

June 20, 2019

**VIA ELECTRONIC FILING**

Michael Law  
President and Chief Executive Officer  
Alberta Electric System Operator  
2500, 330 - 5 Avenue SW  
Calgary, Alberta  
T2P 0L4

RE: *North American Electric Reliability Corporation*

Dear Mr. Law:

The North American Electric Reliability Corporation (“NERC”) hereby submits Notice of Filing of the North American Electric Reliability Corporation of Revised and Retired Reliability Standards Under the NERC Standards Efficiency Review. NERC requests, to the extent necessary, a waiver of any applicable filing requirements with respect to this filing.

NERC understands the AESO may adopt the proposed reliability standards subject to Alberta legislation, principally as established in the *Transmission Regulation* (“the T Reg.”). Briefly, it is NERC’s understanding that the T Reg. requires the following with regard to the adoption in Alberta of a NERC Reliability Standard:

1. The AESO must consult with those market participants that it considers are likely to be directly affected.
2. The AESO must forward the proposed reliability standards to the Alberta Utilities Commission for review, along with the AESO’s recommendation that the Commission approve or reject them.
3. The Commission must follow the recommendation of the AESO that the Commission approve or reject the proposed reliability standards unless an interested person satisfies the Commission that the AESO’s recommendation is “technically deficient” or “not in the public interest.”

Further, NERC has been advised by the AESO that the AESO practice with respect to the adoption of a NERC Reliability Standard includes a review of the NERC Reliability Standard for applicability to Alberta legislation and electric industry practice. NERC has been advised that, while the objective is to adhere as closely as possible to the requirements of the NERC Reliability Standard, each NERC Reliability Standard

**3353 Peachtree Road NE**  
**Suite 600, North Tower**  
**Atlanta, GA 30326**  
**404-446-2560 | [www.nerc.com](http://www.nerc.com)**

approved in Alberta (called an “Alberta reliability standard”) generally varies from the similar and related NERC Reliability Standard.

NERC requests the AESO consider the retirement of the ten Reliability Standards as set forth in the filing and the adoption of the four proposed Reliability Standards as set forth in the filing in Alberta as an “Alberta reliability standard(s),” subject to the required procedures and legislation of Alberta.

Please contact the undersigned if you have any questions concerning this filing.

Respectfully submitted,

/s/ Lauren Perotti

Lauren Perotti  
*Senior Counsel for the North American Electric  
Reliability Corporation*

Enclosure

---

**BEFORE THE  
ALBERTA ELECTRIC SYSTEM OPERATOR**

**NORTH AMERICAN ELECTRIC )  
RELIABILITY CORPORATION )**

**NOTICE OF FILING OF THE  
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION OF REVISED AND  
RETIRED RELIABILITY STANDARDS  
UNDER THE NERC STANDARDS EFFICIENCY REVIEW**

Lauren A. Perotti  
Senior Counsel  
North American Electric Reliability Corporation  
1325 G Street, N.W., Suite 600  
Washington, D.C. 20005  
(202) 400-3000  
(202) 644-8099 – facsimile  
lauren.perotti@nerc.net

*Counsel for the North American Electric  
Reliability Corporation*

June 20, 2019

---

## TABLE OF CONTENTS

I.	THE STANDARDS EFFICIENCY REVIEW.....	4
II.	NOTICES AND COMMUNICATIONS .....	7
III.	BACKGROUND.....	7
A.	NERC Reliability Standards Development Procedure .....	7
B.	Project 2018-03 Standards Efficiency Review Retirements.....	8
IV.	JUSTIFICATION – PROPOSED STANDARD RETIREMENTS.....	9
A.	Reliability Standard FAC-013-2.....	10
B.	Reliability Standard INT-004-3.1 .....	12
C.	Reliability Standard INT-010-2.1 .....	13
D.	Reliability Standards MOD-001-1a, MOD-004-1, MOD-008-1, MOD-028-2, MOD-029-2a, and MOD-030-3.....	15
E.	Reliability Standard MOD-020-0 .....	20
V.	JUSTIFICATION – PROPOSED RELIABILITY STANDARDS.....	22
A.	Reliability Standard FAC-008-4.....	23
B.	Reliability Standard INT-006-5 .....	26
C.	Reliability Standard INT-009-3 .....	29
D.	Reliability Standard PRC-004-6 .....	30
E.	Enforceability of the Proposed Reliability Standards.....	32
VI.	EFFECTIVE DATE .....	32

<b>Exhibit A</b>	The proposed Reliability Standards
	<b>Exhibit A-1:</b> Proposed Reliability Standard FAC-008-4 Clean Redline to Last Approved (FAC-008-3)
	<b>Exhibit A-2:</b> Proposed Reliability Standard INT-006-5 Clean Redline to Last Approved (INT-006-4)
	<b>Exhibit A-3:</b> Proposed Reliability Standard INT-009-3 Clean Redline to Last Approved (INT-009-2.1)
	<b>Exhibit A-4:</b> Proposed Reliability Standard PRC-004-6 Clean Redline to Last Approved (PRC-004-5(i))
<b>Exhibit B</b>	Implementation Plan
<b>Exhibit C</b>	Reliability Standards Criteria
<b>Exhibit D</b>	Analysis of Violation Risk Factors and Violation Severity Levels
	<b>Exhibit D-1:</b> Proposed Reliability Standard FAC-008-4
	<b>Exhibit D-2:</b> Proposed Reliability Standard INT-006-5
	<b>Exhibit D-3:</b> Proposed Reliability Standard INT-009-3
	<b>Exhibit D-4:</b> Proposed Reliability Standard PRC-004-6
<b>Exhibit E</b>	Technical Rationale
<b>Exhibit F</b>	Summary of Development and Complete Record of Development
<b>Exhibit G</b>	Standard Drafting Team Roster, Project 2018-03 Standards Efficiency Review Retirements

**BEFORE THE  
ALBERTA ELECTRIC SYSTEM OPERATOR**

**NORTH AMERICAN ELECTRIC )  
RELIABILITY CORPORATION )**

**NOTICE OF FILING OF THE  
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION OF REVISED AND  
RETIRED RELIABILITY STANDARDS  
UNDER THE NERC STANDARDS EFFICIENCY REVIEW**

The North American Electric Reliability Corporation (“NERC”) hereby submits: (i) the retirement of ten currently effective Reliability Standards in their entirety, without replacement; and (ii) four proposed revised Reliability Standards, in which individual requirements from the currently effective versions are retired.

As discussed more fully herein, the proposals discussed in this filing originate from the first phase of work under NERC’s Standards Efficiency Review. This initiative, which began in 2017, reviewed the body of NERC Reliability Standards to identify those Reliability Standards and requirements that were administrative in nature, duplicative to other standards, or provided no benefit to reliability. The retirement proposals described in this filing are the first step toward achieving a more streamlined, effective, and efficient body of Reliability Standards. None of the proposed retirements would have an adverse impact on reliability. The specific proposals addressed in this filing are as follows.

First, NERC provides notice of the retirement of ten currently effective Reliability Standards in their entirety. The Reliability Standards proposed for retirement are as follows:

- FAC-013-2 – Assessment of Transfer Capability for the Near-term Transmission Planning Horizon
- INT-004-3.1 – Dynamic Transfers

- INT-010-2.1 – Interchange Initiation and Modification for Reliability
- MOD-001-1a – Available Transmission System Capability
- MOD-004-1 – Capacity Benefit Margin
- MOD-008-1 – Transmission Readability Margin Calculation Methodology
- MOD-020-0 – Providing Interruptible Demands and Direct Control Load Management Data to System Operators and Reliability Coordinators
- MOD-028-2 – Area Interchange Methodology
- MOD-029-2a – Rated System Path Methodology
- MOD-030-3 – Flowgate Methodology

NERC has previously proposed the retirement of the MOD Reliability Standards listed above (excluding MOD-020-0) in connection with its filing of Reliability Standard MOD-001-2, filed on February 18, 2014.<sup>1</sup> On this day, 2019, NERC filed a Notice of Withdrawal to withdraw its February 18, 2014 filing.

