

151 FERC ¶ 61,230
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 40

[Docket Nos. RM15-7-000, RM15-12-000, and RM15-13-000]

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

(Issued June 18, 2015)

AGENCY: Federal Energy Regulatory Commission.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Commission proposes to approve Reliability Standards and definitions of terms submitted in three related petitions by the North American Electric Reliability Corporation (NERC), the Commission-approved Electric Reliability Organization. The Commission proposes to approve Reliability Standards EOP-011-1 (Emergency Operations) and PRC-010-1 (Undervoltage Load Shedding). According to NERC, the proposed Reliability Standards consolidate, streamline and clarify the existing requirements of certain currently-effective Emergency Preparedness and Operations (EOP) and Protection and Control (PRC) standards. The Commission also proposes to approve NERC’s revised definition of the term “Remedial Action Scheme” as set forth in the NERC Glossary of Terms Used in Reliability Standards, and modifications of specified Reliability Standards to incorporate the revised definition. Further, the Commission proposes to approve the proposed implementation plans, and the retirement of certain currently-effective Reliability Standards. The Commission discusses concerns

regarding several of NERC's proposals and, depending on the comments provided in response, the Commission may direct NERC to develop further modifications to address the concerns and possibly delay the retirement of one currently-effective standard.

DATES: Comments are due **[INSERT DATE 60 days after publication in the FEDERAL REGISTER].**

ADDRESSES: Comments, identified by docket number, may be filed in the following ways:

- Electronic Filing through <http://www.ferc.gov>. Documents created electronically using word processing software should be filed in native applications or print-to-PDF format and not in a scanned format.
- Mail/Hand Delivery: Those unable to file electronically may mail or hand-deliver comments to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street, NE, Washington, DC 20426.

Instructions: For detailed instructions on submitting comments and additional information on the rulemaking process, see the Comment Procedures Section of this document.

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SUPPLEMENTARY INFORMATION:

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Revisions to Emergency Operations Reliability Standards	Docket Nos. RM15-7-000
Revisions to Undervoltage Load Shedding Reliability Standards	RM15-12-000
Revisions to the Definition of “Remedial Action Scheme” and Related Reliability Standards	RM15-13-000

NOTICE OF PROPOSED RULEMAKING

(June 18, 2015)

1. Pursuant to section 215 of the Federal Power Act (FPA),¹ the Commission proposes to approve Reliability Standards and definitions of terms submitted in three related petitions by the North American Electric Reliability Corporation (NERC), the Commission-approved Electric Reliability Organization (ERO). In particular, the Commission proposes to approve Reliability Standards EOP-011-1 (Emergency Operations) and PRC-010-1 (Undervoltage Load Shedding). NERC explains that the proposed Reliability Standards consolidate, streamline, and clarify the existing requirements of certain currently-effective Emergency Preparedness and Operations (EOP) and Protection and Control (PRC) standards. The Commission also proposes to approve NERC’s revised definition of the term “Remedial Action Scheme” as set forth in

¹ 16 U.S.C. 824o.

the NERC Glossary of Terms Used in Reliability Standards (NERC Glossary), and modifications of specified Reliability Standards to incorporate the revised definition. Further, the Commission proposes to approve assigned violation risk factors and violation severity levels, proposed implementation plans, and the retirement of certain currently-effective Reliability Standards. The Commission discusses concerns regarding several of NERC's proposals and, depending on the comments provided in response, the Commission may direct NERC to develop further modifications to address the concerns and possibly delay the retirement of one currently-effective standard.

I. Background

2. Section 215 of the FPA requires a Commission-certified ERO to develop mandatory and enforceable Reliability Standards, subject to Commission review and approval.² Once approved, the Reliability Standards may be enforced by the ERO subject to Commission oversight or by the Commission independently. In 2006, the Commission certified NERC as the ERO pursuant to FPA section 215.³

3. On March 16, 2007, the Commission issued Order No. 693, approving 83 of the 107 Reliability Standards filed by NERC, including initial versions of EOP-001,

² 16 U.S.C. 824o.

³ *North American Electric Reliability Corp.*, 116 FERC ¶ 61,062, *order on reh'g & compliance*, 117 FERC ¶ 61,126 (2006), *aff'd sub nom. Alcoa, Inc. v. FERC*, 564 F.3d 1342 (D.C. Cir. 2009).

EOP-002, and EOP-003.⁴ In addition, the Commission directed NERC to develop certain modifications to the EOP standards. In Order No. 693, the Commission also approved several Undervoltage Load Shedding (UVLS)-related Reliability Standards, including PRC-010-0, PRC-021-1 and PRC-022-1.⁵ Also, the Commission directed NERC to modify Reliability Standard PRC-010-0 to develop an “integrated and coordinated” approach to all protection systems.⁶ In Order No. 693, the Commission approved the NERC Glossary, including NERC’s currently-effective Special Protection System and Remedial Action Scheme definitions.

II. NERC Petitions

4. NERC submitted three related petitions that we address together in this notice of proposed rulemaking (NOPR).⁷

A. NERC EOP Petition – Proposed Reliability Standard EOP-011-1 (Docket No. RM15-7-000)

5. On December 29, 2014, NERC submitted a petition seeking Commission approval of proposed Reliability Standard EOP-011-1 and a revised definition of

⁴ *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).

