

October 20, 2015

#### VIA ELECTRONIC FILING

David Erickson 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. Erickson:

The North American Electric Reliability Corporation ("NERC") hereby submits Notice of Filing of the North American Electric Reliability Corporation of Proposed Interconnection Reliability Operations and Coordination Reliability Standard. 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

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

NERC requests the AESO consider Proposed Reliability Standard IRO-009-2 for adoption 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.

Respectfully submitted,

/s/ Holly A. Hawkins

Holly A. Hawkins Associate General 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 PROPOSED INTERCONNECTION RELIABILITY OPERATIONS AND COORDINATION RELIABILITY STANDARD

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October 20, 2015

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<sup>1</sup> Exhibits D – G also include support for Reliability Standard IRO-006-EAST-2. Notice of that standard was only included in the filings submitted to the provincial authorities located in the Eastern Interconnection.

## BEFORE THE ALBERTA ELECTRIC SYSTEM OPERATOR

NORTH AMERICAN ELECTRIC	)
RELIABILITY CORPORATION	)

# NOTICE OF FILING OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION OF PROPOSED INTERCONNECTION RELIABILITY OPERATIONS AND COORDINATION RELIABILITY STANDARD

The North American Electric Reliability Corporation ("NERC") hereby submits IRO-009-2 (*Reliability Coordinator Actions to Operate within IROLs*). The proposed Reliability Standard is just, reasonable, not unduly discriminatory or preferential, and in the public interest. NERC also provides notice of the retirement of the currently effective versions of this standard, Reliability Standard IRO-009-1. Along with approval of Reliability Standard IRO-009-2 and retirement of the currently effective versions of this standard, NERC provides notice of (i) the associated Implementation Plan (**Exhibit B**), and (ii) the Violation Risk Factors ("VRFs") and Violation Severity Levels ("VSLs") (**Exhibit E**). The NERC Board of Trustees ("Board") adopted proposed Reliability Standard IRO-009-2 on August 13, 2015.<sup>2</sup>

This filing presents the technical basis and purpose of the proposed Reliability Standard, a demonstration that the proposed Reliability Standard meets the Reliability Standards criteria (**Exhibit C**), and a summary of the development proceedings (**Exhibit F**).

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<sup>&</sup>lt;sup>2</sup> See Board Agenda, Board of Trustees Meeting – August 13, 2015, available at <a href="http://www.nerc.com/gov/bot/botquarterlyitems/Board">http://www.nerc.com/gov/bot/botquarterlyitems/Board</a> August 13 2015 Agenda Package.pdf.

#### I. EXECUTIVE SUMMARY

As outlined above, NERC is proposing a Interconnection Reliability Operations and Coordination ("IRO") Reliability Standard that continues the work initiated in two related NERC projects. First, the Project 2012-09 – Interconnection Reliability Operations five-year review team ("FYRT" or "IRO FYRT") performed a periodic review of existing IRO standards and made recommendations for revision and retirement of a number of those standards.<sup>3</sup> Second, the standard drafting team for Project 2014-03 – Revisions to TOP and IRO Standards further refined the IRO suite of standards by recommending retirement of five IRO standards, leaving only two recommendations from Project 2012-09 to be implemented.<sup>4</sup> The proposed standard that is the subject of this filing represents the standard that was recommended for revision in Project 2012-09 but that was not retired in Project 2014-03.

Proposed Reliability Standard IRO-009-2 is an improvement to the existing version of the standard because it combines two existing requirements, revises existing language to clearly delineate applicable entities and the specific actions required, and removes unnecessary language. The proposed Reliability Standard implements language revisions and format improvements for consistency with recent Board approved Reliability Standards.<sup>5</sup>

As described above, the proposed standard substantially improves the existing version, IRO-009-1, and will retire this standard upon approval.

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The standard drafting team for Project 2012-09 recommended retirement of IRO-004-2 and IRO-005-4 and revisions to IRO-001-3, IRO-003-2, IRO-006-EAST, IRO-008-1, IRO-009-1, and IRO-010-1a.