Second, NERC provides notice of four proposed Reliability Standards, as shown in **Exhibit A**, as just, reasonable, not unduly discriminatory or preferential, and in the public interest. In these proposed Reliability Standards, NERC proposes to revise the currently effective versions of the standards to retire individual requirements that are not needed for reliability. The proposed Reliability Standards are as follows:

- FAC-008-4 – Facility Ratings
- INT-006-5 – Evaluation of Interchange Transactions
- INT-009-3 – Implementation of Interchange
- PRC-004-6 – Protection System Misoperation Identification and Correction

---

<sup>1</sup> *Notice of Filing of NERC of Proposed Reliability Standard MOD-001-2 and Retirement of Reliability Standards MOD-001-1a, MOD-004-1, MOD-008-1, MOD-028-2, MOD-029-1a and MOD-030-2.*

With respect to the proposed Reliability Standards, NERC provides notice of: (i) the associated Violation Risk Factors (“VRFs”) and Violation Severity Levels (“VSLs”) (**Exhibit D**), which are generally unchanged from the currently effective versions of those standards; and (ii) the retirement of currently effective Reliability Standards FAC-008-3, INT-006-4, INT-009-2.1, and PRC-004-5(i).

Last, NERC provides notice of the associated implementation plan for the proposed retired and revised Reliability Standards discussed above (**Exhibit B**).

This filing presents the technical basis and purpose of the proposed Reliability Standards and retirements, a demonstration that the proposals meet the Reliability Standards criteria (**Exhibit C**), and a summary of the standard development history (**Exhibit F**). The NERC Board of Trustees adopted the proposed Reliability Standards and approved the proposed retirements discussed in this filing on May 9, 2019.

This filing is organized as follows: Section I of the filing presents an overview of the Standards Efficiency Review and a summary of the proposals in this filing. Section II of the filing provides the individuals to whom notices and communications related to the filing should be provided. Section III provides information on the development of the proposals through Project 2018-03 Standards Efficiency Review Retirements. Sections IV and V of the filing provide an overview of each of the Reliability Standard proposals and the justification supporting the proposals. Section VI of the filing provides a summary of the proposed implementation plan.

## **I. THE STANDARDS EFFICIENCY REVIEW**

NERC’s mission is to assure effective and efficient reduction of risks to the reliability and security of the North American Bulk Power System (“BPS”).<sup>2</sup> Mandatory Reliability Standards play an integral role in helping NERC achieve its mission of a highly reliable and secure grid. After a decade of developing and implementing mandatory Reliability Standards in North America, NERC launched the Standards Efficiency Review in 2017. This comprehensive, multi-year review project comprises a key element of NERC’s plan to achieve its long-term strategic goal of establishing risk-based controls to minimize BPS reliability risk while also driving operational efficiencies and effectiveness.<sup>3</sup> This project also marks an important milestone in the maturity of NERC’s standard development program.

NERC submitted the first set of mandatory Reliability Standards on April 4, 2006. In the intervening years, NERC invested significant resources to develop new and revised mandatory Reliability Standards to address FERC directives and emerging risks. NERC also invested significant time and effort to improve the quality, content, and organization of Reliability Standards. Notable achievements include:

- The evolution in standards-writing from a highly detailed, prescriptive approach to one that is “results-based,” whereby standards are written to provide entities with built-in flexibility to achieve the stated reliability goal.
- The retirement of 34 Reliability Standard requirements that were redundant, administrative, or otherwise unnecessary and where violations posed a lesser risk to the reliability of the BPS, under the “paragraph 81” project.<sup>4</sup>

---

<sup>2</sup> Unless otherwise indicated, capitalized terms used in this filing shall have the meaning set forth in the *Glossary of Terms Used in NERC Reliability Standards* (“NERC Glossary”), [https://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary\\_of\\_Terms.pdf](https://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary_of_Terms.pdf).

<sup>3</sup> See *ERO Enterprise Long-Term Strategy* (Nov. 2017), available on NERC’s website at <https://www.nerc.com/AboutNERC/Pages/Strategic-Documents.aspx>.

<sup>4</sup> See *Notice of Filing of the North American Electric Reliability Corporation of Retirement of Requirements in Reliability Standards*, filed March 19, 2013.

- The revision and streamlining of entire families of Reliability Standards, including the INT Reliability Standards<sup>5</sup> and the TOP and IRO Reliability Standards.<sup>6</sup>
- The implementation of enhanced processes for performing periodic reviews of Reliability Standards, including a new grading process to measure content and quality.

In addition to these standards development-related efforts, NERC and the Regional Entities have completed the implementation of risk-based compliance and enforcement processes across the ERO Enterprise.

Through its experience successfully completing over 100 standards projects, and informed by the improvement efforts highlighted above, NERC has developed a more sophisticated understanding of what a Reliability Standard should be and how it should be written. With the benefit of this experience, NERC determined that it was an appropriate time to initiate a comprehensive and critical review of the body of NERC Reliability Standards. At this time, approximately 475 continent-wide Reliability Standard requirements are in effect in North America, addressing various aspects of BPS planning, operations, and cyber and physical security. NERC initiated the Standards Efficiency Review to determine whether there were opportunities to improve the overall effectiveness and efficiency of its Reliability Standards consistent with its regulatory philosophy, which consists of several key elements including the following:

- Reliability Standards should be developed using a results-based approach that focuses on performance, risk management, and entity capabilities, rather than prescribing specific processes for an entity to follow.
- Reliability Standards should be focused on advancing reliability; they should not prescribe commercial business practices which do not contribute directly to reliability.

---

<sup>5</sup> NERC submitted the revised INT standards on March 1, 2014. *See Notice of Filing of the North American Electric Reliability Corporation of Proposed Reliability Standards for Interchange Scheduling and Coordination.*

<sup>6</sup> NERC submitted the revised TOP and IRO Reliability Standards on March 25, 2015. *See Notice of Filing of the North American Electric Reliability Corporation of Proposed Transmission Operations and Interconnection Reliability Operations and Coordination Reliability Standards.*

- Reliability Standard requirements should be organized logically and efficiently, both to aid ease of use and to avoid duplication and conflict among requirements.

For the first phase of work, review teams consisting of industry experts in Real-time operations, long-term planning, and operations planning performed a comprehensive review of the operations and planning Reliability Standards (i.e., excluding CIP). The purpose of this review was to identify Reliability Standard requirements that provide little or no benefit to reliability and should be retired. An important part of this review was exploring the relationships between the different Reliability Standards in a deeper way than would be feasible during a targeted periodic review of a Reliability Standard or Reliability Standard family. This in-depth review allowed NERC to identify requirements that are not necessary for reliability or that are redundant to other requirements. The review process was conducted in an open and transparent manner, with broad industry participation. NERC then initiated the standard development process to consider the retirement recommendations resulting from the phase one work.

As discussed more fully in this filing, NERC proposes to retire 73 requirements and one requirement part, including the retirement of 10 Reliability Standards in their entirety.<sup>7</sup> (NERC has also filed a notice to withdraw its 2014 filing of proposed Reliability Standard MOD-001-2.) The proposals include the following Reliability Standards families: Interchange Scheduling and Coordination (“INT”); Facilities Design, Connections, and Maintenance (“FAC”); Modeling, Data, and Analysis (“MOD”); and Protection and Control (“PRC”). None of the proposals discussed in this filing would have an adverse impact to reliability. To the contrary, NERC’s proposals would benefit reliability by allowing entities to focus their resources on those Reliability

---

<sup>7</sup> Concurrently with this filing, NERC has submitted a separate filing addressing the retirement of four requirements related to next-day operations planning, which also resulted from work under the first phase of the Standards Efficiency Review. See *Notice of Filing of the North American Electric Reliability Corporation of Reliability Standards IRO-002-7, TOP-001-5, and VAR-001-6 Developed under the NERC Standards Efficiency Review*, filed this day.

Standard requirements that promote the reliable operation and planning of the BPS and avoid unnecessary regulatory burden. The proposals described in this filing as just, reasonable, not unduly discriminatory or preferential, and in the public interest.

Work continues under the second phase of the Standard Efficiency Review to consider recommendations for Reliability Standard revisions that would further improve the efficiency of the body of NERC Reliability Standards, such as through consolidation of Reliability Standard requirements. The review teams are also expected to consider recommendations for standards-based improvements that would further reduce inefficiencies and promote effectiveness going forward. NERC would submit separate filings to address any such proposals at the appropriate time.