⁵ Order No. 693, FERC Stats. & Regs. ¶ 31,242 at PP 1509, 1560 and 1565. The Commission neither approved nor remanded Reliability Standard PRC-020-1, explaining that the standard only applied to Regional Reliability Organizations. *Id.* P 1555.

⁶ *Id.* P 1509.

⁷ The proposed EOP and PRC Reliability Standards are not attached to this notice of proposed rulemaking, nor are the additional standards that NERC proposes to modify to incorporate the revised term Remedial Action Scheme. The proposed Reliability Standards are available on the Commission’s eLibrary document retrieval system in the identified dockets and on the NERC website, www.nerc.com.

“Energy Emergency.” NERC explains that proposed Reliability Standard EOP-011-1 consolidates the requirements in three existing Reliability Standards: EOP-001-2.1b, EOP-002-3.1 and EOP-003-2 “into a single Reliability Standard that clarifies the critical requirements for Emergency Operations while ensuring strong communication and coordination across the functional entities.”⁸ NERC seeks retirement of Reliability Standards EOP-001-2.1b, EOP-002-3.1 and EOP-003-2, as well as the approval of the associated implementation plan and violation risk factors and violation severity levels for Reliability Standard EOP-011-1 detailed in the petition. NERC also asserts that proposed Reliability Standard EOP-011-1 satisfies seven Commission directives set forth in Order No. 693.⁹

6. NERC states that the purpose of proposed Reliability Standard EOP-011-1 is “to address the effects of operating Emergencies by ensuring each Transmission Operator and Balancing Authority has developed Operating Plans to mitigate operating Emergencies, and that those plans are coordinated within a Reliability Coordinator area.”¹⁰ NERC notes that Requirements R2 and R6 of the proposed Reliability Standard incorporate Attachment 1, which describes three energy emergency levels used by the

⁸ NERC EOP Petition at 3.

⁹ *Id.* at 12-18.

¹⁰ *Id.* at 2.

reliability coordinator and the process for communicating the condition of a balancing authority experiencing an energy emergency.¹¹

7. Proposed Reliability Standard EOP-011-1 includes six requirements, and is applicable to balancing authorities, reliability coordinators and transmission operators. Requirements R1 and R2 require transmission operators and balancing authorities to develop, maintain and implement reliability coordinator-reviewed operating plans to mitigate operating, capacity and energy emergencies.¹² Requirement R1 specifies elements for the plans “as applicable,” which is intended to provide flexibility to account for regional differences and pre-existing emergency mitigation methods. NERC states that the requirement for transmission operators and balancing authorities to maintain operating plans includes the expectation that the plans are current and up-to-date.¹³
8. Requirement R3 requires reliability coordinators to review the operating plans submitted by transmission operators and balancing authorities and is designed to ensure

¹¹ Attachment 1 describes three alert levels: Energy Emergency Alert Level 1 (all available generation resources in use, concern about sustaining required contingency reserves); Energy Emergency Alert Level 2 (load management procedures in effect, energy deficient balancing authority implements its emergency Operating Plan but maintains minimum contingency reserve requirements); and Energy Emergency Alert Level 3 (firm load interruption is imminent or in process, energy deficient balancing authority unable to maintain minimum contingency reserve requirements).

¹² Operating Plan is defined in the NERC Glossary as a “document that identifies a group of activities that may be used to achieve some goal. An Operating Plan may contain Operating Procedures and Operating Processes. A company-specific system restoration plan that includes an Operating Procedure for black-starting units, Operating Processes for communicating restoration progress with other entities, etc., is an example of an Operating Plan.”

¹³ NERC EOP Petition at 8-9.

that there is appropriate coordination of reliability risks identified in the operating plans. In reviewing operating plans, reliability coordinators shall consider compatibility, coordination and inter-dependency with other entity operating plans and notify transmission operators and balancing authorities if revisions to their operating plans are necessary.¹⁴

9. Requirement R4 requires transmission operators and balancing authorities to resolve any issues identified by the reliability coordinator and resubmit their revised operating plans within a time period specified by the reliability coordinator. Requirement R5 requires each reliability coordinator to notify balancing authorities and transmission operators in its area, and neighboring reliability coordinators, within thirty minutes of receiving an emergency notification. Requirement R6 requires a reliability coordinator with a balancing authority experiencing a potential or actual energy emergency to declare an energy emergency alert in accordance with Attachment 1.

10. Proposed Reliability Standard EOP-011-1 also includes the following revised definition of Energy Emergency:

Energy Emergency—A condition when a Load-Serving Entity or Balancing Authority has exhausted all other resource options and can no longer meet its expected Load obligations.

NERC explains that the proposed revised definition is intended to clarify that an energy emergency is not limited to a load-serving entity and, based on a review of the impact on

¹⁴ *Id.* at 10-11.

the body of NERC Reliability Standards, “does not change the reliability intent of other requirements of Definitions.”¹⁵

B. NERC PRC Petition – Proposed Reliability Standard PRC-010-1 (Docket No. RM15-12-000)

11. On February 6, 2015, NERC submitted a petition seeking approval of proposed Reliability Standard PRC-010-1 (Undervoltage Load Shedding), approval of a revised definition of Undervoltage Load Shedding Program (UVLS Program) for inclusion in the NERC Glossary, the implementation plan for the proposed Reliability Standard and the associated violation risk factors and violation severity levels and retirement of four PRC Reliability Standards.¹⁶

12. In its petition, NERC states that proposed Reliability Standard PRC-010-1 is a single, comprehensive standard that addresses the same reliability principles outlined in the four currently-effective UVLS-related Reliability Standards.¹⁷ NERC explains that the purpose of proposed Reliability Standard PRC-010-1 is to “establish an integrated and coordinated approach to the design, evaluation, and reliable operation of Undervoltage Load Shedding Programs” as directed by the Commission in Order No. 693.¹⁸ Also,

¹⁵ *Id.* at 18.

