



March 4, 2011

**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 this Notice of Filing of the following proposed Interconnection Reliability Operations and Coordination (“IRO”) standards, set forth as **Exhibit A** to this petition that were approved by the NERC Board of Trustees on November 4, 2010:

- IRO-006-5 — Transmission Loading Relief; and
- IRO-006-EAST-1 — TLR Procedure for the Eastern Interconnection.

NERC also provides notice of a new definition for inclusion in the NERC Glossary of Terms that is included in the new standard:

- Market Flow — the total amount of power flowing across a specified Facility or set of Facilities due to a market dispatch of generation internal to the market to serve Load internal to the market.

Additionally, NERC provides notice of implementation plans that call for the retirement of the following items and a new effective date, pending the approval of IRO-006-5 and IRO-006-EAST-1:

§ Retirement of the term “Reallocation”;

- § Retirement of IRO-006-4.1 and IRO-006-4.1 Attachment 1;
- § Retirement of the regional differences within IRO-006-4.1; and
- § An effective date of the first day of the first calendar quarter after the date the standards are approved.

This filing discusses the new standards and one Glossary term and the basis for the retirement of the other listed items.

This filing consists of the following:

- This transmittal letter;
- A table of contents;
- A narrative description providing justification for the proposed Reliability Standards and Glossary term;
- Reliability Standards and Glossary term (**Exhibit A**);
- Reliability Standard Proposed for Retirement (**Exhibit B**);
- Implementation Plan (**Exhibit C**);
- Standard Drafting Team Roster (**Exhibit D**); and
- Development Record of the proposed Reliability Standards and Implementation Plans (**Exhibit E**).

NERC understands the AESO may adopt IRO-006-5 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 approved in Alberta (called an “Alberta reliability standard”) generally varies from the similar and related NERC Reliability Standard.

NERC requests the AESO consider the attached IRO-006-5 for adoption in Alberta as an “Alberta reliability standard(s)”, subject to the required procedures and legislation of Alberta.

Please contact me if you have any questions regarding this filing.

Respectfully submitted,

/s/ Holly A. Hawkins  
Holly A. Hawkins

*Assistant General Counsel for  
Standards and Critical  
Infrastructure Protection for North  
American Electric Reliability  
Corporation*

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**BEFORE THE  
ALBERTA ELECTRIC SYSTEM OPERATOR**

**NORTH AMERICAN ELECTRIC )  
RELIABILITY CORPORATION )**

**NOTICE OF FILING OF THE NORTH AMERICAN ELECTRIC RELIABILITY  
CORPORATION OF PROPOSED NEW INTERCONNECTION RELIABILITY  
OPERATIONS AND COORDINATION RELIABILITY STANDARDS,  
GLOSSARY TERM  
AND IMPLEMENTATION PLAN**

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March 4, 2011

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**Exhibit A** — Reliability Standards Proposed

**Exhibit B** — Reliability Standard Proposed for Retirement

**Exhibit C** — Implementation Plan Proposed

**Exhibit D** — Standard Drafting Team Roster

**Exhibit E** — Record of Development of Proposed Reliability Standards and Implementation Plans

## **I. INTRODUCTION**

The North American Electric Reliability Corporation (“NERC”) hereby provides notice of the following new Reliability Standards:

- IRO-006-5 — Transmission Loading Relief; and
- IRO-006-EAST- 1 — TLR Procedure for the Eastern Interconnection.

NERC also provides notice of a new definition for inclusion in the NERC Glossary of Terms that is in used in the new standard:

- Market Flow- the total amount of power flowing across a specified Facility or set of Facilities due to a market dispatch of generation internal to the market to serve Load internal to the market.

Additionally, NERC provides notice of an implementation plan that calls for the retirement of the following items and a new effective date, pending the approval of IRO-006-5 and IRO-006-EAST-1:

- § Retirement of the term “Reallocation”
- § Retirement of IRO-006-4.1 and IRO-006-4.1 Attachment 1
- § Retirement of the regional differences within IRO-006-4.1
- § An effective date of the first day of the first calendar quarter after the date the standards are approved.

The NERC Board of Trustees approved the proposed new Reliability Standards, Glossary Term, and Implementation Plan on November 4, 2010.

NERC also provides notice of the proposed Violation Risk Factors (“VRFs”) and Violation Severity Levels (“VSLs”) associated with the requirements in this filing.

**Exhibit A** to this filing sets forth the proposed Reliability Standards and definitions. **Exhibit B** includes the Reliability Standard proposed for retirement. **Exhibit C** includes the

Implementation Plan. **Exhibit D** presents the roster for the drafting team that developed the proposed Reliability Standards. **Exhibit E** contains the complete development record of the proposed Reliability Standards and Implementation Plans. NERC filed these proposed Reliability Standards, definition, and implementation plan with the Federal Energy Regulatory Commission (“FERC”), as well as with the other applicable governmental authorities in Canada.

## **II. NOTICES AND COMMUNICATIONS**

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

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## **III. BACKGROUND**

### **a. Basis of Proposed Reliability Standard**

The modified standards in this filing serve several important reliability and policy goals:

- They clearly identify the coordination obligation between entities when Interconnection-wide procedures happen to impact transactions that transfer power from one Interconnection to another (IRO-006-5 Requirement R1).

- They move all key reliability elements of the previous standard that were intended to apply solely to Eastern Interconnection TLR into a separate Interconnection-wide Reliability Standard (IRO-006-EAST-1).
- They move all key reliability elements of the Eastern Interconnection TLR procedure that were previously in an Appendix into that same Interconnection-wide Reliability Standard (IRO-006-EAST-1).
- They eliminate the Regional Differences associated with the enhanced congestion management processes used by PJM, MISO, and SPP, instead incorporating the concept of “Market Flow” directly into the Reliability Standard (IRO-006-EAST-1). This ensures that the reliability aspects of those processes are explicitly identified and enforceable.
- They eliminate the potential for any conflict between the Continent-wide standard and any associated regional processes by removing the requirement that Reliability Coordinators use the regional processes, instead deferring to other Interconnection-wide Reliability Standards to specify the reliability details of those processes.

#### **b. Reliability Standards Development Procedure**

NERC develops Reliability Standards in accordance with Section 300 (Reliability Standards Development) of its Rules of Procedure and the NERC *Reliability Standards Development Procedure*, which is incorporated into the Rules of Procedure as Appendix 3A. NERC’s rules provide for reasonable notice and opportunity for public comment, due process, openness, and a balance of interests in developing 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 of Trustees is required to approve a Reliability Standard for submission to the applicable governmental authorities.

The proposed Reliability Standards set out in **Exhibit A** have been developed and approved by industry stakeholders using NERC's *Reliability Standards Development Procedure*.<sup>1</sup> A narrative of this process appears in section VI of this filing. These proposed Reliability Standards were approved by the NERC Board of Trustees on November 4, 2010.