## **II. NOTICES AND COMMUNICATIONS**

Notices and communications with respect to this filing may be addressed to the following:

Lauren A. Perotti  
Senior Counsel  
North American Electric Reliability  
Corporation  
1325 G Street, N.W., Suite 600  
Washington, D.C. 20005  
(202) 400-3000  
(202) 644-8099 – facsimile  
lauren.perotti@nerc.net

Howard Gugel  
Vice President and Director of Engineering and Standards  
North American Electric Reliability Corporation  
3353 Peachtree Road, N.E.  
Suite 600, North Tower  
Atlanta, GA 30326  
(404) 446-2560  
(404) 446-2595 – facsimile  
howard.gugel@nerc.net

## **III. BACKGROUND**

### **A. NERC Reliability Standards Development Procedure**

The proposed Reliability Standards and standard retirements discussed in this filing were developed in an open and fair manner and in accordance with the Reliability Standard development

process. NERC develops Reliability Standards in accordance with Section 300 (Reliability Standards Development) of its Rules of Procedure and the NERC Standard Processes Manual.<sup>8</sup>

NERC's rules provide for reasonable notice and opportunity for public comment, due process, openness, and a balance of interests in developing Reliability Standards, and thus satisfy several of the criteria for approving Reliability Standards. The development process is open to any person or entity with a legitimate interest in the reliability of the BPS. NERC considers the comments of all stakeholders. Stakeholders must approve, and the NERC Board of Trustees must adopt, a new or revised Reliability Standard before NERC submits the Reliability Standard to the applicable governmental authorities. Similarly, stakeholders and the NERC Board of Trustees must approve the retirement of a Reliability Standard before the retirement is submitted to the applicable governmental authorities.

#### **B. Project 2018-03 Standards Efficiency Review Retirements**

In 2018, NERC initiated Project 2018-03 Standards Efficiency Review Retirements to consider the Reliability Standard Retirement recommendations from the first phase of the Standards Efficiency Review. In total, the Project 2018-03 standard drafting team evaluated recommendations to: (i) withdraw one proposed Reliability Standard in its entirety, consisting of six requirements; and (ii) retire 99 Reliability Standard requirements and one requirement part, including the retirement of 12 Reliability Standards in their entirety.

For the reasons explained in **Exhibit E**, the standard drafting team determined to: (i) withdraw one proposed Reliability Standard; and (ii) retire 77 Reliability Standard requirements and one requirement part, including the 73 requirements and one requirement part in the INT, FAC, PRC, and MOD Reliability Standards that are addressed in this filing. For those Reliability

---

<sup>8</sup> The NERC Rules of Procedure, including Appendix 3A, NERC Standard Processes Manual, are available at <http://www.nerc.com/AboutNERC/Pages/Rules-of-Procedure.aspx>.

Standards in which individual requirements are proposed for retirement, the standard drafting team developed a new version of the Reliability Standard in which the text of the retired requirement is replaced with the term “Reserved,” with corresponding revisions made as necessary to the VSLs and measures.

Each of the proposed standards and retirements were posted for formal comment and ballot from February 27, 2019 to April 12, 2019 and for final ballot from April 23, 2019 to May 2, 2019. Having achieved the requisite quorum and ballot body approval percentages, the NERC Board of Trustees adopted the proposed standards and approved the proposed retirements on May 9, 2019. A summary of the development history and the complete record of development is attached to this filing as **Exhibit F**.

#### **IV. JUSTIFICATION– PROPOSED STANDARD RETIREMENTS**

In this filing, NERC proposes the retirement of ten Reliability Standards in their entirety:

- FAC-013-2 – Assessment of Transfer Capability for the Near-term Transmission Planning Horizon
- INT-004-3.1 – Dynamic Transfers
- INT-010-2.1 – Interchange Initiation and Modification for Reliability
- The MOD A Reliability Standards (MOD-001-1a – Available Transmission System Capability; MOD-004-1 – Capacity Benefit Margin; MOD-008-1 – Transmission Readability Margin Calculation Methodology; MOD-028-2 – Area Interchange Methodology; MOD-029-2a – Rated System Path Methodology; MOD-030-3 – Flowgate Methodology); and
- MOD-020-0 – Providing Interruptible Demands and Direct Control Load Management Data to System Operators and Reliability Coordinators

For the reasons set forth in this section, none of these Reliability Standards are necessary for reliability. Therefore, the retirement of these Reliability Standards would not have an adverse impact on reliability and would be in the public interest. The retirement of these Reliability

Standards shall be effective in accordance with the proposed implementation plan discussed in Section VI.

**A. Reliability Standard FAC-013-2**

**1. Procedural History**

NERC submitted Reliability Standard FAC-013-2 – Assessment of Transfer Capability for the Near-Term Transmission Planning Horizon on March 3, 2011. The standard was originally developed to address FERC directives in Order Nos. 693<sup>9</sup> and 729<sup>10</sup> to require entities to perform an annual assessment of transfer capability in the planning horizon and to do so using data inputs and modeling assumptions that are consistent with other planning uses. In the Reliability Standard FAC-013-2 filing, NERC proposed the retirement of Requirement R3 following NERC’s “paragraph 81” initiative.

**2. Justification for Retirement**

The purpose of Reliability Standard FAC-013-2 is “to ensure that Planning Coordinators have a methodology for, and perform an annual assessment to identify potential future Transmission System weaknesses and limiting Facilities that could impact the Bulk Electric System’s (‘BES’) ability to reliably transfer energy in the Near-Term Transmission Planning Horizon.” In approving the standard, FERC noted the standard’s purpose as a planning tool with a regional focus, rather than a mechanism for ensuring that individual systems are planned to reliably meet projected load and known transmission uses.<sup>11</sup> In the intervening years, NERC determined

---

<sup>9</sup> Order No. 693 at P 779, 782.

<sup>10</sup> *Mandatory Reliability Standards for the Calculation of Available Transfer Capability, Capacity Benefit Margins, Transmission Reliability Margins, Total Transfer Capability, and Existing Transmission Commitment and Mandatory Reliability Standards for the Bulk-Power System*, Order No. 729, 129 FERC ¶ 61,155, at P 291 (2009) (“Order No. 729”), *order on reh’g*, Order No. 729-A, 131 FERC ¶ 61,109 (2010), *order on reh’g*, Order No. 729-B, 132 FERC ¶ 61,027 (2010).

<sup>11</sup> *See* FAC-013-2 Approval Order at P 21.

that the standard is not needed for BES reliability and is primarily administrative in nature, and should therefore be retired. The specific reasons for this determination are described below.

First, the requirement for Planning Coordinators to have a methodology for and to perform an annual assessment of Transfer Capability for a single year in the Near-Term Transmission Planning Horizon does not benefit System reliability beyond that provided by other Reliability Standards. Reliability Standard TPL-001-4, which was submitted on March 19, 2013, requires Transmission Planners and Planning Coordinators to prepare an annual Planning Assessment of its portion of the BES. Requirement R1.1.5 of this standard requires that the System models used for the Planning Assessment represent “known commitments for Firm Transmission Service and Interchange.”<sup>12</sup> The additional Transfer Capability assessment required by FAC-013-2 serves only a market function; it does not provide for System reliability.

Second, NERC has determined that the Transfer Capability assessment is not an indicator of BES reliability. Reliability Standard FAC-013-2 does not require specific performance metrics or coordination among functional entities. Individual Planning Coordinators develop their own methodologies that may be very different from each other. Impacted functional entities, such as the Transmission Planner, do not have meaningful input into the methodology or analysis. The standard does not specify performance metrics, nor does it define acceptable BES performance. Entities that receive the methodology or assessment results are not obligated to use, or even consider, the information in their assessments. Further, the standard requires that the assessment be performed for only one year in the Near-Term Transmission Planning Horizon in the Planning

---

<sup>12</sup> The relevant language is carried forward in Requirement R1.1.4 in proposed Reliability Standard TPL-001-5. Proposed Reliability Standard TPL-001-5 was filed on December 14, 2018.

Coordinator's discretion.<sup>13</sup> For these reasons, NERC has determined that these assessments are not useful for regional reliability planning purposes.

In light of these considerations, NERC has determined that Reliability Standard FAC-013-2 provides little or no benefit to reliability and should be retired. Should an individual entity find the Transfer Capability assessments specified in this standard useful for its own planning purposes, it may continue to perform them voluntarily.

## **B. Reliability Standard INT-004-3.1**

### **1. Procedural History**

NERC submitted Reliability Standard INT-004-3 – Dynamic Transfers on March 11, 2014 and the errata version INT-004-3.1 on August 27, 2014. The standard was last substantively revised through a larger project to revise and consolidate the INT family of Reliability Standards. Requirements R1 and R2 were originally drafted to be applicable to the Purchasing-Selling Entity; however, on January 6, 2015, NERC submitted changes to the NERC Rules of Procedure that removed the Purchasing-Selling Entity from the NERC Compliance Registry, effectively retiring those requirements.