¹⁶ Reliability Standard PRC-010-0 (Assessment of the Design and Effectiveness of UVLS Program); Reliability Standard PRC-020-1 (Under-Voltage Load Shedding Program Database); Reliability Standard PRC-021-1 (Under-Voltage Load Shedding Program Data); and Reliability Standard PRC-022-1 (Under-Voltage Load Shedding Program Performance).

¹⁷ NERC PRC Petition at 14.

¹⁸ *Id.* (citing Order No. 693, FERC Stats & Regs ¶ 31,242 at P 1509).

according to NERC, proposed Reliability Standard PRC-010-1 replaces the applicability to and involvement of “Regional Reliability Organization” in Reliability Standards PRC-020-1 and PRC-021-1 and consolidates the four currently-effective UVLS-Related Standards into one comprehensive standard. NERC states that proposed Reliability Standard PRC-010-1 “reflects consideration of the 2003 Blackout Report recommendations,”¹⁹ particularly, Recommendation 21 for NERC to “make more effective and wider use of system protection measures”²⁰ and Recommendation 21C that “NERC determine the goals and principles needed to establish an integrated approach to relay protection for generators and transmission lines, as well as of UFLS and UVLS programs.”²¹

13. Proposed Reliability Standard PRC-010-1 incorporates a proposed definition of UVLS Program, which reads:

Undervoltage Load Shedding Program (UVLS Program):

An automatic load shedding program, consisting of distributed relays and controls, used to mitigate undervoltage conditions impacting the Bulk Electric System (BES), leading to voltage instability, voltage collapse, or Cascading. Centrally controlled undervoltage-based load shedding is not included.

NERC explains that “to ensure that the applicability of the proposed Reliability Standard covers undervoltage-based load shedding systems whose performance has an impact on

¹⁹ NERC PRC Petition at 2 (citing the U.S.-Canada Power System Outage Task Force, *Final Report on the August 14, 2003 Blackout in the United States and Canada: Causes and Recommendations*, April, 2004 (2003 Blackout Report)).

²⁰ NERC PRC Petition at 4 (citing 2003 Blackout Report at 3, 158).

²¹ NERC PRC Petition at 6.

system reliability, a UVLS Program must mitigate risk of one or more of the following: voltage instability, voltage collapse, or Cascading impacting the Bulk Electric System. By focusing on the enumerated risks, the definition is meant to exclude locally-applied relays that are not designed to mitigate wide-area voltage collapse.”²² NERC states that the proposed UVLS Program definition “clearly identifies and separates centrally controlled undervoltage-based load shedding, which is now addressed by the proposed definition of Remedial Action Scheme.”²³

14. Proposed Reliability Standard PRC-010-1 applies to planning coordinators and transmission planners because “either may be responsible for designing and coordinating the UVLS Program...[and] also applies to Distribution Providers and Transmission Owners responsible for the ownership, operation and control of UVLS equipment as required by the UVLS Program established by the Transmission Planner or Planning Coordinator.”²⁴ NERC explains that the planning coordinator or transmission planner that establishes a UVLS Program is responsible for identifying the UVLS equipment and the necessary distribution provider and transmission owner (referred to as “UVLS entities” in the Applicability section) that performs the required actions.

15. NERC states that proposed Reliability Standard PRC-010-1 “applies only after an entity has determined the need for a UVLS Program as a result of its own planning

²² *Id.* at 16.

²³ *Id.* at 15. NERC’s petition for approval of the proposed definition of Remedial Action Scheme (Docket No. RM15-13-000) is discussed below.

²⁴ *Id.*

studies.”²⁵ NERC explains that the eight requirements in proposed Reliability Standard PRC-010-1 meet four primary objectives: (1) the proposed standard requires applicable entities to evaluate a UVLS Program’s effectiveness prior to implementation, including coordination with other protection systems and generator voltage ride-through capabilities;(2) applicable entities must comply with UVLS program specifications and implementation schedule; (3) applicable entities must perform periodic assessment and performance analysis; and (4) applicable entities must maintain and share UVLS Program data.

16. Proposed Requirement R1 requires each planning coordinator or transmission planner that is developing a UVLS Program to evaluate the viability and effectiveness of its program before implementation to confirm its effectiveness in resolving the undervoltage conditions for which it was designed, and that it is integrated through coordination with generator ride-through capabilities and other protection and control systems. Also, the planning coordinator or transmission planner must provide the UVLS Program specifications and implementation schedule to the applicable UVLS entities. Requirement R2 requires UVLS entities to meet the UVLS Program’s specifications and implementation schedule provided by the planning coordinator or transmission planner or address any necessary corrective actions in accordance with Requirement R5.

17. Requirement R3 requires each planning coordinator or transmission planner to perform periodic comprehensive assessments at least every 60 calendar months to ensure

²⁵ *Id.* at 14.

continued effectiveness of the UVLS program, including whether the program resolves identified undervoltage issues and that it is integrated and coordinated with generator voltage ride-through capabilities and other specified protection and control systems.