### **c. Progress in Improving Proposed Reliability Standards**

NERC continues to develop new and revised Reliability Standards that address the issues NERC identified in its initial filing of proposed Reliability Standards on April 4, 2006, the concerns noted in the FERC Staff Report issued on May 11, 2006, and the directives FERC has made in several subsequent orders pertaining to Reliability Standards.<sup>2</sup>

NERC has filed with the applicable governmental authorities in the U.S. and Canada petitions to approve numerous Reliability Standards that were proposed as new, modified, or retired Reliability Standards, as well as several interpretations.

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<sup>1</sup> NERC's *Reliability Standards Development Procedure* is available on NERC's website at [http://www.nerc.com/fileUploads/File/Standards/RSDP\\_V6\\_1\\_12Mar07.pdf](http://www.nerc.com/fileUploads/File/Standards/RSDP_V6_1_12Mar07.pdf). Note that FERC approved the new *Reliability Standards Processes Manual* on September 3, 2010 (FERC Docket No. RR10-12-000), which replaces the *Reliability Standards Development Procedure Version 7* in its entirety. The *Standards Processes Manual* was not used to develop the standard proposed in this filing because it was not yet FERC approved.

<sup>2</sup> *Rules Concerning Certification of the Electric Reliability Organization: Procedures for the Establishment, Approval and Enforcement of Electric Reliability Standards*, Order No. 672, 71 FR 8662 (February 17, 2006), FERC Stats. & Regs. ¶ 31,204 (2006), *order on reh'g*, Order No. 672-A, 71 FR 19814 (April 18, 2006), FERC Stats. & Regs. ¶ 31,212 (2006). (*Order 672*).  
*Mandatory Reliability Standards for the Bulk-Power System*, 118 FERC ¶ 61,218, FERC Stats. & Regs. ¶ 31,242 (2007) ("Order No. 693"), *order on reh'g*, *Mandatory Reliability Standards for the Bulk-Power System*, 120 FERC ¶ 61,053 ("Order No. 693-A") (2007).

## **IV. JUSTIFICATION OF PROPOSED RELIABILITY STANDARDS**

### **a. Section Overview**

The discussion in this section is intended to demonstrate that the proposed Reliability Standards are just, reasonable, not unduly discriminatory or preferential and in the public interest.

The standard drafting team roster is provided in **Exhibit D**. The complete development record for the proposed Reliability Standards is available in **Exhibit E**. This extensive development record includes successive drafts of the Reliability Standards, the Implementation Plan, the ballot pool, and the final ballot results by ballot pool members, and stakeholder comments received during the development of these Reliability Standards, as well as a discussion regarding how those comments were considered in developing the Reliability Standards.

The discussion of each of the two proposed Reliability Standards presented sequentially below is followed by discussion of the standard that is recommended for retirement when the new Reliability Standards become effective. If a requirement recommended for retirement was addressed in FERC Order No. 693, the directive has been identified, and the work done to meet the directive is described.

### **DISCUSSION OF IRO-006-5**

NERC proposes the addition of a new standard IRO-006-5 to the current suite of Reliability Standards. IRO-006-5 is presented in **Exhibit A** of this filing.

**a. Demonstration that the proposed Reliability Standard is just, reasonable, not unduly discriminatory or preferential and in the public interest**

***1. Proposed Reliability Standard is designed to achieve a specified reliability goal***

IRO-006-5 ensures that actions related to Interconnection-wide congestion management procedures are coordinated across Interconnections when such coordination is needed. In other words, if a congestion management action in one Interconnection requires action from a party in another interconnection, the responding party must either comply with the request or provide the requestor with a reliability reason why it cannot comply. This ensures that the requesting entity will have an understanding of what actions are (or are not) being taken with regard to its request, even if those actions are taking place outside what would be considered their “normal” scope of authority.

***2. Proposed Reliability Standard contains a technically sound method to achieve the goal***

This reliability standard addresses a problem related to coordinated operations across Interconnections. When implementing interconnection-wide congestion management within a single Interconnection, all parties involved are operating under the same set of rules and protocols. However, when energy is scheduled over a DC tie between Interconnections that are operating asynchronously to each other, and that schedule is to be curtailed as part of an Interconnection-wide congestion management effort, one party is being asked to honor the rules that are applicable within another Interconnection. This has the potential to cause confusion, which may lead to denial of the curtailment (which would continue to negatively affect the associated reliability problem) or the creation of scheduling error at the DC Tie (leaving one or both Interconnections operating in an unbalanced state). The industry currently uses interchange scheduling tools to minimize this potential. This requirement makes the necessary coordination a mandatory part of the process. IRO-006-5 achieves this goal by explicitly requiring either a)

compliance with the request for curtailment, or b) communication to the requestor that it cannot comply with the request for a specific reliability reason.

**3. *Proposed Reliability Standard is applicable to users, owners, and operators of the bulk power system, and not others***

Reliability Standard IRO-006-5 applies to Reliability Coordinators and Balancing Authorities, which are entities specified in the NERC Functional Model as users, owners, and operators of the bulk power system.

**4. *Proposed Reliability Standard is clear and unambiguous as to what is required and who is required to comply***

The single requirement in IRO-006-5 is clear in identifying the required performance (what) and the responsible entity (who). The performance required of users, owners, and operators of the bulk power system is specified in Requirement R1 of the proposed standard:

- R1. Each Reliability Coordinator and Balancing Authority that receives a request pursuant to an Interconnection-wide transmission loading relief procedure (such as Eastern Interconnection TLR, WECC Unscheduled Flow Mitigation, or congestion management procedures from the ERCOT Protocols) from any Reliability Coordinator, Balancing Authority, or Transmission Operator in another Interconnection to curtail an Interchange Transaction that crosses an Interconnection boundary shall comply with the request, unless it provides a reliability reason to the requestor why it cannot comply with the request.

**5. *Proposed Reliability Standard includes clear and understandable consequences and a range of penalties (monetary and/or non-monetary) for a violation***

NERC has assigned a VRF and a set of VSLs to the requirement. These elements support the determination of an initial value range for the Base Penalty Amount regarding violations of requirements in Reliability Standards, as defined in the ERO Sanction Guidelines.<sup>3</sup> The table below shows the VRF and VSLs resulting in the indicated range of penalties for violations of the one requirement in the proposed IRO-006-5 standard.

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<sup>3</sup> See [http://www.nerc.com/files/Appendix4B\\_Sanctions\\_Guidelines\\_Effective\\_20080115.pdf](http://www.nerc.com/files/Appendix4B_Sanctions_Guidelines_Effective_20080115.pdf)

R#	VRF	VSL Lower	VSL Moderate	VSL High	VSL Severe
R1	High				The responsible entity received a request to curtail an Interchange Transaction crossing an Interconnection boundary pursuant to an Interconnection-wide transmission loading relief procedure from a Reliability Coordinator, Balancing Authority, or Transmission Operator, but the entity neither complied with the request, nor provided a reliability reason why it could not comply with the request.