### **2. Justification for Retirement**

The purpose of Reliability Standard INT-004-3.1 is to “ensure that Dynamic Schedules and Pseudo-Ties are communicated and accounted for appropriately in congestion management procedures.” NERC determined that it is appropriate to retire this standard as the substance relates primarily to commercial or business practices and the standard itself provides little, if any, benefit to reliability.

As noted above, Requirements R1 and R2 have been effectively retired since 2015 with

---

<sup>13</sup> The Near-Term Transmission Planning Horizon is defined in the NERC Glossary as “The transmission planning period that covers Year One through five.”

the removal of the Purchasing-Selling Entity function from the NERC Compliance Registry. The remaining requirement, Requirement R3, refers to implementation or operation of only those “Pseudo-Ties that are included in the NAESB Electric Industry Registry publication in order to support congestion management procedures.” Interchange scheduling and congestion are elements that impact transmission costs, rather than the reliable management of the BES. The requirement itself provides no benefit to reliability. Therefore, the retirement of Reliability Standard INT-004-3.1 would have no adverse impact on reliability and is in the public interest.

## **C. Reliability Standard INT-010-2.1**

### **1. Procedural History**

NERC submitted Reliability Standard INT-010-2 – Interchange Initiation and Modification for Reliability on March 11, 2014 and the errata version INT-010-2.1 on August 27, 2014. NERC last revised the standard as part of a larger project to revise and consolidate the INT family of Reliability Standards. At that time, modest revisions were made to the terminology used in the requirements and the entity responsible for each task. The prior version of the standard, INT-010-1, was submitted by NERC on September 11, 2006.

### **2. Justification for Retirement**

The purpose of Reliability Standard INT-010-2.1 is “to provide guidance for required actions on Confirmed Interchange or Implemented Interchange to address reliability.” NERC determined that it is appropriate to retire this Reliability Standard as it relates primarily to commercial or business practices and provides little, if any, benefit to reliability.

Reliability Standard INT-010-2.1 Requirement R1 provides that a Balancing Authority that experiences a loss of resources or other reliability needs covered by an energy sharing agreement shall ensure a Request for Interchange is submitted with a start time no more than 60 minutes beyond the resource loss. Reliability Standard INT-010-2.1 Requirement R2 provides that a Sink

Balancing Authority shall ensure that a Reliability Adjustment Arranged Interchange reflecting a modification is submitted within 60 minutes of the start of the modification if the Reliability Coordinator directs modification of a Confirmed Interchange or Implemented Interchange for actual or anticipated reliability-related reasons. Reliability Standard INT-010-2.1 Requirement R3 provides that a Sink Balancing Authority shall ensure that a Request for Interchange is submitted reflecting that Interchange Schedule within 60 minutes of the start of the scheduled Interchange if a Reliability Coordinator directs the scheduling of Interchange for actual or anticipated reliability-related reasons.

Notwithstanding the references in these requirements to “reliability” and “reliability-related reasons,” the requirements of Reliability Standard INT-010-2.1 ultimately relate primarily to commercial or business practices; specifically, the timing of Requests for Interchange. The NAESB WEQ-004 Coordinate Interchange Business Practice Standards (specifically, WEQ-004-1 and WEQ-004-8) provide more stringent requirements.<sup>14</sup> The NERC Independent Experts Review Panel recommended the retirement of the previous version of this Reliability Standard, INT-010-1, in 2013, due to overlap with the NAESB Electronic Tagging Functional Specification.<sup>15</sup> Based on these considerations, and informed by its experience implementing the INT-010 standard, NERC has determined that Reliability Standard INT-010-2.1 provides little, if any, benefit to the reliability of the BPS and should be retired.

---

<sup>14</sup> In the interest of continued coordination between NERC and NAESB on standards development matters, NERC has provided notice to NAESB of the INT proposals described in this filing so it may determine whether to initiate action to review or revise its WEQ Business Practice Standards.

<sup>15</sup> *Standards Independent Experts Review Project* (2013), [https://www.nerc.com/pa/Stand/Standard%20Development%20Plan/Standards\\_Independent\\_Experts\\_Review\\_Project\\_Report-SOTC\\_and\\_Board.pdf](https://www.nerc.com/pa/Stand/Standard%20Development%20Plan/Standards_Independent_Experts_Review_Project_Report-SOTC_and_Board.pdf) at 28.

**D. Reliability Standards MOD-001-1a, MOD-004-1, MOD-008-1, MOD-028-2, MOD-029-2a, and MOD-030-3**

**1. Procedural History**

On December 17, 2009, NERC submitted six MOD Reliability Standards pertaining to methodologies for calculation of Available Transfer Capability (“ATC”) or Available Flowgate Capacity (“AFC”), referred to herein as the “MOD A” Reliability Standards:

- MOD-001-1 – Available Transmission System Capability (superseded by MOD-001-1a, submitted on December 17, 2009);
- MOD-004-1 – Capacity Benefit Margin (currently effective);
- MOD-008-1 – Transmission Reliability Margin Calculation Methodology (currently effective);
- MOD-028-1 – Area Interchange Methodology (superseded by MOD-028-2, submitted on August 31, 2012);
- MOD-029-1 – Rated System Path Methodology (superseded by MOD-029-1a, submitted on December 17, 2009 and MOD-029-2a, submitted on February 25, 2015<sup>16</sup>); and
- MOD-030-2 – Flowgate Methodology (superseded by MOD-030-3, submitted on February 25, 2015<sup>17</sup>).

---

<sup>16</sup> Reliability Standard MOD-029-2a revised the prior version by incorporating the new definition of Remedial Action Scheme and eliminating use of the term Special Protection System.

<sup>17</sup> In Reliability Standard MOD-030-3, NERC revised the prior version by incorporating the new definition of Remedial Action Scheme and eliminating use of the term Special Protection System.

These Reliability Standards were developed in response to FERC’s directives in Order No. 890<sup>18</sup> and Order No. 693<sup>19</sup> to develop Reliability Standards to provide for consistency and transparency in the methodologies used by transmission providers to calculate ATC.

On February 18, 2014, NERC filed a Notice of Filing of proposed Reliability Standard MOD-001-2 and the retirement of Reliability Standards MOD-001-1a, MOD-004-1, MOD-008-1, MOD-028-2, MOD-029-1a, and MOD-030-2.<sup>20</sup> In this filing, NERC proposed to retire the majority of the existing MOD A Reliability Standard requirements and retain, in proposed Reliability Standard MOD-001-2, only six requirements it believed were necessary for reliability. NERC’s proposed MOD-001-2 implementation plan was designed to provide NAESB the opportunity to consider, through its standards development process, which, if any, of the commercial or business practice related requirements from the existing MOD A standards should be incorporated into the WEQ Business Practice Standards.

On June 19, 2014, FERC issued a Notice of Proposed Rulemaking proposing to approve Reliability Standard MOD-001-2 and the retirement of the existing MOD A Reliability Standards.<sup>21</sup> FERC also sought comment on aspects of NERC’s proposal regarding coordination

---

<sup>18</sup> *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, 118 FERC ¶ 61,119 (2007) (“Order No. 890”), *order on reh’g*, Order No. 890-A, 121 FERC ¶ 61,297 (2007), *order on reh’g*, Order No. 890-B, 123 FERC ¶ 61,299 (2008), *order on reh’g*, Order No. 890-C, 126 FERC ¶ 61,228 (2009).

In Order No. 890, FERC sought to address and remedy continued opportunities for undue discrimination under the pro forma Open Access Transmission Tariff adopted in Order No. 888. Among other things, FERC sought to standardize the manner in which ATC/AFC was calculated to address market-related concerns that a lack of a consistent and transparent methodology could lead to undue discrimination for providing open access transmission service. *Id.* at P 68. FERC also asserted that a lack of consistent, industry-wide calculation standards could pose a threat to the BPS because “a transmission provider might not know of its neighbors’ system conditions affecting its own ATC values.” *See id.* at 195.

<sup>19</sup> *Mandatory Reliability Standards for the Bulk-Power System*, Order No. 693 at PP 1020-1126 (2007).