The standard drafting team for Project 2014-03 proposed revisions to IRO-001-3 and recommended retirement of IRO-003-2, IRO-004-2, IRO-005-4, IRO-008-1, and IRO-010-1a. After work in that project was completed, only two standards, IRO-006-EAST-1 and IRO-009-1, were left to be revised from the IRO FYRT recommendations.

The standard drafting team for Project 2015-06 found that Requirements R3 and R4 of IRO-009-1 should be revised for consistency with Requirement R14 of TOP-001-3.

#### II. NOTICES AND COMMUNICATIONS

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

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#### III. BACKGROUND

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#### A. NERC Reliability Standards Development Procedure

The proposed Reliability Standard was 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. NERC's proposed 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 certain 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 Bulk-Power System. NERC considers the comments of all stakeholders, and a vote of stakeholders and the NERC Board is required to approve a Reliability Standard before the Reliability Standard is submitted to the applicable governmental authorities.

The NERC Rules of Procedure, available at <a href="http://www.nerc.com/AboutNERC/Pages/Rules-of-Procedure.aspx">http://www.nerc.com/Comm/SC/Documents/Appendix</a> 3A Standards Processes Manual.pdf.

## B. History of Project 2015-06 -- Interconnection Reliability Operations and Coordination

As described below, proposed Reliability Standard IRO-009-2 was designed by the Project 2015-06 standard drafting team to address recommendations of the IRO FYRT for improvement of several IRO standards. For a summary of the development history in Project 2015-06 and the complete record of development, see **Exhibit F**.

#### 1. IRO-009-2

In Order No. 693, FERC directed NERC to develop modifications to existing IRO Reliability Standards (i) to ensure that a minimum set of capabilities are made available to the Reliability Coordinator to ensure that it has the capabilities needed to adequately perform its functions<sup>7</sup>, and (ii) to require a next-day analysis to be performed to identify actions that can be implemented and effective within 30 minutes after a contingency.<sup>8</sup>

On January 21, 2010, NERC submitted a filing of several new or revised IRO standards, and among these, NERC requested approval of IRO-009-1 to respond to the two FERC directives in Order No. 693 referenced above. First, IRO-009-1 required Reliability Coordinators to have plans to address exceedances of IROLs. Second, IRO-009-1 required Reliability Coordinators to have a plan to resolve IROL that are identified during the "day-ahead" study within 30 minutes. The standard was designed to apply only to Reliability Coordinators and to prevent instability, uncontrolled separation, or cascading outages that

Mandatory Reliability Standards for the Bulk-Power System, Order No. 693, 72 FR 16416 (Apr. 4, 2007), FERC Stats. & Regs. ¶ 31,242, order on reh'g, Order No. 693-A, 120 FERC ¶ 61,053 (2007) (the applicable portion of the directive in Paragraph 566 states that FERC "directs the ERO to develop a modification to EOP-001-0 through the Reliability Standards development process that: (1) includes the Reliability Coordinator as an applicable entity with responsibilities as described above..." Paragraph 547 clarifies this directive by stating that, "Given the importance NERC attributes to the reliability coordinator in connection with matters covered by EOP-001-0, FERC is persuaded that specific responsibilities for the reliability coordinator in the development and coordination of emergency plans must be included as part of this Reliability Standard.")

<sup>&</sup>lt;sup>8</sup> *Id.* at P 935 (the applicable directive requires NERC "to modify IRO-004-1 through the Reliability Standards development process to require the next-day analysis to identify control actions that can be implemented and effective within 30 minutes after a contingency.").

adversely impact the reliability of the interconnection by "ensuring prompt action to prevent or mitigate instances of exceeding [IROLs]."

The IRO FYRT recommended revisions to IRO-009-1 and presented a SAR to the SC on October 17, 2013 that included these recommendations. On March 11, 2015, the SC accepted the SAR as a precursor for development in Project 2015-06, and the standard drafting team for Project 2015-06 developed proposed Reliability Standard IRO-009-2. Proposed Reliability Standard IRO-009-2 improves IRO-009-1 because it combines two existing requirements into one requirement with two subparts to make the requirements more clear and concise, it identifies the applicable entity and the actions required by the standard, it removes unnecessary language, and it implements commonly used terms and phrases for consistency with other Board approved standards.