Requirement R4 requires each planning coordinator or transmission planner to commence a timely assessment of a voltage excursion subject to the UVLS Program, within twelve calendar months of the event, to evaluate whether the UVLS Program resolved the undervoltage issues associated with the event. Requirement R5 requires a planning coordinator or transmission planner to develop a corrective action plan for any program deficiencies identified during an assessment performed under either Requirement R3 or R4, and provide an implementation schedule to UVLS entities within three calendar months of its completion.

18. Pursuant to Requirement R6, a planning coordinator must update the data necessary to model its UVLS Program for use in event analyses and program assessments at least each calendar year. Requirement R7 requires each UVLS entity to provide data to its planning coordinator, according to the planning coordinator's format and schedule, to support maintenance of the UVLS Program database. Requirement R8 requires a planning coordinator to provide its UVLS Program database to other planning coordinators and transmission planners within its Interconnection, and other functional entities with a reliability need, within thirty calendar days of a written request.

19. NERC proposes that PRC-010-1 and the revised definition of UVLS Program shall become effective on the first day of the first calendar quarter that is twelve (12) months after the date that the standard and definition are approved by the

Commission. NERC also proposes to retire PRC-010-0, PRC-020-1, PRC-021-1, and PRC-022-1 at midnight of the day immediately prior to the effective date of PRC-010-1.²⁶ Further, NERC explains that proposed Reliability Standard PRC-010-1 addresses reliability obligations that are set forth in Requirements R2, R4 and R7 of currently-effective Reliability Standard EOP-003-2.²⁷ Since NERC has proposed to retire EOP-003-2 in the petition seeking approval of proposed Reliability Standard EOP-011-1 (Docket No. RM15-7-00, discussed above), concurrent Commission action on the two petitions will prevent a possible reliability gap.

C. NERC RAS Petition – Revisions to the Definition of “Remedial Action Scheme” (Docket No. RM15-13-000)

20. On February 3, 2015, NERC submitted a petition seeking approval of a proposed revised definition of Remedial Action Scheme in the NERC Glossary. In addition, NERC seeks approval of modified Reliability Standards that incorporate the new definition of Remedial Action Scheme and eliminate use of the term Special Protection System.²⁸ NERC states that the defined terms Special Protection System and Remedial Action Scheme are currently used interchangeably throughout the NERC Regions and in

²⁶ *Id.* Ex. B (Implementation Plan).

²⁷ *See* NERC EOP Petition at 23.

²⁸ NERC RAS Petition at 1-2. NERC proposes to modify the following Reliability Standards to incorporate the proposed definition of Remedial Action Scheme and eliminate use of the term Special Protection System: EOP-004-3, PRC-005-3(ii), PRC-023-4, FAC-010-3, TPL-001-0.1(i), FAC-011-3, TPL-002-0(i)b, MOD-030-3, TPL-003-0(i)b, MOD-029-2a, PRC-015-1, TPL-004-0(i)a, PRC-004-WECC-2, PRC-016-1, PRC-001-1.1(i), PRC-005-2(ii), and PRC-017-1. NERC does not propose any changes to the violation risk factors or violation severity levels for the modified standards.

various Reliability Standards. NERC explains that “[a]lthough these defined terms share a common definition in the NERC Glossary of Terms today, their use and application have been inconsistent as a result of a lack of granularity in the definition and varied regional uses of the terms. The proposed revisions add clarity and granularity that will allow for proper identification of Remedial Action Schemes and a more consistent application of related Reliability Standards.”²⁹

21. NERC states that the revised definition of Remedial Action Scheme consists of a “core” definition, including a list of objectives and a separate list of exclusions for certain schemes or systems not intended to be covered by the revised definition.³⁰ NERC explains that it is proposing a broad definition because of “all the possible scenarios an entity may develop” for its Remedial Action Scheme and a “very specific, narrow definition may unintentionally exclude schemes that should be covered.”³¹ Accordingly, NERC proposes the following revised “core” definition of Remedial Action Scheme:

A scheme designed to detect predetermined system conditions and automatically take corrective actions that may include, but are not limited to, adjusting or tripping generation (MW and Mvar), tripping load, or reconfiguring a System(s). (sic) RAS accomplish objectives such as:

- Meet requirements identified in the NERC Reliability Standards;
- Maintain Bulk Electric System (BES) stability;

²⁹ *Id.* at 4-5.

³⁰ *Id.* at 16. NERC notes that “for each exclusion, the scheme or system could still classify as a Remedial Action Scheme if employed in a broader scheme that meets the definition of Remedial Action Scheme.”

³¹ *Id.* at 17.

- Maintain acceptable BES voltages;
- Maintain acceptable BES power flows;
- Limit the impact of Cascading or extreme events.

The definition then lists fourteen exclusions, describing specific schemes and systems that do not constitute a Remedial Action Scheme, because each is either a protection function, a control function, a combination of both, or used for system reconfiguration.³²

22. In the implementation plan, NERC proposes an effective date for the revised Reliability Standards and the revised definition of “Remedial Action Scheme” on the first day of the first calendar quarter that is twelve months after Commission approval.³³ NERC also proposes that for entities with existing schemes that become newly classified as “Remedial Action Schemes” resulting from the application of the revised definition, the entities will have additional time of up to twenty-four months from the effective date to be fully compliant with all applicable Reliability Standards.³⁴ Further, NERC asks the Commission to take final action concurrently with the NERC petition on proposed Reliability Standard PRC-010-1 (Docket No. RM15-12-000) because “[t]he proposed definitions of UVLS Program and Remedial Action Scheme in each project have been coordinated to cover centrally controlled UVLS as a Remedial Action Scheme. Final

³² *Id.* at 18.