<sup>20</sup> *Notice of Filing of NERC of Proposed Reliability Standard MOD-001-2 and Retirement of Reliability Standards MOD-001-1a, MOD-004-1, MOD-008-1, MOD-028-2, MOD-029-1a and MOD-030-2* (Feb. 18, 2014) (“MOD-001-2 Filing”).

<sup>21</sup> *Modeling, Data, and Analysis Reliability Standards*, Notice of Proposed Rulemaking, 147 FERC ¶ 61,208 (2014).

with NAESB on incorporating commercial or business practice related requirements in the NAESB WEQ Business Practice Standards. On September 25, 2015, NAESB submitted a final status report to FERC explaining that it had completed the development of new and revised WEQ Business Practice Standards to include commercially relevant requirements from the existing MOD A Reliability Standards being proposed for retirement.<sup>22</sup>

As a result of work performed under the Standards Efficiency Review, and as discussed further below, NERC determined that the existing MOD A Reliability Standards are not needed for reliability and should be retired independently of any action on proposed Reliability Standard MOD-001-2. Further, NERC determined that proposed Reliability Standard MOD-001-2 is not needed for reliability and should be withdrawn. Accordingly, NERC filed a notice to withdraw the MOD-001-2 Filing concurrently with the filing of this filing. In the interest of continued coordination between NERC and NAESB on standards development matters, NERC has provided notice to NAESB of the MOD proposals described in this filing. NERC's proposals, however, are not contingent on any NAESB action.

## **2. Justification for Retirement**

MOD-001-1a serves as an umbrella standard that contains the generic requirements applicable to determining ATC and AFC, and requires each applicable entity to select and implement one or more of the three methodologies found in MOD-028-2 (Area Interchange Methodology), MOD-029-2a (Rated System Path Methodology), and MOD-030-3 (Flowgate Methodology). MOD-004-1 and MOD-008-1 provide for the calculation, verification, preservation, and use of Capacity Benefit Margin ("CBM") and Transmission Reliability Margin ("TRM"), respectively, which are inputs into ATC/AFC calculations.

---

<sup>22</sup> *NAESB Status Report on the Development of Modeling, Data, and Analysis Business Practice Standards*, filed in Docket Nos. RM05-5-000 and RM14-7-000 (Sep. 25, 2015).

As noted in NERC's MOD-001-2 Filing, NERC has previously concluded that many of the requirements in the existing MOD A Reliability Standards provide little or no reliability benefit and serve only a commercial function.<sup>23</sup> As NERC noted in that filing:

ATC/AFC values do not directly control the operation of the Bulk-Power System. Transmission Operators are ultimately responsible for operating the grid in a reliable manner consistent with System Operating Limits, not ATC/AFC values. NERC's Reliability Standards prohibit the scheduling and delivery of transmission service if such action would cause a violation of System Operating Limits or otherwise adversely affect reliability, regardless of the amount of ATC or AFC that is posted and sold by the Transmission Service Provider. It is the Transmission Operator's responsibility, when operating its system in Real-time, to monitor changing system conditions and respond to any events, such as a facility exceeding its System Operating Limit.<sup>24</sup>

At that time, NERC concluded that ATC/AFC determinations had the potential to influence reliability, insofar as they could lead to the possibility of oversold conditions that could trigger the need for the Transmission Operator to take corrective action to maintain system reliability. To that end, NERC proposed Reliability Standard MOD-001-2 to require that: (i) entities that determine ATC/AFC and/or Total Transfer Capability ("TTC")/Total Flowgate Capacity ("TFC") do so in a manner that accounts for system limits and relevant system conditions; and (ii) entities share the methodologies and data used to determine ATC/AFC, TTC/TFC, CBM, and TRM with other entities that need such information for their own determinations or to operate or plan the Bulk-Power System in a reliable manner.

NERC included both the existing MOD A Reliability Standards and proposed Reliability Standard MOD-001-2 in the scope of the Standards Efficiency Review and the subsequent standard development project. NERC reaffirmed that the existing MOD A Reliability Standards should be

---

<sup>23</sup> See, e.g., MOD-001-2 Filing at 10.

<sup>24</sup> MOD-001-2 Filing at 13.

retired. Further, NERC determined that the proposed MOD-001-2 standard, in which certain elements of the existing MOD A standards would be retained, would provide little, if any, benefit to reliability if approved and should therefore be withdrawn. The reasons for this determination are discussed below.

The existing MOD A Reliability Standards provide little, if any, benefit to the reliable operation of the BPS. ATC and AFC, as well as e-Tags, are commercially-focused elements, facilitating interchange and balancing of interchange. System Operators are ambivalent to these commercial arrangements. System Operators monitor Real-time flows to maintain reliability of the BPS according to System Operating Limits and Interconnection Reliability Operating Limits. If a scheduled interchange would violate either of these limits, the System Operators must disregard the scheduled interchange and operate the System within its actual reliability limits.

While NERC proposed to retain certain elements of the MOD A Reliability Standards in proposed Reliability Standard MOD-001-2 to promote operator awareness of potential oversold conditions, NERC has since determined that the proposed standard should be withdrawn. Requirements R1 through R4 of proposed Reliability Standard MOD-001-2 would require applicable entities that determine TFC/TTC, AFC/ATC, CBM, or TRM values, respectively, to develop methodologies or implementation documents describing how it determines such values. Requirement R5 would require that applicable entities respond to requests for clarification of methodologies or implementation documents and to provide such documents upon request, where these documents are not publicly available on the Open Access Same-Time Information System (“OASIS”) or the entity’s website.

Upon further review, NERC has determined that these requirements are administrative in nature or relate expressly to commercial or business practices and would not advance reliability.

Entities are not obligated to determine the values specified in the requirements, nor is any criteria imposed on their determination. Further, as Real-time flows are influenced by a number of factors beyond commercial arrangements, having access to documented ATC/AFC, TTC/TFC, CBM, and TRM methodologies under MOD-001-2 would provide little benefit to the System Operator maintaining the reliability of the System in Real-time.

As noted above, System Operators must monitor Real-time flows on their Systems and operate their Systems within actual reliability limits. The FAC Reliability Standards, specifically Reliability Standards FAC-011-3 and FAC-014-2, require a consistent methodology for calculating System Operating Limits and Interconnection Reliability Operating Limits between the Reliability Coordinator and Transmission Operator. Reliability Standard TPL-001-4, which became effective in 2015, requires each planning entity to share the results of its system planning studies (Requirement R8). These requirements provide for the coordination needed for reliability. Therefore, NERC has filed a notice to withdraw proposed Reliability Standard MOD-001-2 and provides notice of the retirement of the MOD A Reliability Standards in this proceeding.

## **E. Reliability Standard MOD-020-0**

### **1. Procedural History**

Reliability Standard MOD-020-0 – Providing Interruptible Demands and Direct Control Load Management Data to System Operators and Reliability Coordinators was submitted on April 4, 2006. As originally written, the standard was applicable to Load-Serving Entities, Transmission Planners, and Resource Planners. On January 6, 2015, NERC submitted a Notice of Filing notifying this authority of the removal of the Load-Serving Entity from the NERC Compliance Registry.<sup>25</sup>

---

<sup>25</sup> *Notice of Filing of the North American Electric Reliability Corporation of Risk-Based Registration Initiative Rules of Procedure Revisions (Jan. 6, 2015).*

## 2. Justification for Retirement

The purpose of Reliability Standard MOD-020-0 is to ensure that past and forecasted demand data are available for validation of past events and future system assessments. Reliability Standard MOD-020-0 consists of a single requirement which provides as follows:

- R1. The Load-Serving Entity, Transmission Planner, and Resource Planner shall each make known its amount of interruptible demands and Direct Control Load Management (DCLM) to Transmission Operators, Balancing Authorities, and Reliability Coordinators on request within 30 calendar days.

NERC proposes to retire Reliability Standard MOD-020-0 on the basis that it provides little, if any, benefit to reliability and is duplicative to other mechanisms for obtaining the information required be provided by the standard.

Reliability Standard MOD-020-0 requires information on Interruptible Demands and Direct Control Load Management to be provided within 30 calendar days of a request. As such, information obtained under this standard may properly be regarded as a resource for the long-term planning and operations planning time horizons, but not for the Real-time operations time horizon or for day-ahead studies. As such, this standard does not provide useful information for Transmission Operators and Reliability Coordinators, who must plan and operate the BPS within System Operating Limits and Interconnection Reliability Operating Limits under the TOP and IRO Reliability Standards, nor does it provide useful information to the Balancing Authority, who must maintain generation-Load-interchange balance in real time. Even if such information was available more quickly than 30 days, the amount of interruptible demands and DCLM at the Transmission Planner and Resource Planner level is not sufficiently granular to be of locational benefit to Balancing Authorities, Transmission Operators, or Reliability Coordinators to assist them in operating in Real-time or planning for next-day operations.