#### IV. JUSTIFICATION

As discussed in detail in **Exhibit C**, proposed Reliability Standard IRO-009-2 satisfies the Reliability Standards criteria and is just, reasonable, not unduly discriminatory or preferential, and in the public interest. The following subsections provide: (A) a description of the proposed standard, the reliability purposes of the standard, and applicable entities to which the standard applies; (B) justification for the proposed standard, detailing the proposed revisions; and (C) discussion of the enforceability of the proposed standard. As discussed below, the scope of revisions are consistent with the recommendations provided by the FYRT in Project 2012-09 to improve the quality, relevance, and clarity of the standard.

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See Project 2012-09 Development Page, available at http://www.nerc.com/pa/stand/pages/project201209iroreview.aspx.

See Standards Committee Agenda – March 11, 2015, available at <a href="http://www.nerc.com/comm/SC/Agenda%20Highlights%20and%20Minutes/Standard%20Committee%20Meeting%20Minutes%20March%2011,%202015%20-%20Approved.pdf">http://www.nerc.com/comm/SC/Agenda%20Highlights%20and%20Minutes/Standard%20Committee%20Meeting%20Minutes%20March%2011,%202015%20-%20Approved.pdf</a>.

# A. Proposed Reliability Standard IRO-009-2 – Reliability Coordinator Actions to Operate Within IROLs

The purpose of proposed Reliability Standard IRO-009-2 is "[t]o prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection by ensuring prompt action to prevent or mitigate instances of exceeding Interconnection Reliability Operating Limits (IROLs)." The standard applies only to Reliability Coordinators. As described below, proposed Reliability Standard IRO-009-2 improves the existing version of the standard by streamlining existing requirements to make existing requirements more concise, revising existing language to improve clarity and consistency with other Board approved standards, and removing redundant and unnecessary language. Along with proposed IRO-009-2, the IRO SDT also proposes to retire the existing Reliability Standard IRO-009-1 as described in the Implementation Plan for IRO-009-2 (See Exhibit B) to ensure a seamless transition to the newly revised standard.

#### 1. Requirement-by-Requirement Justification

#### i. IRO-009-1, Requirements R1 and R2

The IRO SDT combined Requirements R1 and R2 of IRO-009-1 to improve the clarity and to simplify the language, as both contained similar language. Requirements R1 and R2 of IRO-009-1, which now become Requirement R1 in proposed Reliability Standard IRO-009-2, have been revised as follows:

- R1. For each IROL (in its Reliability Coordinator Area) that the Reliability Coordinator identifies one or more days prior to the current day, the Reliability Coordinator shall have one or more Operating Processes, Procedures, or Plans that identify actions it the Reliability Coordinator shall direct others to take (up to and including load shedding): that can be implemented in time to prevent exceeding those IROLs. (Violation Risk Factor: Medium) (Time Horizon: Operations Planning or Same Day Operations)
  - 1.1 That can be implemented in time to prevent the identified IROL exceedance.
  - R2. For each IROL (in its Reliability Coordinator Area) that the Reliability Coordinator identifies one or more days prior to the current day,

the Reliability Coordinator shall have one or more Operating Processes, Procedures, or Plans that identify actions it shall take or actions it shall direct others to take (up to and including load shedding) tTo mitigate the magnitude and duration of exceeding an that IROL IROL exceedance such that the IROL exceedance is relieved within the IROL's Tv. (Violation Risk Factor: Medium) (Time Horizon: Operations Planning or Same Day Operations)

These modifications improve existing language and consolidate the two Requirements into one Requirement related to actions to prevent or mitigate IROL exceedances. The IRO SDT determined that these changes will not negatively affect reliability but will improve it because the combined Requirement is now clearer.

Along with the modifications reflected in the redline above, the IRO SDT improved the associated proposed Measure M1 of IRO-009-1 to take into account the combined Requirements R1 and R2.