³³ *Id.* at 15-16.

³⁴ NERC RAS Petition, EX. C (Implementation Plan) at 4.

action by the Commission is needed contemporaneously on both petitions to facilitate implementation and avoid a gap in coverage of centrally controlled UVLS.”³⁵

III. Discussion

23. Pursuant to section 215(d) of the FPA, the Commission proposes to approve as just, reasonable, not unduly discriminatory or preferential, and in the public interest the proposed Reliability Standards and NERC Glossary definitions set forth in NERC’s three petitions pertaining to EOP-011-1, PRC-010-1 and a revised definition of Remedial Action Scheme. As discussed below, the Commission believes that the modified Reliability Standards provide greater clarity, and the consolidated EOP and PRC standards will provide additional efficiencies for responsible entities.

A. Proposed Reliability Standard EOP-011-1

24. Pursuant to section 215(d) of the FPA, we propose to approve proposed Reliability Standard EOP-011-1 and the proposed new Energy Emergency definition, as well as the proposed violation risk factors and violation severity levels and implementation plan. We agree with NERC that proposed EOP-011-1 consolidates and reorganizes previously approved standards, and proposes modifications based on current operating practices and experience. We believe that the Reliability Standard enhances reliability by requiring that actions necessary to mitigate capacity and energy emergencies are focused in single operating plans, and ensures communication and coordination among relevant

³⁵ NERC RAS Petition at 25.

entities during emergency operations. Also, we are satisfied that the NERC petition adequately addresses the relevant Order No. 693 directives.³⁶

B. Proposed Reliability Standard PRC-010-1

25. Pursuant to section 215 of the FPA, we propose to approve proposed Reliability Standard PRC-010-1 as just, reasonable, not unduly discriminatory or preferential and in the public interest. We also propose to approve the proposed, revised definition of UVLS Program for inclusion in the NERC Glossary, the implementation plan and the associated violation risk factors and violation severity levels. Likewise, we propose to approve the retirement of PRC-010-0, PRC-020-1 and PRC-021-1.³⁷ However, for the reasons explained below, we are concerned whether it is appropriate to retire PRC-022-1, as

³⁶ Currently effective EOP-002-3.1 applies, *inter alia*, to load-serving entities. Proposed EOP-011-1, which would replace EOP-002-3.1, would apply to balancing authorities, reliability coordinators and transmission operators, but not load-serving entities. The removal of load-serving entities 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 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.

³⁷ As noted above, the Commission in Order No. 693 did not approve or remand proposed Reliability Standard PRC-020-1 but, rather, took no action on the Reliability Standard pending the receipt of additional information. Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 1555. Approval of Reliability Standard PRC-010-1, as proposed herein, will render PRC-020-1 "retired," i.e., withdrawn, and no longer pending before the Commission.

NERC requests, before an acceptable replacement Reliability Standard is in place to address the potential misoperation of UVLS equipment.

26. The 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, and therefore satisfies the Commission's directive issued in Order No. 693.³⁸ We also propose to approve the proposed UVLS Program definition and agree that it "clearly identifies and separates centrally controlled undervoltage-based load shedding, which is now addressed by the proposed definition of Remedial Action Scheme."³⁹

27. In the "Guidelines for UVLS Program Definition," NERC provides an example of a "BES subsystem," in the diagram below, 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.⁴⁰ The Commission seeks clarification whether this example illustrates a centrally controlled UVLS and would therefore be considered a Remedial Action Scheme.⁴¹ The Commission also seeks clarification regarding the use of the term "BES subsystem," since the term is not defined in the NERC Glossary. Depending on the response from NERC and others, a directive for further modification may be

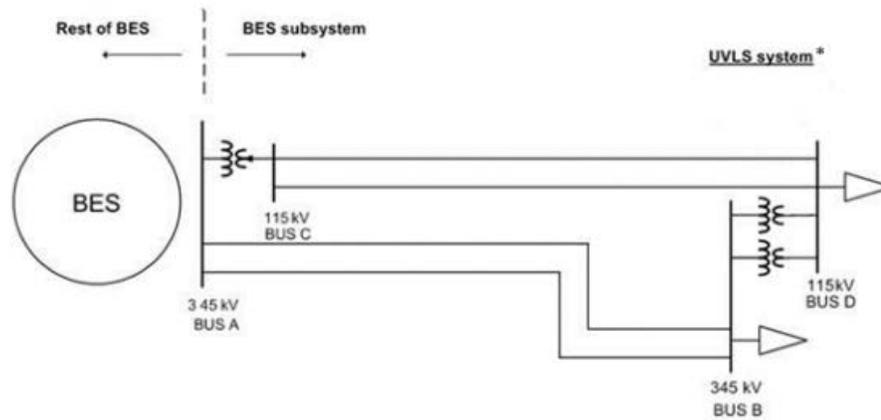
³⁸ Order No. 693, FERC Stats & Regs. ¶ 31,242 at P 1509.

³⁹ NERC PRC Petition at 15. NERC's proposed revised definition of Remedial Action Scheme (Docket No. RM15-13-000) is addressed elsewhere in this NOPR.

⁴⁰ NERC PRC Petition, Ex. A (Proposed Reliability Standard PRC-010-1) at 12.