To the extent that interruptible demand and DCLM information is useful to Transmission

Operators, Reliability Coordinators, and Balancing Authorities as a longer-term resource, it may be obtained from the NERC Demand Response Availability System (“DADS”). Beginning in 2011, NERC began the mandatory collection of information on demand response programs and events where demand response was used under its authority provided in Section 1600 of the NERC Rules of Procedure.<sup>26</sup>

For these reasons, NERC has determined that Reliability Standard MOD-020-0 provides little, if any, benefit to reliability and should be retired.

## **V. JUSTIFICATION– PROPOSED RELIABILITY STANDARDS**

In this filing, NERC provides notice of seven revised Reliability Standards in which requirements from the currently effective Reliability Standards are proposed to be retired:

- FAC-008-4 – Facility Ratings
- INT-006-5 – Evaluation of Interchange Transactions
- INT-009-3 – Implementation of Interchange
- PRC-004-6 – Protection System Misoperation Identification and Correction

For the reasons set forth in this section, none of the requirements proposed for retirement in the proposed Reliability Standards are necessary for reliability. As shown in the redlines included in **Exhibit A**, for each instance in which NERC has proposed to retire a Reliability Standard requirement, NERC has struck the requirement in its entirety and replaced the text with the word “Reserved.” Corresponding revisions have also been made to the VRFs, VSLs, measures, and, where present, the supplemental material included as information.

---

<sup>26</sup> NERC Rules of Procedure Section 1600, Requests for Data or Information. The NERC Rules of Procedure is available at <https://www.nerc.com/AboutNERC/Pages/Rules-of-Procedure.aspx>. Information on DADS is available at <https://www.nerc.com/pa/RAPA/dads/Pages/default.aspx>.

The proposed Reliability Standards continue to meet the Reliability Standards criteria and are just, reasonable, not unduly discriminatory, and in the public interest. These Reliability Standards are to become effective in accordance with the proposed implementation plan discussed in Section VI.

**A. Reliability Standard FAC-008-4**

**1. Procedural History**

Reliability Standard FAC-008-3 – Facility Ratings was submitted on June 17, 2011. The standard was developed in response to FERC directives from Order No. 693 to modify the FAC-008 standard to require entities to: (i) document underlying assumptions and methods used to determine normal and emergency facility ratings; (ii) develop facility ratings consistent with industry standards developed through an open, transparent, and validated process; and (iii) for each facility, identify the limiting component and, for critical facilities, the resulting increase in rating if that component is no longer limiting.<sup>27</sup> On March 19, 2013, NERC proposed the retirement of Requirements R4 and R5 following NERC’s “paragraph 81” initiative.<sup>28</sup>

**2. Justification**

The purpose of proposed Reliability Standard FAC-008-4, which remains unchanged from the currently effective version of the standard, is to “to ensure that Facility Ratings used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on technically sound principles. A Facility Rating is essential for the determination of System Operating Limits.”

In proposed Reliability Standard FAC-008-4, NERC proposes to retire Requirements R7

---

<sup>27</sup> See Order No. 693 at PP 739, 742, 756.

<sup>28</sup> In proposed Reliability Standard FAC-008-4, NERC has struck the text of these requirements and replaced them with the word “Reserved.”

and R8 of the currently effective standard because these requirements are redundant to those in other Reliability Standards and therefore are not needed for reliability.

Reliability Standard FAC-008-3 Requirements R7 and R8 require Generator Owners and Transmission Owners to provide certain information to requesting Reliability Coordinator(s), Planning Coordinator(s), Transmission Planner(s), Transmission Owner(s), and Transmission Operator(s) regarding their Facilities, as follows:

**R7.** Each Generator Owner shall provide Facility Ratings (for its solely and jointly owned Facilities that are existing Facilities, new Facilities, modifications to existing Facilities and re-ratings of existing Facilities) to its associated Reliability Coordinator(s), Planning Coordinator(s), Transmission Planner(s), Transmission Owner(s) and Transmission Operator(s) as scheduled by such requesting entities.

**R8.** Each Transmission Owner (and each Generator Owner subject to Requirement R2) shall provide requested information as specified below (for its solely and jointly owned Facilities that are existing Facilities, new Facilities, modifications to existing Facilities and re-ratings of existing Facilities) to its associated Reliability Coordinator(s), Planning Coordinator(s), Transmission Planner(s), Transmission Owner(s) and Transmission Operator(s):

**8.1.** As scheduled by the requesting entities:

**8.1.1.** Facility Ratings

**8.1.2.** Identity of the most limiting equipment of the Facilities

**8.2.** Within 30 calendar days (or a later date if specified by the requester), for any requested Facility with a Thermal Rating that limits the use of Facilities under the requester's authority by causing any of the following: 1) An Interconnection Reliability Operating Limit, 2) A limitation of Total Transfer Capability, 3) An impediment to generator deliverability, or 4) An impediment to service to a major load center:

**8.2.1.** Identity of the existing next most limiting equipment of the Facility

**8.2.2.** The Thermal Rating for the next most limiting equipment identified in Requirement R8, Part 8.2.1.

In summary, Requirement R7 provides that each Generator Owner shall provide Facility Ratings as scheduled by the requesting entities. Requirement R8 provides that Transmission Owners and applicable Generator Owners shall: (i) provide requesting entities with the Facility Rating and the identity of the most limiting equipment of a Facility to requesting entities (Requirement R8 Part 8.1); and (ii) for certain Facilities, provide the identity of the next most limiting equipment of a Facility as well as the thermal rating of that equipment (Requirement R8 Part 8.2).

In the years since Reliability Standard FAC-008-3 was developed, NERC has developed other Reliability Standards that render the data provision obligations of Requirements R7 and R8 redundant. Specifically, Reliability Standards MOD-032-1, IRO-010-2, and TOP-003-3 contain provisions to help ensure that the relevant entities have the data they need from Generator Owners and Transmission Owners for operations and planning.

Requirement R1 of Reliability Standard MOD-032-1 – Data for Power System Modeling and Analysis requires the Planning Coordinator and Transmission Planner to develop modeling data requirements and reporting procedures including the data listed in Attachment 1 to the standard. This data would include information on power capabilities and Facility Ratings.<sup>29</sup> Requirement R2 requires the Generator Owner and Transmission Owner to provide the requested information.

Requirement R1 of Reliability Standard IRO-010-2 – Reliability Coordinator Data Specification and Collection requires the Reliability Coordinator to maintain a documented specification for the data necessary to perform its Operational Planning Analyses, Real-time

---

<sup>29</sup> See Reliability Standard MOD-032-1 Attachment 1, steady-state column, Items 3, 3(f), 4(c) and 6(g).

monitoring, and Real-time Assessments. This data necessarily includes Facility Ratings as inputs to System Operating Limit monitoring. Requirement R3 requires the Transmission Owner and Generator Owner to provide requested data. Similarly, Requirement R1 of Reliability Standard TOP-003-3 – Operational Reliability Data requires the Transmission Operator to maintain a documented data specification (Requirement R1) and for the Transmission Owner and Generator Owner to provide the requested data (Requirement R5).

As Reliability Standard FAC-008-3 Requirements R7 and R8 are now redundant to other more robust Reliability Standards and are no longer needed for reliability, NERC proposes to retire these Requirements in proposed Reliability Standard FAC-008-4. The retirement of these Requirements would not have an adverse impact on reliability and is in the public interest.

## **B. Reliability Standard INT-006-5**

### **1. Procedural History and Purpose**

Reliability Standard INT-006-4 – Evaluation of Interchange Transactions was proposed by NERC in a filing to this authority on March 1, 2014. NERC last revised the standard as part of a larger project to revise and consolidate the INT family of Reliability Standards.

### **2. Justification**

The purpose of proposed Reliability Standard INT-006-5, which remains unchanged from the currently effective version of the standard, is “to ensure that responsible entities conduct a reliability assessment of each Arranged Interchange before it is implemented.”