#### ii. IRO-009-1, Requirement R3

The IRO SDT revised the language of existing Requirement R3 to improve its clarity and consistency with other Board approved standards. As an example, the IRO SDT cited recently revised Requirement R14 of Reliability Standard TOP-001-3 which uses the terms "IROL exceedance," "Real-time monitoring," and "Real-time Assessments" as they relate to an entity's Operating Plan. Requirements R3 of IRO-009-1, which now becomes Requirement R2 in proposed Reliability Standard IRO-009-2, has been revised as follows:

R23. When an assessment of actual or expected system conditions predicts that an IROL in its Reliability Coordinator Area will be exceeded, the Each Reliability Coordinator shall implement initiate one or more Operating Processes, Procedures, or Plans (not limited to the Operating Processes, Procedures, or Plans developed for Requirements R1) that are intended to prevent exceeding that an IROL exceedance, as identified in the Reliability Coordinator's Real-time monitoring or Real-time Assessment. (Violation Risk Factor: High) (Time Horizon: Real-time Operations)

The IRO SDT determined that these changes will not negatively affect reliability but will improve it because the combined Requirement is now clearer and consistent with other Board approved Reliability Standards.

Along with the modifications reflected in the redline above, the IRO SDT also created an associated Measure to take into account its effort to improve existing Requirement R3 of IRO-009-1. This Measure requires each Reliability Coordinator to have evidence that it complied with proposed Requirement R2 of IRO-009-2, including, but not limited to, "Operating Processes, Operating Procedures, or Operating Plans, dated operating logs, dated voice recordings, dated transcripts of voice recordings, or other evidence."

#### iii. IRO-009-1, Requirement R4

The IRO SDT made several improvements to existing language in Requirement R4 of Reliability Standard IRO-009-1 to improve clarity and consistency with similar Board approved Reliability Standards and to remove redundancy in that Requirement.

After reviewing the existing language in Requirement R4 of IRO-009-1, the IRO SDT determined that, by stating that the applicable entities must "act or direct others to act" to mitigate "the magnitude and duration" of an IROL exceedance, the language in the Requirement already implies that actions must be taken immediately. Requirement R4 of existing IRO-009-1 requires that actions be taken "without delay," but given that this timing is implied, "without delay" is not necessary. Accordingly, the IRO SDT removed the language "without delay" from the Requirement. Similar to improvements mentioned above, the IRO SDT also improved language in existing Requirement R4 to ensure consistency with other Board approved Reliability Standards, including Requirement R14 of Reliability Standard TOP-001-3.

Requirement R4 of IRO-009-1, which now becomes Requirement R3 in proposed Reliability Standard IRO-009-2, has been revised as follows:

R4R3. When actual system conditions show that there is an instance of exceeding an IROL in its Reliability Coordinator Area, the Each Reliability Coordinator shall, without delay, act or direct others to act so that to mitigate the magnitude and duration of the instance of exceeding that an IROL exceedance is mitigated within the IROL's T<sub>v</sub>, as identified in the Reliability Coordinator's Real-time monitoring or Real-time Assessment. (Violation Risk Factor: High) (Time Horizon: Real-time Operations)

The IRO SDT determined that these changes will not negatively affect reliability but will improve it because the Requirement is now clearer and consistent with other Board approved Reliability Standards.

Along with the modifications reflected in the redline above, the IRO SDT also improved the existing associated measure (Measure M4 in existing IRO-009-1, now Measure M3 in proposed Reliability Standard IRO-009-2) to take into account its effort to improve this Requirement. This Measure requires each Reliability Coordinator to have evidence that it complied with proposed Requirement R3 of IRO-009-2, including, but not limited to, "Operating Processes, Operating Procedures, or Operating Plans, dated operating logs, dated voice recordings, dated transcripts of voice recordings, or other evidence."