**6. Proposed Reliability Standard identifies clear and objective criterion or measure for compliance, so that it can be enforced in a consistent and non-preferential manner**

The proposed Reliability Standard identifies clear and objective criteria in the language of the requirement so that that the standard can be enforced in a consistent and non-preferential manner. The language in the requirement is unambiguous with respect to the applicable entity expectations. The single requirement of IRO-006-5 has a single associated measure of compliance that will assist those enforcing the standard in enforcing it in a consistent and non-preferential manner. The proposed measure is as follows:

- M1. Each Reliability Coordinator and Balancing Authority shall provide evidence (such as dated logs, voice recordings, Tag histories, and studies, in electronic or hard copy format) that, when a request to curtail an Interchange Transaction crossing an Interconnection boundary pursuant to an Interconnection-wide transmission loading relief procedure was made from another Reliability Coordinator, Balancing Authority, or Transmission Operator in that other Interconnection, it complied with the request or provided a reliability reason why it could not comply with the request (R1).

**7. Proposed Reliability Standard achieves a reliability goal effectively and efficiently, but do not necessarily reflect “best practices” without regard to implementation cost**

The standard has been developed with consideration of implementation cost. Current practices have not been changed; accordingly, implementation costs are expected to be low while achieving the reliability goals expected of the standard effectively and efficiently.

**8. *Proposed Reliability Standard is not “lowest common denominator,” i.e., does not reflect a compromise that does not adequately protect bulk power system reliability***

The standard does not aim at “lowest common denominator.” The proposed IRO-006-5 continues an obligation established in previous versions of the standard (most recently, in IRO-006-4.1a Requirements R3 and R4). As such, no compromise has been made against the previous requirements. It should be noted, however, that some of the requirements previously included in the currently effective IRO-006-4.1a standard are now being proposed for inclusion in the new IRO-006-EAST-1 standard, as their applicability is more appropriate at the Interconnection level. Additionally, the proposed standard eliminates IRO-006-4.1a Requirement R5, as it simply required entities to adhere to mandatory standards regarding applicable Interchange scheduling to which they are already required to adhere.

**9. *Proposed Reliability Standard considers costs to implement for smaller entities but not at consequence of less than excellence in operating system reliability***

The proposed Reliability Standard does not reflect any differentiation in requirements based on size. All applicable entities are Reliability Coordinators or Balancing Authorities, both of which are already required to have the communication equipment necessary to implement this requirement. Given these already established minimum levels of capability, the proposed standard will have little or no impact on cost, and therefore will not achieve less than excellence in operating system reliability based on cost considerations for smaller entities.

**10. *Proposed Reliability Standard is designed to apply throughout North America to the maximum extent achievable with a single Reliability Standard while not favoring one area or approach***

The requirement in this standard applies throughout North America, with no exceptions. It is intended to work in tandem with three other standards – the Eastern Interconnection standard IRO-006-EAST-1 (included in this filing), the Western Interconnection standard IRO-

006-WECC-1 (currently filed), and the Texas Interconnection standard (currently in development within TRE, and tentatively titled IRO-006-TRE-1).

***11. Proposed Reliability Standard causes no undue negative effect on competition or restriction of the grid***

While the standard may intentionally restrict the grid and may at times have negative impacts on commercial operations, it does so to ensure the overall reliability of the Bulk Power System. Accordingly, there is no undue negative effect on competition or restriction of the grid.

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

The proposed Implementation Plan (*see Exhibit C*) does not allow a lengthy time period for entities to become fully compliant. NERC believes the standard makes no changes to current practice, and therefore can be implemented in the United States within one calendar quarter of receiving approval.

***13. The Reliability Standard development process was open and fair***

NERC develops Reliability Standards in accordance with Section 300 (Reliability Standards Development) of its Rules of Procedure and the NERC *Reliability Standards Development Procedure*,<sup>4</sup> which was incorporated into the Rules of Procedure as Appendix 3A. NERC's rules provide for reasonable notice and opportunity for public comment, due process, openness, and a balance of interests in developing 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 of Trustees is required to approve a Reliability Standard for submission to

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<sup>4</sup> *Reliability Standards Development Procedure* is available on NERC's website at [http://www.nerc.com/fileUploads/File/Standards/RSDP\\_V6\\_1\\_12Mar07.pdf](http://www.nerc.com/fileUploads/File/Standards/RSDP_V6_1_12Mar07.pdf). Note that FERC approved the new *Reliability Standards Processes Manual* on September 3, 2010 (FERC Docket No. RR10-12-000), which replaces the *Reliability Standards Development Procedure Version 7* in its entirety. The *Standards Processes Manual* was not used to develop the standard proposed in this filing because it was not yet FERC approved.

applicable governmental authorities. The drafting team developed this standard by following the *Reliability Standards Development Procedure*, without exception.

***14. Proposed Reliability Standard balances with other vital public interests***

The standard does not conflict with any identified vital public interests.

***15. Proposed Reliability Standards considers any other relevant factors***

No other factors were identified in the development of these proposed Reliability Standards.

**DISCUSSION OF IRO-006-EAST-1**

NERC proposes the addition of a new Reliability Standard IRO-006-EAST-1 to the current suite of Reliability Standards. IRO-006-EAST-1 is presented in **Exhibit A** of this filing.

**a. Demonstration that the proposed reliability standard is just, reasonable, not unduly discriminatory or preferential and in the public interest**

***1. Proposed Reliability Standard is designed to achieve a specified reliability goal***

IRO-006-EAST-1 is designed to provide an Interconnection-wide transmission loading relief procedure (TLR) for the Eastern Interconnection that can be used to prevent and/or mitigate potential or actual System Operating Limit (SOL) and Interconnection Reliability Operating Limit (IROL) exceedances to maintain reliability of the Bulk Electric System (BES).

***2. Proposed Reliability Standard contains a technically sound method to achieve the goal***

This standard provides clear guidance on the actions a Reliability Coordinator must undertake when implementing Interconnection-wide congestion management in the Eastern Interconnection. While system operators can control how much electricity is generated and with which generator it is produced, electricity will flow based on consumption at a given moment, and the electrical characteristics of the system and topology of the system at that moment. To some extent, and in certain areas, this control is augmented by the ability to also direct controllable demand side resources to consume, or not consume load through various programs.



Accordingly, various parts of the country have developed methods for addressing the transmission congestion that can develop due to the flow of electricity. These methods all deal with changing generation dispatch, topology, or demand to ensure that power flows approaching or exceeding reliability limits can be appropriately managed. In some cases, such actions can be taken locally (within the Balancing Authority, region, or sub-region) to actively manage the constraint. In others, entities outside the local area but still within the same Interconnection are causing or contributing to these energy flows. In these cases, Reliability Coordinators invoke Interconnection-wide congestion management procedures to manage the congestion.

IRO-006-EAST-1 lists the specific reliability actions to initiate and respond to a request for Interconnection-wide congestion management. The first requirement was developed in recognition of the August 14 Blackout Report, which noted that TLR should not be considered as a timely way to mitigate an actual IROL exceedance.<sup>5</sup> The second requirement describes the need to identify actions and urgency related to the invocation of the procedure. The third requirement addresses the communication of those actions to other Reliability Coordinators. The fourth requirement mandates that Reliability Coordinators receiving requests to take actions under the authority of this standard must take such actions or take alternate actions. Together, these requirements ensure that the Eastern Interconnection procedures for Interconnection-wide congestion management are implemented at appropriate times, that the resultant actions desired are communicated, and that those actions are undertaken in a timely manner when necessary. The actions described in IRO-006-EAST-1 are consistent with the processes currently used in the Eastern Interconnection, and properly achieve the stated goal of the standard.