⁴¹ *Id.* at 3.

appropriate to ensure that the UVLS standards and related NERC guidance are consistent with the Commission-approved definition of “bulk electric system.”⁴²



*UVLS systems may be installed at either, or both, bus B and D

28. NERC proposes to retire Reliability Standard PRC-022-1, which requires transmission operators, load-serving entities and distribution providers to analyze and document all UVLS operations and misoperations. Requirement R1.5 of this Reliability Standard requires that an applicable entity’s analysis and documentation should include “[f]or any Misoperation, a Corrective Action Plan to avoid future Misoperations of a similar nature.” Proposed Reliability Standard PRC-010-1, Requirement R5 addresses deficiencies in UVLS Programs that a planning coordinator or transmission planner identifies during assessments performed in accordance with either Requirement R3 (periodic UVLS Program effectiveness evaluations) or Requirement R4 (evaluations to

⁴² *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).

assess UVLS Program responses to voltage excursions), and requires the entities to develop a Corrective Action Plan to address the deficiencies.

29. NERC correctly states that “[w]hen a UVLS Program does not function as expected and designed during a voltage excursion event, this presents a risk to system reliability.”⁴³ However, we are not persuaded that proposed Reliability Standard PRC-010-1, Requirement R4 is an adequate replacement for currently-effective PRC-022-1, which contains requirements specifically addressing misoperations. Accordingly, we propose to deny NERC’s proposal to retire currently-effective Reliability Standard PRC-022-1 concurrent with the effective date of proposed PRC-010-1. Rather, we propose that Reliability Standard PRC-022-1 remain in effect until an acceptable replacement standard is approved and implemented.⁴⁴

C. Revised Definition of Remedial Action Scheme

30. Pursuant to section 215(d) of the FPA, the Commission proposes to approve the proposed definition of Remedial Action Scheme, the proposed exclusions, the proposed Reliability Standards and proposed implementation plan, as just, reasonable, not unduly discriminatory or preferential, and in the public interest. We are persuaded that the use of

⁴³ *Id.* at 20.

⁴⁴ In the PRC Petition, NERC indicates that UVLS misoperations are currently being addressed in Project 2008-02.2 Phase 2 Undervoltage Load Shedding (UVLS): Misoperations. NERC states that “[t]his phase of the UVLS project will address Misoperation of UVLS equipment to complete the work anticipated by the two standard drafting teams.” *Id.* at 23. The Commission notes that, 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.

a broad, core definition with a wide scope, accompanied by a list of specific exclusions will help avoid confusion and achieve a uniform understanding across all the Regional Entities of the proper classification of what schemes and systems constitute a Remedial Action Scheme. We agree with NERC that the proposed definition will improve reliability by eliminating ambiguity and promoting the proper, consistent identification of Remedial Action Schemes and more consistency in the application of related Reliability Standards.⁴⁵

IV. Information Collection Statement

31. The collection of information contained in this Notice of Proposed Rulemaking is subject to review by the Office of Management and Budget (OMB) regulations under section 3507(d) of the Paperwork Reduction Act of 1995 (PRA).⁴⁶ OMB's regulations require approval of certain informational collection requirements imposed by agency rules.⁴⁷ 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 a rule will not be penalized for failing to respond to these collections of information unless the collections of information display a valid OMB control number.

32. We solicit 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

⁴⁵ NERC RAS Petition at 14-16.

⁴⁶ 44 U.S.C. 3507(d).

⁴⁷ 5 CFR 1320.11.

suggested methods for minimizing respondents' burden, including the use of automated information techniques. Specifically, the Commission asks that any revised burden or cost estimates submitted by commenters be supported by sufficient detail to understand how the estimates are generated.

A. Proposed Reliability Standard EOP-011-1

33. Public Reporting Burden: As of May 2015, there are 99 balancing authorities, 15 reliability coordinators and 171 transmission operators registered with NERC. These registered entities will have to comply with 6-8 new requirements in the proposed Reliability Standard EOP-011-1. As proposed, each registered balancing authority will have to comply with Requirements R2, R4, and, under certain circumstances, R5. Each reliability coordinator will have to comply with Requirements R1 and its subparts, R2 and its subparts, R3 and its subparts, R5 and R6. Each transmission operator will have to comply with Requirements R1 and its subparts and R4.

34. Proposed Reliability Standard EOP-011-1 replaces a combined total of 40 requirements or subparts that are found in Reliability Standards EOP-001-2.1b, EOP-002-3.1 and EOP-003-2. These three Reliability Standards are proposed to be retired, concurrent with the effective date of proposed Reliability Standard EOP-011-1. Accordingly, the requirements in proposed Reliability Standard EOP-011-1 do not create any new burdens for applicable balancing authorities or transmission operators because the requirements in Reliability Standard EOP-011-1 are already burdens or tasks imposed on this set of registered entities by Reliability Standards EOP-001-2.1b, EOP-002-3.1 and EOP-003-2 under FERC-725A (1902-0244).