#### iv. IRO-009-1, Requirement R5

The IRO SDT revised the language of existing Requirement R5 of Reliability Standard IRO-009-1 to improve its clarity and consistency with other Board approved standards. In its justification for improving the standard for consistency with other Board approved standards, the IRO SDT cited recently revised Requirement R18 of Reliability Standard TOP-001-3, which requires Transmission Operators to operate to the "most limiting parameter in instances where there is a difference in SOLs." To mimic this language in the existing Requirement, the IRO SDT revised it to state that the Reliability Coordinator must operate to "the most limiting IROL and  $T_v$  in instances where there is difference in an IROL or its  $T_v$  between Reliability Coordinators that are responsible for that Facility (or group of Facilities)."

Requirements R5 of IRO-009-1, which now becomes Requirement R4 in proposed Reliability Standard IRO-009-2, has been revised as follows:

R45. If unanimity cannot be reached on the value for an IROL or its T<sub>v</sub>, eEach Reliability Coordinator that monitors that Facility (or group of Facilities) shall operate to, without delay, use the most limiting IROL and T<sub>v</sub> in instances where there is a difference in an IROL or its Tv between Reliability Coordinators that are responsible for that Facility (or group of Facilities) conservative of the values (the value with the least impact on reliability) under consideration. (Violation Risk Factor: High) (Time Horizon: Real-time Operations)

The IRO SDT determined that these changes will not negatively affect reliability but will improve it because the combined Requirement is now clearer and consistent with other Board approved Reliability Standards.

Along with the modifications reflected in the redline above, the IRO SDT also improved the associated measure (Measure M5 of IRO-009-1, now Measure 4 of proposed IRO-009-2) to take into account its effort to improve the related Requirement. Consistent with revisions to the Requirement, revisions to Measure M5 of existing Reliability Standard IRO-009-1 remove the existing language "without delay" and implements the language "to the most limiting IROL and  $T_v$  in instances where there is a difference in an IROL or its  $T_v$ " as mentioned above.

#### B. Enforceability of the Proposed Reliability Standard

As described in the relevant justifications above, the proposed Reliability Standard includes Measures that support each Requirement to help ensure that the Requirements will be enforced in a clear, consistent, non-preferential manner and without prejudice to any party. The proposed Reliability Standard also includes VRFs and VSLs for each Requirement, which are part of several elements used to determine an appropriate sanction when the associated Requirement is violated. Specifically, the VSLs provide guidance on the way that NERC will

enforce the Requirements of the proposed Reliability Standard, and the VRFs assess the impact to reliability of violating a specific Requirement.

The four Requirements in proposed Reliability Standard IRO-009-2 consolidate and improve the existing five Requirements in existing Reliability Standard IRO-009-1. Because Requirements R1 and R2 of the existing IRO-009-1 both had a VRF of medium, the IRO SDT also assigned Requirement R1 of proposed IRO-009-2, which combines Requirements R1 and R2 of the existing standard, a VRF of medium. Requirement R2, Requirement R3, and Requirement R4 of proposed IRO-009-2 map to Requirements R3, R4, and R5 of existing IRO-009-1, respectively; therefore, the IRO SDT did not revise the VRFs for any of those requirements. The IRO SDT did, however, revise the VSLs for Requirements R2 through R4 in proposed IRO-009-2 to conform to the revisions to the language therein.

For reference purposes, **Exhibit E** includes the detailed analysis of the assignment of VRFs and the VSLs for the proposed Reliability Standard. As reflected therein, the VRFs and VSLs for the proposed Reliability Standard comport with NERC and FERC guidelines.

#### V. EFFECTIVE DATE

Reliability Standard IRO-009-2 will be effective as provided in the Implementation Plan.

#### Respectfully submitted,

#### /s/ Andrew C. Wills

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October 20, 2015

## EXHIBITS A – B and D -- G

(Available on the NERC Website at

 $http://www.nerc.com/FilingsOrders/ca/Canadian\%20Filings\%20 and \%20Orders\%20 DL/E\ xhibits\%20 for \%20 IRO-009-2\%20 Reliability\%20 Standard.pdf)$ 

#### Exhibit C

### Reliability Standards Criteria

#### **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 Standard is designed to ensure that Reliability Coordinators take certain actions to prevent or manage reliability threats from potential or actual System Operating Limit (SOL) and Interconnection Reliability Operating Limit (IROL) exceedances to maintain reliability of the Bulk Electric System. Specifically, proposed Reliability Standard IRO-009-2, which was designed as a nationwide standard, is designed to prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection by ensuring prompt action to prevent or mitigate instances of exceeding IROLs.