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<sup>5</sup> See Final Report on the August 14, 2003 Blackout in the United States and Canada: Causes and Recommendations (<http://www.nerc.com/filez/blackout.html>)

**3. Proposed Reliability Standard is applicable to users, owners, and operators of the bulk power system, and not others**

Reliability Standard IRO-006-EAST-1 applies to Reliability Coordinators in the Eastern Interconnection and no others. The Reliability Coordinator is one of the entities specified in the NERC Functional Model, and the proposed Reliability Standard is therefore only applicable to users, owners, and operators of the bulk power system.

**4. Proposed Reliability Standard is clear and unambiguous as to what is required and who is required to comply**

Each of the requirements is clear in identifying the required performance (what) and the responsible entity (who) required to comply with the standard. Requirements R1 through R4 of the proposed standard clearly identify the applicable entities and what is expected.

- R1. When acting or instructing others to act to mitigate the magnitude and duration of the instance of exceeding an IROL within that IROL's  $T_V$ , each Reliability Coordinator shall initiate, prior to or concurrently with the initiation of the Eastern Interconnection TLR procedure (or continuing management of this procedure if already initiated), one or more of the following actions:
- Inter-area redispatch of generation
  - Intra-area redispatch of generation
  - Reconfiguration of the transmission system
  - Voluntary load reductions (e.g., Demand-side Management)
  - Controlled load reductions (e.g., load shedding)
- R2. To ensure operating entities are provided with information needed to maintain an awareness of changes to the Transmission System, when initiating the Eastern Interconnection TLR procedure to prevent or mitigate an SOL or IROL exceedance, and at least every clock hour (with the exception of TLR-1, where an hourly update is not required) after initiation up to and including the hour when the TLR level has been identified as TLR Level 0, the Reliability Coordinator shall identify:
- 2.1. A list of congestion management actions to be implemented, and
  - 2.2. One of the following TLR levels: TLR-1, TLR-2, TLR-3A, TLR-3B, TLR-4, TLR-5A, TLR-5B, TLR-6, TLR-0 1
- R3. Upon the identification of the TLR level and a list of congestion management actions to be implemented, the Reliability Coordinator initiating this TLR procedure shall:
- 3.1. Notify all Reliability Coordinators in the Eastern Interconnection of the identified TLR level

- 3.2. Communicate the list of congestion management actions to be implemented to 1) all Reliability Coordinators in the Eastern Interconnection, and 2) those Reliability Coordinators in other Interconnections responsible for curtailing Interchange Transactions crossing Interconnection boundaries identified in the list of congestion management actions.
  - 3.3. Request that the congestion management actions identified in Requirement R2, Part 2.1 be implemented by:
    - 1.) Each Reliability Coordinator associated with a Sink Balancing Authority for which Interchange Transactions are to be curtailed,
    - 2.) Each Reliability Coordinator associated with a Balancing Authority in the Eastern Interconnection for which Network Integration Transmission Service or Native Load is to be curtailed, and
    - 3.) Each Reliability Coordinator associated with a Balancing Authority in the Eastern Interconnection for which its Market Flow is to be curtailed.
- R4. Each Reliability Coordinator that receives a request as described in Requirement R3, Part 3.3. shall, within 15 minutes of receiving the request, implement the congestion management actions requested by the issuing Reliability Coordinator as follows:
- Instruct its Balancing Authorities to implement the Interchange Transaction schedule change requests.
  - Instruct its Balancing Authorities to implement the Network Integration Transmission Service and Native Load schedule changes for which the Balancing Authorities are responsible.
  - Instruct its Balancing Authorities to implement the Market Flow schedule changes for which the Balancing Authorities are responsible.
  - If an assessment shows that one or more of the congestion management actions communicated in Requirement R3, Part 3.3 will result in a reliability concern or will be ineffective, the Reliability Coordinator may replace those specific actions with alternate congestion management actions, provided that:
    - § The alternate congestion management actions have been agreed to by the initiating Reliability Coordinator, and
    - § The assessment shows that the alternate congestion management actions will not adversely affect reliability.

***5. Proposed Reliability Standard includes clear and understandable consequences and a range of penalties (monetary and/or non-monetary) for a violation***

Each requirement, in its entirety, is assigned a single VRF and a single set of VSLs.

These elements support the determination of an initial value range for the Base Penalty Amount regarding violations of requirements in Reliability Standards, as defined in the ERO Sanction

Guidelines. The table below shows the VRFs and VSLs, resulting in the indicated range of penalties for violations.

R#	VRF	VSL Lower	VSL Moderate	VSL High	VSL Severe
R1	High				When acting or instructing others to act to mitigate the magnitude and duration of the instance of exceeding an IROL within that IROL's Tv, the Reliability Coordinator did not initiate one or more of the actions listed under R1 prior to or in conjunction with the initiation of the Eastern Interconnection TLR procedure (or continuing management of this procedure if already initiated).
R2	Medium	The Reliability Coordinator initiating the Eastern Interconnection TLR procedure missed identifying the TLR Level and/or a list of congestion management actions to take as specified by the requirement for	The Reliability Coordinator initiating the Eastern Interconnection TLR procedure missed identifying the TLR Level and/or a list of congestion management actions to take as specified by the requirement for two clock hours	The Reliability Coordinator initiating the Eastern Interconnection TLR procedure missed identifying the TLR Level and/or a list of congestion management actions to take as specified by the requirement for three clock hours	The Reliability Coordinator initiating the Eastern Interconnection TLR procedure missed identifying the TLR Level and/or a list of congestion management actions to take as specified by the requirement for three clock hours during the period from initiation up to the hour when the TLR level was

		one clock hour during the period from initiation up to the hour when the TLR level was identified as TLR Level 0.	during the period from initiation up to the hour when the TLR level was identified as TLR Level 0.	during the period from initiation up to the hour when the TLR level was identified as TLR Level 0.	identified as TLR Level 0.
R3	Medium	The initiating Reliability Coordinator did not notify one or more Reliability Coordinators in the Eastern Interconnection of the TLR Level (3.1).		The initiating Reliability Coordinator did not communicate the list of congestion management actions to one or more of the Reliability Coordinators listed in Requirement R3, Part 3.2. OR The initiating Reliability Coordinator requested some, but not all, of the Reliability Coordinators identified in Requirement R3, Part 3.3 to implement the identified congestion management actions.	The initiating Reliability Coordinator requested none of the Reliability Coordinators identified in Requirement R3, Part 3.3 to implement the identified congestion management actions.
R4	High				The responding Reliability Coordinator did not, within 15 minutes of receiving a request,