35. Proposed Reliability Standard EOP-011-1 requires reliability coordinators to perform the additional tasks of reviewing, correcting, and coordinating their balancing authorities' and transmission operators' operating procedures for emergency conditions. The Commission estimates that these tasks will add approximately 1,500 man-hours per year for each reliability coordinator as described in detail in the following table:

RM15-7-000 (Mandatory Reliability Standards: Reliability Standard EOP-011-1)						
	<i>Number of Applicable Registered Entities (1)</i>	<i>Annual Number of Responses per Respondent (2)</i>	<i>Total Number of Responses (1)*(2)=(3)</i>	<i>Average Burden (Hours) & Cost Per Response (4)</i>	<i>Total Annual Burden Hours & Total Annual Cost (3)*(4)=(5)</i>	<i>Cost per Respondent (\$) (5)÷(1)</i>
RC tasks necessary for EOP-011-1 compliance	11	1	11	1,500 \$92,387 ⁴⁸	16,500 \$1,016,257	\$92,387

B. Proposed Reliability Standard PRC-010-1

36. Public Reporting Burden: As of May 2015, there are 450 registered distribution providers and 175 transmission planners that are not overlapping in their registration with the distribution provider registration. We estimate that five percent of all distribution providers (23) and transmission planners (9) have under voltage load shedding programs that fall under the proposed Reliability Standard. The proposed Reliability Standard is applicable to planning coordinators and transmission planners, distribution providers and

⁴⁸ The 1,500 hour figure is broken into 1,300 hours at the engineer wage rate and 200 hours at the clerk wage rate. These estimates assume that the engineer's wage rate will be \$66.35 and the clerk's wage rate will be \$30.66. These figures are taken from the Bureau of Labor Statistics at http://www.bls.gov/oes/current/naics2_22.htm; Occupation Code: 17-2071 (engineer) and 43-4071 (clerk).

transmission owners. However, only distribution providers and transmission owners would be responsible for the incremental compliance burden under proposed Reliability Standard PRC-010-1, Requirement R2, as described in detail in the following table:

RM15-12-000 (Mandatory Reliability Standards: Reliability Standard PRC-010-1) ⁴⁹						
	Number of Applicable Registered Entities (1)	Annual Number of Responses per Respondent (2)	Total Number of Responses (1)*(2)=(3)	Average Burden (Hours) & Cost Per Response (4)	Total Annual Burden Hours & Total Annual Cost (3)*(4)=(5)	Cost per Respondent (\$) (5)÷(1)
DP – Requirement 2	23	1	23	36 ⁵⁰ \$1,906.32	828 \$43,845.36	\$1,906
TP - Requirement 2	3	1	3	36 ⁵¹ \$1,906.32	324 \$17,156.07	\$1,906
DP - Requirement 2 Data Retention	23	1	23	12 \$367.92 ⁵²	276 \$8,462.16	\$368
TP – Requirement 2 Data Retention	3	1	3	12 \$367.92	108 \$3,311.28	\$368
TOTAL					\$72,774.87	

⁴⁹ DP = distribution provider and TP = transmission planner.

⁵⁰ The 36 hour figure is broken into 24 hours at the engineer wage rate and 12 hours at the clerk wage rate. These estimates assume that the engineer's wage rate will be \$66.35 and the clerk's wage rate will be \$30.66. These figures are taken from the Bureau of Labor Statistics at http://www.bls.gov/oes/current/naics2_22.htm; Occupation Code: 17-2071 (engineer) and 43-4071 (clerk).

⁵¹ *Id.*

⁵² Clerk's wage rate is used for managing data retention.

C. Remedial Action Scheme Revisions

37. Public Reporting Burden: The Commission approved the definition of Special Protection System (Remedial Action Scheme) in Order No. 693. We propose to approve a revision to the previously approved definition. The proposed revisions to the Remedial Action Scheme definition and proposed Reliability Standards are not expected to result in changes to the scope of systems covered by the proposed Reliability Standards and other Reliability Standards that include the term Remedial Action Scheme. Therefore, the Commission does not expect the proposed revisions to affect applicable entities' current reporting burden.

FERC-725G4, Mandatory Reliability Standards: Reliability Standard
PRC-010-1 (Undervoltage Load Shedding).

FERC-725S, Mandatory Reliability Standards: Reliability Standard
EOP-011-1 (Emergency Operations).

Action: Proposed Collection of Information.

OMB Control No: OMB Control No. 1902-0270 (FERC-725S); OMB Control
No. 1902-TBD (FERC-725G4).

Respondents: Business or other for-profit and not-for-profit institutions.

Frequency of Responses: One time and on-going.

Necessity of the Information: The proposed approval of the proposed Reliability Standards implements the Congressional mandate of the Energy Policy Act of 2005 to develop mandatory and enforceable Reliability Standards to better ensure the reliability of the nation's Bulk-Power System. Specifically, the proposed Reliability Standards

consolidate, streamline and clarify the existing requirements of certain currently-effective Emergency Preparedness and Operations and Protection and Control Reliability Standards.

38. Internal review: The Commission has reviewed the requirements pertaining to proposed Reliability Standards PRC-010-1 and EOP-011-1 and made a determination that the proposed requirements of these Reliability Standards are necessary to implement section 215 of the FPA. These requirements conform to the Commission's plan for efficient information collection, communication and management within the energy industry. The Commission has assured itself, by means of its internal review, that there is specific, objective support for the burden estimates associated with the information requirements.

39. Interested persons may obtain information on the reporting requirements by contacting the Federal Energy Regulatory Commission, Office of the Executive Director, 888 First Street, NE, Washington, DC 20426 [Attention: Ellen Brown, e-mail: DataClearance@ferc.gov, phone: (202) 502-8663, fax: (202) 273-0873].