In proposed Reliability Standard INT-006-5, NERC proposes to retire Requirement R3 Part 3.1, Requirement R4, and Requirement R5 of the currently effective standard on the basis that these requirements provide little, if any, benefit or protection to the reliable operation of the BPS. Each of these requirements is addressed in turn below.

a) *Requirement R3 Part 3.1*

Reliability Standard INT-006-4 Requirement R3 requires that the Source Balancing Authority and the Sink Balancing Authority receiving a Reliability Adjustment Arranged Interchange approve or deny it prior to the expiration of time provided in Attachment 1, Column B to the standard. Requirement R3 Part 3.1 provides as follows:

- 3.1.** If a Balancing Authority denies a Reliability Adjustment Arranged Interchange, the Balancing Authority must communicate that fact to its Reliability Coordinator no more than 10 minutes after the denial.

NERC has determined, through its experience implementing the standard, that there is no substantive benefit to reliability by requiring that the Reliability Coordinator be notified when a Reliability Adjustment Arranged Interchange has been denied. Therefore, NERC proposes to retire this requirement part on that basis.

b) *Requirement R4*

Reliability Standard INT-006-4 Requirement R4 requires each Sink Balancing Authority to confirm that none of the listed conditions exist prior to transitioning an Arranged Interchange to Confirmed Interchange. This requirement reads as follows:

- R4.** Each Sink Balancing Authority shall confirm that none of the following conditions exist prior to transitioning an Arranged Interchange to Confirmed Interchange:
- It is a Reliability Adjustment Arranged Interchange, the time period specified in Attachment 1, Column B has elapsed, and the Source Balancing Authority or the Sink Balancing Authority associated with the Arranged Interchange has not communicated its approval of the transition.
  - It is not a Reliability Adjustment Arranged Interchange, the time period specified in Attachment 1, Column B, has elapsed, and not all Balancing Authorities and Transmission Service Providers associated with the Arranged Interchange have communicated their approval of the transition.

- It is not a Reliability Adjustment Arranged Interchange, the time period specified in Attachment 1, Column B, has elapsed, and any entity associated with the Arranged Interchange has communicated its denial of the transition.

NERC has determined that this requirement provides little, if any, benefit to reliability and should be retired. Presently, the NAESB Electronic Tagging Functional Specification addresses the conditions that must exist for an Arranged Interchange to transition to Confirmed Interchange. As the substance of this requirement relates to commercial or business practices, any such confirmation would be better accomplished through the Balancing Authority's e-Tag Authority Service rather than a mandatory Reliability Standard requirement.

c) *Requirement R5*

Reliability Standard INT-006-4 Requirement R5 provides that the Sink Balancing Authority shall notify certain entities within a set period of time when an Arranged Interchange is transitioned to Confirmed Interchange. This requirement provides as follows:

- R5.** For each Arranged Interchange that is transitioned to Confirmed Interchange, the Sink Balancing Authority shall notify the following entities of the on-time Confirmed Interchange such that the notification is delivered in time to be incorporated into scheduling systems prior to ramp start as specified in Attachment 1, Column D:
- 5.1.** The Source Balancing Authority,
  - 5.2.** Each Intermediate Balancing Authority,
  - 5.3.** Each Reliability Coordinator associated with each Balancing Authority included in the Arranged Interchange,
  - 5.4.** Each Transmission Service Provider included in the Arranged Interchange, and
  - 5.5.** Each Purchasing Selling Entity included in the Arranged Interchange.

NERC has determined that this requirement provides little, if any, benefit to reliability and should be retired. Presently, the NAESB Electronic Tagging Functional Specification addresses who must be notified when the transition to Confirmed Interchange occurs. As the substance of

this requirement relates to commercial or business practices, any such notifications would be better accomplished through the Balancing Authority's e-Tag Authority Service rather than a mandatory Reliability Standard requirement. The retirement of this requirement would not have an adverse impact on reliability and is in the public interest.

### **C. Reliability Standard INT-009-3**

#### **1. Procedural History and Purpose**

Reliability Standard INT-009-2 – Implementation of Interchange was proposed by NERC in a filing on March 1, 2004 and the errata version INT-009-2.1 was submitted by NERC on August 27, 2014.<sup>30</sup> NERC last revised the standard as part of a larger project to revise and consolidate the INT family of Reliability Standards.

#### **2. Justification**

The purpose of proposed Reliability Standard INT-009-3, which remains unchanged from the currently effective version of the standard, is “to ensure that Balancing Authorities implement the Interchange as agreed upon in the Interchange confirmation process.”

In proposed Reliability Standard INT-009-3, NERC proposes to revise Requirement R1 to delete the reference to Reliability Standard INT-010, consistent with NERC's proposal to retire that Reliability Standard in its entirety (*see* Section IV.C). NERC also proposes to retire Requirement R2 because it is redundant to Reliability Standard BAL-005-1 Requirement R7.

Reliability Standard INT-009-2.1 Requirement R2 provides as follows:

**R2.** The Attaining Balancing Authority and the Native Balancing Authority shall use a dynamic value emanating from an agreed upon common source to account for the Pseudo-Tie in the Actual Net Interchange (NIA) term of their respective control ACE (or alternate control process).

---

<sup>30</sup> *N. Am. Elec. Reliability Corp.*, Docket No. RD14-4-000 (June 30, 2014) (delegated letter order). The Commission approved errata version INT-009-2.1 on Nov. 26, 2014 by delegated letter order in the same proceeding.

Following the development of Reliability Standard INT-009-2.1, NERC developed and submitted Reliability Standard BAL-005-1 – Balancing Authority Control on June 16, 2016. The standard became effective in the United States on January 1, 2019. Reliability Standard BAL-005-1 Requirement R7 provides that each Balancing Authority shall ensure that each Pseudo-Tie with an Adjacent Balancing Authority is equipped with: (i) a common source to provide information to both Balancing Authorities for the scan rate values in the calculation of Reporting Ace (Part 7.1); and (ii) a time synchronized common source to determine hourly megawatt-hour values agreed-upon to aid in the identification and mitigation of errors (Part 7.2).

As Reliability Standard BAL-005-1 Requirement R7 now addresses the same reliability goal, NERC determined that it is appropriate to retire Requirement R2 in proposed Reliability Standard INT-009-3. The retirement of this requirement would not have an adverse impact on reliability and is in the public interest.

#### **D. Reliability Standard PRC-004-6**

##### **1. Procedural History and Purpose**

In 2014 and 2015, NERC submitted several versions of the PRC-004 Reliability Standard, including substantive revisions to the requirements in version PRC-004-3, submitted on September 23, 2014, and subsequent revisions to the applicability section (PRC-004-5, submitted on June 17, 2015) and Violation Risk Factors (submitted on August 19, 2015). The currently effective version is Reliability Standard PRC-004-5(i).

##### **2. Justification**

The purpose of proposed Reliability Standard PRC-004-6, which remains unchanged from the currently effective version of the standard, is to “identify and correct the causes of Misoperations of Protection Systems for Bulk Electric System (BES) Elements.” In proposed Reliability Standard PRC-004-6, NERC proposes to retire Requirement R4 of the currently

effective standard because the requirement provides little, if any, benefit or protection to the reliable operation of the BPS.

Currently effective Reliability Standard PRC-004-5(i) consists of six requirements for identifying and analyzing Protection System Misoperations and developing Corrective Action Plans to address underlying causes. Requirement R4 requires each applicable entity that has not yet determined the cause of a Misoperation to perform investigative actions as follows:

- R4.** Each Transmission Owner, Generator Owner, and Distribution Provider that has not determined the cause(s) of a Misoperation, for a Misoperation identified in accordance with Requirement R1 or R3, shall perform investigative action(s) to determine the cause(s) of the Misoperation at least once every two full calendar quarters after the Misoperation was first identified, until one of the following completes the investigation:
- The identification of the cause(s) of the Misoperation; or
  - A declaration that no cause was identified.

While originally intended to promote due diligence in identifying the causes of Misoperations, the activities associated with Requirement R4 have in practice consisted of developing tracking documents to show that investigative actions were performed at the required periodicity. Upon further review of this requirement, NERC has determined that it does not necessarily promote effective or efficient investigation practices. In some cases, an entity may need additional time beyond two calendar quarters to conduct a diligent investigation, particularly if equipment outages are necessary. Moreover, if an entity is unable to determine the cause of a Misoperation, further investigation(s) every two calendar quarters using the same event data are unlikely to lead to the identification of the cause. For these reasons, NERC has determined that it would be more effective and efficient to have entities investigate the causes of Misoperations according to their own internal control policies and procedures, rather than in accordance with a mandatory Reliability Standard requirement that requires investigative actions be performed on a

specific, recurring, and inflexible timeframe.