					<p>either 1.) implement all the requested congestion management actions, or 2.) implement none or some of the requested congestion management actions and replace the remainder with alternate congestion management actions, provided that: assessment showed that the actions replaced would have resulted in a reliability concern or would have been ineffective, the alternate congestion management actions were agreed to by the initiating Reliability Coordinator, and assessment determined that the alternate congestion management actions would not adversely affect reliability.</p>
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**6. Proposed Reliability Standard identifies clear and objective criterion or measure for compliance, so that it can be enforced in a consistent and non-preferential manner**

The proposed Reliability Standard identifies clear and objective criteria in the language of the requirement so that that the standard can be enforced in a consistent and non-preferential

manner. The language in the requirements is unambiguous with respect to the applicable entity expectations. Additionally, each requirement of IRO-006-EAST-1 has an associated measure of compliance that will assist those enforcing the standard in enforcing it in a consistent and non-preferential manner. The proposed measures are as follows:

- M1. Each Reliability Coordinator shall provide evidence (such as dated logs, voice recordings, or other information in electronic or hard-copy format) that when acting or instructing others to act to mitigate the magnitude and duration of the instance of exceeding an IROL within that IROL's Tv, the Reliability Coordinator initiated one or more of the actions listed in R1 prior to or concurrently with the initiation of the Eastern Interconnection TLR procedure (or continuing management of this procedure if already initiated)(R1).
- M2. Each Reliability Coordinator shall provide evidence (such as dated logs, voice recordings, or other information in electronic or hard-copy format) that at the time it initiated the Eastern Interconnection TLR procedure, and at least every clock hour after initiation up to and including the hour when the TLR level was identified as TLR Level 0, the Reliability Coordinator identified both the TLR Level and a list of congestion management actions to be implemented (R2).
- M3. Each Reliability Coordinator shall provide evidence (such as dated logs, voice recordings, or other information in electronic or hard-copy format) that after it identified a TLR level and a list of congestion management actions to take, it 1.) notified all Reliability Coordinators in the Eastern Interconnection of the TLR Level, 2.) communicated the list of actions to all Reliability Coordinators in the Eastern Interconnection and those Reliability Coordinators in other Interconnections responsible for curtailing Interchange Transactions crossing Interconnection boundaries identified in the list of congestion management actions, and 3.) requested the Reliability Coordinators identified in Requirement R3 Part 3.2 to implement the congestion management actions identified in Requirement R2 Part 2.1 (R3).
- M4. Each Reliability Coordinator shall provide evidence (such as dated logs, voice recordings, or other information in electronic or hard-copy format) that within fifteen minutes of the receipt of a request as described in R3, the Reliability Coordinator complied with the request by either 1.) implementing the communicated congestion management actions requested by the issuing Reliability Coordinator, or 2.) implementing none or some of the communicated congestion management actions requested by the issuing Reliability Coordinator, and replacing the remainder with alternate congestion management actions if assessment showed that some or all of the congestion management actions communicated in R3 would have resulted in a reliability concern or would have been ineffective, the alternate congestion management actions were agreed to by

the initiating Reliability Coordinator, and assessment showed that the alternate congestion management actions would not adversely affect reliability (R4).

**7. *Proposed Reliability Standard achieves a reliability goal effectively and efficiently — but do not necessarily reflect “best practices” without regard to implementation cost***

The standard has been developed with consideration of implementation cost. Current practices have not been changed; accordingly, implementation costs are expected to be low while achieving the reliability goals expected of the standard effectively and efficiently.

**8. *Proposed Reliability Standard is not “lowest common denominator,” i.e., does not reflect a compromise that does not adequately protect bulk power system reliability***

The methods in the standard do not employ a “lowest common denominator” approach. The proposed IRO-006-EAST-1 continues obligations that were established in previous versions of the standard (most recently, in IRO-006-4.1 Requirements R1, R2, and R3 and Attachment 1). As such, no compromise has been made relative to the previous requirements.

**9. *Proposed Reliability Standard considers costs to implement for smaller entities but not at consequence of less than excellence in operating system reliability***

The proposed Reliability Standard does not reflect any differentiation in requirements based on size, and all applicable entities are Reliability Coordinators (which by definition require a wide-area view and sufficient monitoring capability to meet that requirement). Given these already established minimum levels of capability, the proposed standard will have little or no impact on cost, and therefore will not achieve less than excellence in operating system reliability based on cost considerations for smaller entities.

**10. *Proposed Reliability Standard is designed to apply throughout North America to the maximum extent achievable with a single Reliability Standard while not favoring one area or approach***

The requirements in this Reliability Standard apply to Reliability Coordinators in the Eastern Interconnection. Unlike most NERC standards, this standard deals with requirements on an Interconnection-wide basis, rather than a Regional or continent-wide basis. It is within the



scope of the ERO to develop standards that apply on an Interconnection wide, basis, as it helps ensure uniformity in inter-regional operations.

***11. Proposed Reliability Standard causes no undue negative effect on competition or restriction of the grid***

While the standard may intentionally restrict the grid and may at times have negative impacts on commercial operations, it does so to ensure the overall reliability of the Bulk Power System, which is clearly in the public interest. Accordingly, there is no undue negative effect on competition or restriction of the grid.

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

The Implementation Plan (see **Exhibit C**) does allow an appropriate time period for entities to become fully compliant balancing both urgency and reasonableness. The standard makes no changes to current practice, and therefore can be implemented in the Eastern Interconnection within one calendar quarter of approval.

***13. The Reliability Standard Development Process was open and fair***

Through NERC, the industry develops Reliability Standards in accordance with Section 300 (Reliability Standards Development) of the FERC approved Rules of Procedure and the NERC *Reliability Standards Development Procedure*,<sup>6</sup> which was incorporated into the Rules of Procedure as Appendix 3A. NERC's rules provide for reasonable notice and opportunity for public comment, due process, openness, and a balance of interests in developing 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 of Trustees is required to approve a Reliability

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<sup>6</sup> *Reliability Standards Development Procedure* is available on NERC's website at [http://www.nerc.com/fileUploads/File/Standards/RSDP\\_V6\\_1\\_12Mar07.pdf](http://www.nerc.com/fileUploads/File/Standards/RSDP_V6_1_12Mar07.pdf). Note that FERC approved the new *Reliability Standards Processes Manual* on September 3, 2010 (FERC Docket No. RR10-12-000), which replaces the *Reliability Standards Development Procedure Version 7* in its entirety. The *Standards Processes Manual* was not used to develop the standard proposed in this filing because it was not yet FERC approved.

Standard for submission to applicable governmental authorities. The drafting team developed this standard by following the Reliability Standards development process.

***14. Proposed Reliability Standard balances with other vital public interests***

The Reliability Standard does not conflict with any identified vital public interests.

***15. Proposed Reliability Standard considers any other relevant factors***

NERC considered this requirement and cannot identify any other factors for consideration in the development of these proposed standards.

