve retirement of PRC-022-1, consistent with both (i) the proposals presented in the Filings and the UVLS Phase II Petition, and (ii) the NOPR.

II. CONCLUSION

For the reasons stated above, NERC supports the NOPR and provides the clarifications included in these Comments. NERC respectfully requests that the Commission approve Reliability Standards EOP-011-1 and PRC-010-1, the revised definitions, the associated retirements, VRFs and VSLs, and implementation plans as proposed in the Filings, and

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[26] UVLS Phase II Petition, at p. 13.

[27] Peak Reliability's comments on the UVLS Phase II Petition and in this proceeding appear to reflect incomplete understanding of the proposed integrated and coordinated approach to UVLS Programs. The comments state, for example, that the proposed standard does not apply to NERC functional entities that operate the BES, while acknowledging that the standard applies to Distribution Providers and Transmission Owners responsible for ownership, operation, or control of UVLS equipment in a UVLS Program established by Planning Coordinators and Transmission Planners. Further, Requirement R8 of PRC-010-1 and PRC-010-2 adds that Planning Coordinators with a UVLS Program shall provide the UVLS Program database to "functional entities with a reliability need," which may include Reliability Coordinators ("RCs"). Requirements R1 and R2 of proposed Reliability Standard EOP-011-1 would also require Transmission Operators and Balancing Authorities to implement RC-reviewed Operating Plan(s) to mitigate operating Emergencies, Capacity Emergencies, and Energy Emergencies, and that Operating Plan(s) include (as applicable) provisions for operator-controlled manual Load shedding that minimize overlap with automatic Load shedding.

concurrently approve the proposals in the UVLS Phase II Petition, for an integrated and coordinated approach to UVLS Programs consistent with the NOPR.

Respectfully submitted,

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Date: August 24, 2015

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 Nos. RM15-7-000, RM15-12-000, and RM15-13-000.

Dated at Washington, D.C. this 24th day of August, 2015.

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