Based on these considerations, NERC has determined that Reliability Standard PRC-004-5(i) Requirement R4 provides little, if any, benefit or protection to the reliable operation of the BPS. Therefore, NERC proposes to retire Requirement R4 in proposed Reliability Standard PRC-004-6. The retirement of this requirement would not have an adverse impact on reliability and is in the public interest.

#### **E. Enforceability of the Proposed Reliability Standards**

The proposed Reliability Standards contain Violation Risk Factors (“VRFs”) and Violation Severity Levels (“VSLs”) for each of the requirements. The VRFs and VSLs provide guidance on the way that NERC will enforce the requirements of the proposed Reliability Standards. The VRFs and VSLs are substantively unchanged from currently effective versions of the Reliability Standards, reflecting only those revisions necessary to effectuate the proposed requirement retirements. As such, they continue to comport with NERC and FERC guidelines related to their assignment.

In addition, the proposed Reliability Standards also include measures that support the requirements by clearly identifying what is required and how the requirement will be enforced. The measures help ensure that the requirements will be enforced in a clear, consistent, and non-preferential manner and without prejudice to any party. The measures are substantively unchanged from currently enforceable versions of the Reliability Standards, reflecting only those revisions necessary to effectuate the proposed requirement retirements.

#### **VI. EFFECTIVE DATE**

The implementation plan is attached to this filing as **Exhibit B**. The proposed implementation plan provides that, for Reliability Standards that are proposed to be retired in their entirety (i.e. no new standard version is proposed), the Reliability Standard shall be retired

on the effective date of the applicable governmental authority's order approving retirement of the standard, or as otherwise provided for by the applicable governmental authority. Where approval by an applicable governmental authority is not required, the standard shall be retired on the date the standard is retired by the NERC Board of Trustees, or as otherwise provided for in that jurisdiction..For the proposed revised Reliability Standards, where approval by an applicable governmental authority is required, the standard shall become effective on the first day of the first calendar quarter that is three (3) months after the effective date of the applicable governmental authority's order approving the standard, or as otherwise provided for by the applicable governmental authority. Where approval by an applicable governmental authority is not required, the standard shall become effective on the first day of the first calendar quarter that is three (3) months after the date the standard is adopted by the NERC Board of Trustees, or as otherwise provided for in that jurisdiction.The currently effective versions of those Reliability Standards would be retired immediately prior to the effective date of the revised Reliability Standards. This implementation timeline reflects consideration that entities may need time to update their internal systems and documentation to reflect the new Reliability Standard version numbers.

Respectfully submitted,

/s/ Lauren A. Perotti

Lauren A. Perotti  
Senior Counsel  
North American Electric Reliability Corporation  
1325 G Street, N.W., Suite 600  
Washington, D.C. 20005  
(202) 400-3000  
(202) 644-8099 – facsimile  
lauren.perotti@nerc.net

*Counsel for the North American Electric  
Reliability Corporation*

June 20, 2019

**EXHIBITS A-D and D-G**

## EXHIBIT C

### Reliability Standards Criteria

The discussion below explains how proposed Reliability Standards FAC-008-4, INT-006-5, INT-009-3, and PRC-004-6 continue to meet or exceed the Reliability Standards criteria.

**1. Proposed Reliability Standards must be designed to achieve a specified reliability goal and must contain a technically sound means to achieve that goal.**

The proposed Reliability Standards improve upon the currently effective versions of the Reliability Standards by retiring Requirements that are redundant or provide little, if any, benefit to reliability. Except for corresponding changes that are necessary to the Violation Risk Factors (“VRFs”), Violation Severity Levels (“VSLs”), and measures, no other changes are proposed.<sup>1</sup> As such, each of the proposed Reliability Standards remains designed to achieve a specified reliability goal and continues to provide a technically sound means to achieve that goal, consistent with the Commission’s approval of the currently effective versions of the standards.

**2. Proposed Reliability Standards must be applicable only to users, owners and operators of the bulk power system, and must be clear and unambiguous as to what is required and who is required to comply.**

The proposed Reliability Standards are clear and unambiguous as to what is required and who is required to comply. Individual Requirements from the currently effective versions of the Reliability Standards are proposed for retirement. NERC does not propose any changes to the applicability of the standards.

---

<sup>1</sup> Proposed Reliability Standard INT-009-3 Requirement R1 contains an additional revision to remove a cross-reference to the INT-010 standard being proposed for retirement in this filing.

- 3. A proposed Reliability Standard must include clear and understandable consequences and a range of penalties (monetary and/or non-monetary) for a violation.**

The Violation Risk Factors (“VRFs”) and Violation Severity Levels (“VSLs”) for the proposed Reliability Standards continue to comport with NERC and FERC guidelines related to their assignment, as discussed further in **Exhibit D**. As noted therein, no changes are proposed to the VRFs and VSLs from the currently effective versions of the standards beyond those necessary to reflect the retirement of individual requirements.

- 4. A proposed Reliability Standard must identify clear and objective criterion or measure for compliance, so that it can be enforced in a consistent and non-preferential manner.**

The proposed Reliability Standards contain measures that support each requirement by clearly identifying what is required to demonstrate compliance. These measures help provide clarity regarding the manner in which the requirements will be enforced and help ensure that the Requirements will be enforced in a clear, consistent, and non-preferential manner and without prejudice to any party. No changes are proposed to the measures from the currently effective versions of the standards beyond those necessary to reflect the retirement of individual requirements.

- 5. Proposed Reliability Standards should achieve a reliability goal effectively and efficiently — but do not necessarily have to reflect “best practices” without regard to implementation cost or historical regional infrastructure design.**

The proposed Reliability Standards would achieve their reliability goals effectively and efficiently. The proposed Reliability Standards improve upon the currently effective Reliability Standards by retiring requirements that are redundant or not needed for reliability, thereby improving the efficiency of the standards.

- 6. Proposed Reliability Standards cannot be “lowest common denominator,” *i.e.*, cannot reflect a compromise that does not adequately protect Bulk-Power System reliability. Proposed Reliability Standards can consider costs to implement for smaller entities, but not at consequences of less than excellence in operating system reliability.**

The proposed Reliability Standards do not reflect a “lowest common denominator” approach. The requirement retirements reflected in the proposed Reliability Standards would improve the effectiveness and efficiency of the standards and would not result in adverse impacts to reliability.

- 7. Proposed Reliability Standards must be designed to apply throughout North America to the maximum extent achievable with a single Reliability Standard while not favoring one geographic area or regional model. It should take into account regional variations in the organization and corporate structures of transmission owners and operators, variations in generation fuel type and ownership patterns, and regional variations in market design if these affect the proposed Reliability Standard.**

The proposed Reliability Standards continue to apply throughout North America and do not favor one geographic area or regional model.

- 8. Proposed Reliability Standards should cause no undue negative effect on competition or restriction of the grid beyond any restriction necessary for reliability.**

The proposed Reliability Standards would have no undue negative impact on competition. The proposed Reliability Standards would continue to require the same performance by each of the applicable Functional Entities, minus the individual requirements proposed for retirement. The proposed Reliability Standards would not unreasonably restrict the available transmission capability or limit use of the Bulk-Power System in a preferential manner.

- 9. The implementation time for the proposed Reliability Standard is reasonable.**

The proposed implementation period for the proposed Reliability Standards is just and reasonable and allows entities sufficient time to update their internal documentation and other processes.

**10. The Reliability Standard was developed in an open and fair manner and in accordance with the Reliability Standard development process.**

The proposed Reliability Standards were developed in accordance with NERC's ANSI-accredited processes for developing and approving Reliability Standards. **Exhibit F** includes a summary of the development proceedings and details the processes followed to develop the proposed Reliability Standards. These processes included, among other things, comment and ballot periods. Additionally, all meetings of the drafting team were properly noticed and open to the public. The initial and final ballots achieved a quorum and exceeded the required ballot pool approval levels.

**11. NERC must explain any balancing of vital public interests in the development of proposed Reliability Standards.**

NERC has identified no competing public interests regarding the request for approval of the proposed Reliability Standards. No comments were received that indicated the proposed Reliability Standards conflict with other vital public interests.

**12. Proposed Reliability Standards must consider any other appropriate factors.**

No other negative factors relevant to whether the proposed Reliability Standards are just and reasonable were identified.