**b. Violation Risk Factor and Violation Severity Level Assignments**

The proposed Reliability Standard includes VRFs and VSLs. The ranges of penalties for violations are based on the applicable VRF and VSLs and will be administered based on the sanctions table and supporting penalty determination process described in the NERC Sanction Guidelines, included as Appendix 4B in NERC's Rules of Procedure. Each requirement, in its entirety, has an associated VRF and a set of VSLs. These elements support the determination of an initial value range for the Base Penalty Amount regarding violations of requirements in Reliability Standards, as defined in the ERO Sanction Guidelines.

**Assignment of Violation Risk Factors**

The TLR Standard Drafting Team applied the following criteria when proposing VRFs for the requirements in IRO-006-5.

***High Risk Requirement***

A requirement that, if violated, could directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures; or, a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

### ***Medium Risk Requirement***

A requirement that, if violated, could directly affect the electrical state or the capability of the bulk electric system, or the ability to effectively monitor and control the bulk electric system. However, violation of a medium risk requirement is unlikely to lead to bulk electric system instability, separation, or cascading failures; or, a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly and adversely affect the electrical state or capability of the bulk electric system, or the ability to effectively monitor, control, or restore the bulk electric system. However, violation of a medium risk requirement is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk electric system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

### ***Lower Risk Requirement***

A requirement that is administrative in nature and a requirement that, if violated, would not be expected to adversely affect the electrical state or capability of the bulk electric system, or the ability to effectively monitor and control the bulk electric system; or, a requirement that is administrative in nature and a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to adversely affect the electrical state or capability of the bulk electric system, or the ability to effectively monitor, control, or restore the bulk electric system. A planning requirement that is administrative in nature.<sup>7</sup>

The team also considered consistency with the FERC Violation Risk Factor Guidelines for setting VRFs:<sup>8</sup>

#### **Guideline (1) — Consistency with the Conclusions of the Final Blackout Report**

The Commission seeks to ensure that Violation Risk Factors assigned to Requirements of Reliability Standards in these identified areas appropriately reflect their historical critical impact on the reliability of the Bulk-Power System.

In the VRF Order, FERC listed critical areas (from the Final Blackout Report) where violations could severely affect the reliability of the Bulk-Power System:<sup>9</sup>

- Emergency operations
- Vegetation management
- Operator personnel training
- Protection systems and their coordination
- Operating tools and backup facilities

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<sup>7</sup> These three levels of risk are defined by NERC and recognized by FERC in the May 18, 2007 Order at P9, and the November 16, 2007 Order at Appendix A.

<sup>8</sup> North American Electric Reliability Corp., 119 FERC ¶ 61,145, order on reh'g and compliance filing, 120 FERC ¶ 61,145 (2007) (“VRF Rehearing Order”).

<sup>9</sup> *Id.* at n. 15.

- Reactive power and voltage control
- System modeling and data exchange
- Communication protocol and facilities
- Requirements to determine equipment ratings
- Synchronized data recorders
- Clearer criteria for operationally critical facilities
- Appropriate use of transmission loading relief.

**Guideline (2) — Consistency within a Reliability Standard**

The Commission expects a rational connection between the sub-Requirement Violation Risk Factor assignments and the main Requirement Violation Risk Factor assignment.

**Guideline (3) — Consistency among Reliability Standards**

The Commission expects the assignment of Violation Risk Factors corresponding to Requirements that address similar reliability goals in different Reliability Standards would be treated comparably.

**Guideline (4) — Consistency with NERC’s Definition of the Violation Risk Factor Level**

Guideline (4) was developed to evaluate whether the assignment of a particular Violation Risk Factor level conforms to NERC’s definition of that risk level.

**Guideline (5) — Treatment of Requirements that Co-mingle More Than One Obligation**

Where a single Requirement co-mingles a higher risk reliability objective and a lesser risk reliability objective, the VRF assignment for such Requirements must not be watered down to reflect the lower risk level associated with the less important objective of the Reliability Standard.

The following discussion addresses how the drafting team considered FERC’s VRF

Guidelines 2 through 5. The team did not address Guideline 1 directly because of an apparent conflict between Guidelines 1 and 4. Whereas Guideline 1 identifies a list of topics that encompass nearly all topics within NERC’s Reliability Standards and implies that these requirements should be assigned a “High” VRF, Guideline 4 directs assignment of VRFs based on the impact of a specific requirement to the reliability of the system. The team believes that Guideline 4 is reflective of the intent of VRFs in the first instance and therefore concentrated its approach on the reliability impact of the requirements.

There is one requirement in IRO-006-5:

R1. Each Reliability Coordinator and Balancing Authority that receives a request pursuant to an Interconnection-wide transmission loading relief procedure (such as Eastern Interconnection TLR, WECC Unscheduled Flow Mitigation, or congestion management procedures from the ERCOT Protocols) from any Reliability Coordinator, Balancing Authority, or Transmission Operator in another Interconnection to curtail an Interchange Transaction that crosses an Interconnection boundary shall comply with the request, unless it provides a reliability reason to the requestor why it cannot comply with the request. [Violation Risk Factor: High] [Time Horizon: Real-time Operations]

• **VRF for IRO-006-5, Requirement R1:**

- FERC’s Guideline 2 — because there is only one requirement in this standard, the VRF application is by default consistent within the standard.
- FERC’s Guideline 3 — the assignment of the VRF is consistent with the VRFs in the related Interconnection-wide standard, IRO-006-EAST-1.
- FERC’s Guideline 4 — because this is a real-time requirement that reinforces an operator action directly related to preventing or mitigating a potential or actual SOL or IROL violation, there is potential that a violation could directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures. This criteria establishes the VRF for this requirement as “High.”
- FERC’s Guideline 5 —the requirement does not co-mingle more than one obligation. Additionally, the VRF is already set at “High,” and can be raised no further.

There are four requirements in IRO-006-EAST-1:

R1. When acting or instructing others to act to mitigate the magnitude and duration of the instance of exceeding an IROL within that IROL’s  $T_V$ , each Reliability Coordinator shall initiate, prior to or concurrently with the initiation of the Eastern Interconnection TLR procedure (or continuing management of this procedure if already initiated), one or more of the following actions: [Violation Risk Factor: High] [Time Horizon: Real-time Operations]

- Inter-area redispatch of generation
- Intra-area redispatch of generation
- Reconfiguration of the transmission system
- Voluntary load reductions (e.g., Demand-side Management)
- Controlled load reductions (e.g., load shedding)

• **VRFs for IRO-006-EAST-1, Requirements R1**

- FERC’s Guideline 2 — the assignment of the VRF is consistent with the VRFs in the other requirements in the standard.