40. Comments concerning the information collections proposed in this NOPR and the associated burden estimates, should be sent to the Commission in this docket and may also be sent to the Office of Management and Budget, Office of Information and Regulatory Affairs [Attention: Desk Officer for the Federal Energy Regulatory Commission]. For security reasons, comments should be sent by e-mail to OMB at the following e-mail address: oir_submission@omb.eop.gov. Please reference the docket

numbers of this Notice of Proposed Rulemaking (Docket Nos. RM15-13-000, RM15-12-000, and RM15-7-000) in your submission.

V. Regulatory Flexibility Act Analysis

41. The Regulatory Flexibility Act of 1980 (RFA)⁵³ generally requires a description and analysis of Proposed Rules that will have significant economic impact on a substantial number of small entities. The immediate rulemaking proposes action on three separate, but related, NERC petitions. As discussed above, the consolidated EOP standard and consolidated PRC standards are intended to provide additional efficiencies for responsible entities. Thus, the Commission estimates that the rulemaking will impose only a minimal additional burden on responsible entities, as described below. Proposed Reliability Standard EOP-011-1 is expected to impose an additional burden on 11 entities (reliability coordinators). The remaining 270 entities (balancing authorities and transmission operators and a combination thereof) will maintain the existing levels of burden. Comparison of the applicable entities with FERC's small business data indicates that approximately 7 of the 11 entities are small entities affected by this proposed Reliability Standard.⁵⁴

⁵³ 5 U.S.C. 601-12.

⁵⁴ The Small Business Administration sets the threshold for what constitutes a small business. Public utilities may fall under one of several different categories, each with a size threshold based on the company's number of employees, including affiliates, the parent company, and subsidiaries. For the analysis in this NOPR, we use a 500 employee threshold for each affected entity. Each entity is classified as Electric Bulk Power Transmission and Control (NAICS code 221121).

42. On average, each small entity affected may have a one-time cost of \$92,387, representing a one-time review of the program for each entity, consisting of 1,500 man-hours at \$66.35/hour (for engineers) and \$30.66/hour (for record clerks), as explained above in the information collection statement. Proposed Reliability Standard PRC-010-1 is expected to impose an additional burden on 26 entities (distribution providers and transmission planners or a combination thereof). Comparison of the applicable entities with FERC's small business data indicates that approximately 8 are small entities affected by this proposed Reliability Standard.

43. On average, each small entity affected may have a cost of \$1,906, representing a one-time review of the program for each entity, consisting of 96 man-hours at \$66.35/hour (for engineers) and \$30.66/hour (for record clerks), as explained above in the information collection statement. The Commission estimates that the modified definition of the term Remedial Action Scheme and related modifications to Reliability Standards will have no cost impact on applicable entities, including any small entities.

44. The Commission estimates that the combined impact of proposed Reliability Standards EOP-011-1 and PRC-010-1 in this NOPR would impose an additional burden on a total of 47 entities. Further, the Commission estimates that 15 respondents are small entities affected by these proposed Reliability Standards. On average, each small entity affected may have a cost of \$92,387 and \$1,906 (EOP-011-1 and PRC-010-1 respectively), representing a one-time review of the program for each entity. The Commission does not consider these costs to be a significant economic impact on small entities. Accordingly, the Commission certifies that this rulemaking will not have a

significant economic impact on a substantial number of small entities. The Commission seeks comment on this certification.

VI. Environmental Analysis

45. 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.⁵⁵ The Commission has categorically excluded certain actions from this requirement as not having a significant effect on the human environment. Included in the exclusion are rules that are clarifying, corrective, or procedural or that do not substantially change the effect of the regulations being amended.⁵⁶ The actions proposed herein fall within this categorical exclusion in the Commission's regulations.

VII. Comment Procedures

46. The Commission invites interested persons to submit comments on the matters and issues proposed in this notice to be adopted, including any related matters or alternative proposals that commenters may wish to discuss. Comments are due

[INSERT DATE

60 days after publication in the FEDERAL REGISTER]. Comments must refer to Docket Nos. RM15-13-000, RM15-12-000, and RM15-7-000, and must include the commenter's name, the organization they represent, if applicable, and address.

⁵⁵ *Regulations Implementing the National Environmental Policy Act of 1969*, Order No. 486, FERC Stats. & Regs. ¶ 30,783 (1987).

⁵⁶ 18 CFR 380.4(a)(2)(ii).

47. The Commission encourages comments to be filed electronically via the eFiling link on the Commission's web site at <http://www.ferc.gov>. The Commission accepts most standard word processing formats. Documents created electronically using word processing software should be filed in native applications or print-to-PDF format and not in a scanned format. Commenters filing electronically do not need to make a paper filing.

48. Commenters that are not able to file comments electronically must send an original of their comments to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street, NE, Washington, DC 20426.

49. All comments will be placed in the Commission's public files and may be viewed, printed, or downloaded remotely as described in the Document Availability section below. Commenters on this proposal are not required to serve copies of their comments on other commenters.

VIII. Document Availability

50. 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>) and in the Commission's Public Reference Room during normal business hours (8:30 a.m. to 5:00 p.m. Eastern time) at 888 First Street, NE, Room 2A, Washington, DC 20426.

51. 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.

52. 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, or the Public Reference Room at (202) 502-8371, TTY (202) 502-8659. E-mail the Public Reference Room at public.referenceroom@ferc.gov.

By direction of the Commission.

(S E A L)

Kimberly D. Bose,
Secretary.