The proposed Reliability Standard continues to achieve the specific reliability goals mentioned above. The revisions made in the proposed standard improves upon the existing standard by converting the standard into the Results Based Standards, streamlining and clarifying language, and conforming the existing standard to comply with Paragraph 81 principles.

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.

As described below, proposed Reliability Standard IRO-009-2 is clear and ambiguous as to who is required to comply and what is required.

Each of the four revised requirements in Reliability Standard IRO-009-2 clearly articulate the actions that such entities must take to comply, as the standard reflects separate performance elements that are easily recognizable using means defined in the associated measures. IRO-009-2 applies only to Reliability Coordinators.

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

Proposed Reliability Standard IRO-009-2 includes clear and understandable consequences

and an appropriate range of penalties. The Violation Risk Factors ("VRFs") and Violation Severity Levels ("VSLs") for the proposed revised Reliability Standard IRO-009-2 comports with NERC and FERC guidelines related to their assignment. The assignment of the severity level for each VSL is consistent with the corresponding Requirement and will ensure uniformity and consistency in the determination of penalties. The VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. The assignment of factors for the VRFs is consistent with the NERC Criteria for VRFs and will ensure that penalties assessed for violation of requirements is proportionate to the threat to reliability posed by noncompliance.

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.

Proposed Reliability Standard IRO-009-2 contains four Measures, and supports the related requirements by clearly identifying what is required and how the requirement will be enforced. These measures help ensure that the requirements will be enforced in a clear, consistent, and non-preferential manner and without prejudice to any party.

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.

Proposed Reliability Standard IRO-009-2 improves the quality, relevance, and clarity of the standard so that the reliability goals are achieved effectively and efficiently.

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.

Proposed Reliability Standard IRO-009-2 does not reflect a "lowest common denominator" approach; rather, the proposed Reliability Standard represents improvements to

the existing version of this standard by introducing granularity and simplicity to the language of each requirement. Because the standard is now clearer than the existing version, the revised standard is more stringent than the currently effective IRO-009-2.

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 requirements in proposed Reliability Standard IRO-009-2 are designed to work in tandem with the existing IRO standards to prevent issues that adversely impact reliability by ensuring prompt action to prevent or mitigate instances of exceeding IROLs. Reliability Standard IRO-009-2 applies throughout North America to the maximum extent and does not favor one geographic area or regional model. As such, IRO-009-2 has been designed to properly account for variations across all organizations and corporate structures.

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

Proposed Reliability Standard IRO-009-2 will not cause undue negative effect on competition or result in any unnecessary restrictions.

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

The proposed effective date for Reliability Standard IRO-009-2 is just and reasonable. NERC proposes an effective date for IRO-009-2 as provided for in the Implementation Plan. The proposed implementation period is designed to allow sufficient time for the applicable entities to make any changes in their internal process necessary to implement the proposed revisions. The proposed Implementation Plan for IRO-009-2 is attached as **Exhibit B**.

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

The proposed Reliability Standard was developed in accordance with NERC's ANSI-accredited processes for developing and approving Reliability Standards. Exhibit G includes a summary of the Reliability Standard development proceedings, and details the processes followed to develop the Reliability Standard. These processes included, among other things, multiple comment period, pre-ballot review periods, and balloting periods. Additionally, all meetings of the standard drafting team were properly noticed and open to the public.

# 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 proposed Reliability Standard IRO-009-2. No comments were received that indicated the proposed Reliability Standard conflicts with other vital public interests.

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

No other negative factors relevant to whether proposed Reliability Standard I IRO-009-2 is just and reasonable were identified.

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<sup>&</sup>lt;sup>1</sup> See NERC Rules of Procedure, Section 300 (Reliability Standards Development) and Appendix 3A (Standard Processes Manual).