- FERC’s Guideline 3 — the assignment of the VRF is consistent with the VRFs in the related Interconnection-wide standard, IRO-006-5.
  - FERC’s Guideline 4 — because this is a real-time requirement that reinforces an operator action directly related to preventing or mitigating a potential or actual SOL or IROL violation, there is potential that a violation could directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures. This criteria establishes the VRF for this requirement as “High.”
  - FERC’s Guideline 5 — the requirement does not co-mingle more than one obligation. Additionally, the VRF is already set at “High,” and can be raised no further.
- R2. To ensure operating entities are provided with information needed to maintain an awareness of changes to the Transmission System, when initiating the Eastern Interconnection TLR procedure to prevent or mitigate an SOL or IROL exceedance, and at least every clock hour (with the exception of TLR-1, where an hourly update is not required) after initiation up to and including the hour when the TLR level has been identified as TLR Level 0, the Reliability Coordinator shall identify: [Violation Risk Factor: Medium] [ Time Horizon: Real-time Operations]
- 2.1. A list of congestion management actions to be implemented, and
  - 2.2. One of the following TLR levels: TLR-1, TLR-2, TLR-3A, TLR-3B, TLR-4, TLR-5A, TLR-5B, TLR-6, TLR-0 1

● **VRFs for IRO-006-EAST-1, Requirements R2**

- FERC’s Guideline 2 — the assignment of the VRF is consistent with the VRFs in the other requirements in the standard.
- FERC’s Guideline 3 — the assignment of the VRF is consistent with the VRFs in the related Interconnection-wide standard, IRO-006-5.
- FERC’s Guideline 4 — while this is a real-time requirement that is related to preventing or mitigating a potential or actual SOL or IROL exceedance, the requirement itself is only a list of potential actions that can be taken. To the extent the Reliability Coordinator does not undertake this action consistently as described in the requirement, it does not hinder or prevent them from taking action to mitigate or prevent the related exceedance. Accordingly, a violation of the requirement is unlikely to lead to bulk electric system instability, separation, or cascading failures. This criteria establishes the VRF for this requirement as “Medium.”
- FERC’s Guideline 5 — while the requirement co-mingles more than one obligation, neither obligation exceeds the criteria for a “Medium” VRF.

- R3. Upon the identification of the TLR level and a list of congestion management actions to be implemented, the Reliability Coordinator initiating this TLR procedure shall: [Violation Risk Factor: Medium] [ Time Horizon: Real-time Operations]
- 3.1. Notify all Reliability Coordinators in the Eastern Interconnection of the identified TLR level
  - 3.2. Communicate the list of congestion management actions to be implemented to 1) all Reliability Coordinators in the Eastern Interconnection, and 2) those Reliability Coordinators in other Interconnections responsible for curtailing Interchange Transactions crossing Interconnection boundaries identified in the list of congestion management actions.
  - 3.3. Request that the congestion management actions identified in Requirement R2, Part 2.1 be implemented by:
    - 1.) Each Reliability Coordinator associated with a Sink Balancing Authority for which Interchange Transactions are to be curtailed,
    - 2.) Each Reliability Coordinator associated with a Balancing Authority in the Eastern Interconnection for which Network Integration Transmission Service or Native Load is to be curtailed, and
    - 3.) Each Reliability Coordinator associated with a Balancing Authority in the Eastern Interconnection for which its Market Flow is to be curtailed.

• **VRFs for IRO-006-EAST-1, Requirements R3**

- FERC’s Guideline 2 — the assignment of the VRF is consistent with the VRFs in the other requirements in the standard.
- FERC’s Guideline 3 — the assignment of the VRF is consistent with the VRFs in the related Interconnection-wide standard, IRO-006-5.
- FERC’s Guideline 4 — while this is a real-time requirement that is related to preventing or mitigating a potential or actual SOL or IROL exceedance, the requirement itself is only a list of potential actions that can be taken. To the extent the Reliability Coordinator does not undertake this action consistently as described in the requirement, it does not hinder or prevent them from taking action to mitigate or prevent the related exceedance. Accordingly, a violation of the requirement is unlikely to lead to bulk electric system instability, separation, or cascading failures. This criteria establishes the VRF for this requirement as “Medium.”
- FERC’s Guideline 5 — while the requirement co-mingles more than one obligation, neither obligation exceeds the criteria for a “Medium” VRF.

- R4. Each Reliability Coordinator that receives a request as described in Requirement R3, Part 3.3. shall, within 15 minutes of receiving the request, implement the congestion management actions requested by the issuing Reliability Coordinator as follows: [Violation Risk Factor: High] [ Time Horizon: Real-time Operations]
- Instruct its Balancing Authorities to implement the Interchange Transaction schedule change requests.
  - Instruct its Balancing Authorities to implement the Network Integration Transmission Service and Native Load schedule changes for which the Balancing Authorities are responsible.
  - Instruct its Balancing Authorities to implement the Market Flow schedule changes for which the Balancing Authorities are responsible.
  - If an assessment shows that one or more of the congestion management actions communicated in Requirement R3, Part 3.3 will result in a reliability concern or will be ineffective, the Reliability Coordinator may replace those specific actions with alternate congestion management actions, provided that:
    - § The alternate congestion management actions have been agreed to by the initiating Reliability Coordinator, and
    - § The assessment shows that the alternate congestion management actions will not adversely affect reliability.
- **VRFs for IRO-006-EAST-1, Requirements R4**
    - FERC’s Guideline 2 — the assignment of the VRF is consistent with the VRFs in the other requirements in the standard.
    - FERC’s Guideline 3 — the assignment of the VRF is consistent with the VRFs in the related Interconnection-wide standard, IRO-006-5.
    - FERC’s Guideline 4 — because this is a real-time requirement that reinforces an operator action directly related to preventing or mitigating a potential or actual SOL or IROL violation, there is potential that a violation could directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures. This criteria establishes the VRF for this requirement as “High.”
    - FERC’s Guideline 5 — While the requirement co-mingles more than one obligation, the VRF is already set at “High,” and can be raised no further.

As discussed above, NERC believes that the three of the five Requirements merit a “high” Violation Risk Factor. However, while NERC recognizes that TLR is explicitly discussed as Recommendation 31 in the August 14 Blackout Report, NERC does not agree that



any requirement that is related to TLR should by default be elevated to a Violation Risk Factor of “High” in contravention of the Violation Risk Factor definitions.

IRO-006-5 R1, IRO-006-EAST-1 R1, and IRO-006-EAST-1 R4 have a direct impact on the reliable operation of the bulk power system. An entity that does not implement a curtailment as required in IRO-006-5-R1 is either: 1) moving both interconnections to an unbalanced state, or b) continuing to contribute to the problem being experienced by the requesting entity. An entity that violates IRO-006-EAST-1 R1 is taking action that has been identified as potentially unreliable in the August 14<sup>th</sup> Blackout Report and discussed extensively by FERC in its previous rulings. Additionally, an entity that violates IRO-006-EAST-1 R4 is continuing to contribute to the problem being experienced by the requesting entity. A violation of any of these three requirements could “directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures,” which is the criteria for assignment of a “High” VRF.

However, a Reliability Coordinator that does not choose a TLR Level and list of actions and then communicate that list of actions is not likely to be impacting the reliable operation of the Bulk Power System in a manner that would “directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or could place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures.” While NERC agrees that such obligations related to communication are helpful from a coordination perspective, and that the absence of such communications would likely have some impact to reliability, NERC does not believe those impacts would meet the criteria required to assign a “High” VRF.

As a part of drafting this standard, the team sought to develop a standard that could be relatively “implementation neutral.” In other words, should the implementation of TLR change (for commercial reasons or otherwise), the core reliability elements of the standard should not need to be changed. The consideration of this aspect guided the team in developing the VRFs. If, instead of choosing a TLR Level and a list of actions and communicating it to other Reliability Coordinators, the initiating Reliability Coordinator simply directed Generator Operators to redispatch, could they protect the reliability of the system? While there might be degradation in reliability due to a lack of coordination, the Reliability Coordinator could take such action in a way that would not “directly cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures, or ... place the bulk electric system at an unacceptable risk of instability, separation, or cascading failures.” As such, NERC believes that the VRFs for Requirements R2 and R3 are appropriately set at “Medium,” and that for violations of these requirements, any determination of sanctions should begin at this point and be adjusted to fit the facts of each specific case.

### **Violation Severity Levels**

The VSLs are presented below, followed by an analysis of how the VSLs meet the FERC Guidelines for assessing VSLs:

#### **Guideline 1: Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance**

Compare the VSLs to any prior Levels of Non-compliance and avoid significant changes that may encourage a lower level of compliance than was required when Levels of Non-compliance were used.

#### **Guideline 2: Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties**

A violation of a “binary” type requirement must be a “Severe” VSL.

Do not use ambiguous terms such as “minor” and “significant” to describe noncompliant performance.

**Guideline 3: Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement**

VSLs should not expand on what is required in the requirement.

**Guideline 4: Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations**

. . . unless otherwise stated in the requirement, each instance of non-compliance with a requirement is a separate violation. Section 4 of the Sanction Guidelines states that assessing penalties on a per violation per day basis is the “default” for penalty calculations.

In order to comply with FERC VSL Guideline 1, included below is a discussion of the new VSLs relative to level of compliance established with the previously approved version of the standard.

**VSLs for IRO-006-5**

R#	VRF	VSL Lower	VSL Moderate	VSL High	VSL Severe
R1	High				The responsible entity received a request to curtail an Interchange Transaction crossing an Interconnection boundary pursuant to an Interconnection-wide transmission loading relief procedure from a Reliability Coordinator, Balancing Authority, or Transmission Operator, but the entity neither complied with the request, nor provided a reliability reason why it could not comply with the request.

- FERC’s Guideline 1 — The VSL is equally or more stringent than the VSLs previously established related to IRO-006-4.1a, R3 and R4.
- FERC’s Guideline 2 — The VSL is binary in nature and therefore at the “Severe” level, and the VSL uses no ambiguous language.
- FERC’s Guideline 3 — The language of the VSL is consistent with that of the requirement.
- FERC’s Guideline 4 — The VSL is based on a single violation of the requirement.

**VSLs for IRO-006-EAST-1**

R#	VSL Lower	VSL Moderate	VSL High	VSL Severe
R1				When acting or instructing others to act to mitigate the magnitude and duration of the instance of exceeding an IROL within that IROL's Tv, the Reliability Coordinator did not initiate one or more of the actions listed under R1 prior to or in conjunction with the initiation of the Eastern Interconnection TLR procedure (or continuing management of this procedure if already initiated).

- FERC's Guideline 1 — The VSL is consistent with the VSL previously established related to IRO-006-4.1, R1.1 (which was also binary in nature and "Severe").
- FERC's Guideline 2 — The VSL is binary in nature and therefore at the "Severe" level, and the VSL uses no ambiguous language.
- FERC's Guideline 3 — The language of the VSL is consistent with that of the requirement, only omitting the specific details of the actions.
- FERC's Guideline 4 — The VSL is based on a single violation of the requirement.

R#	VSL Lower	VSL Moderate	VSL High	VSL Severe
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R2	The Reliability Coordinator initiating the Eastern Interconnection TLR procedure missed identifying the TLR Level and/or a list of congestion management actions to take as specified by the requirement for one clock hour during the period from initiation up to the hour when the TLR level was identified as TLR Level 0.	The Reliability Coordinator initiating the Eastern Interconnection TLR procedure missed identifying the TLR Level and/or a list of congestion management actions to take as specified by the requirement for two clock hours during the period from initiation up to the hour when the TLR level was identified as TLR Level 0.	The Reliability Coordinator initiating the Eastern Interconnection TLR procedure missed identifying the TLR Level and/or a list of congestion management actions to take as specified by the requirement for three clock hours during the period from initiation up to the hour when the TLR level was identified as TLR Level 0.	The Reliability Coordinator initiating the Eastern Interconnection TLR procedure missed identifying the TLR Level and/or a list of congestion management actions to take as specified by the requirement for three clock hours during the period from initiation up to the hour when the TLR level was identified as TLR Level 0.
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- FERC’s Guideline 1 — The VSL addresses details previously unaddressed explicitly in the standard. As such, a comparison between this standard and its previous version cannot easily be made. We believe this additional detail has made the standard and VSL more stringent than the previous approved version.
- FERC’s Guideline 2 — The VSL is graded; and the VSL uses no ambiguous language.
- FERC’s Guideline 3 — The language of the VSL is consistent with that of the associated requirement.
- FERC’s Guideline 4 — The VSL is based on a single violation of the requirement. Since the requirement mandates ongoing updates on a periodic basis, judging the severity of the violation based on whether or not that periodicity was observed is appropriate.

R#	VSL Lower	VSL Moderate	VSL High	VSL Severe
R3	The initiating		The initiating	The initiating

	<p>Reliability Coordinator did not notify one or more Reliability Coordinators in the Eastern Interconnection of the TLR Level (3.1).</p>		<p>Reliability Coordinator did not communicate the list of congestion management actions to one or more of the Reliability Coordinators listed in Requirement R3, Part 3.2. OR The initiating Reliability Coordinator requested some, but not all, of the Reliability Coordinators identified in Requirement R3, Part 3.3 to implement the identified congestion management actions.</p>	<p>Reliability Coordinator requested none of the Reliability Coordinators identified in Requirement R3, Part 3.3 to implement the identified congestion management actions.</p>
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- FERC’s Guideline 1 — The VSL addresses details previously unaddressed explicitly in the standard. As such, a comparison between this standard and its previously approved version cannot easily be made. We believe this additional detail has made the standard and VSL more stringent than previous versions.
- FERC’s Guideline 2 — The VSL is graded, and the VSL uses no ambiguous language.
- FERC’s Guideline 3 — The language of the VSL is consistent with that of the associated requirement.
- FERC’s Guideline 4 — The VSL is based on a single violation of the requirement.

R#	VSL Lower	VSL Moderate	VSL High	VSL Severe
R4				<p>The responding Reliability Coordinator did not, within 15 minutes of receiving a request, either 1.) implement all the requested congestion management actions, or 2.) implement none or some of the requested congestion management actions and replace the remainder with alternate congestion management actions, provided that: assessment showed that the actions replaced would have resulted in a reliability concern or would have been ineffective, the alternate congestion management actions were agreed to by the initiating Reliability Coordinator, and assessment determined that the alternate congestion management actions would not adversely affect reliability.</p>

- FERC’s Guideline 1 — The VSL addresses details previously unaddressed explicitly in the standard. As such, a comparison between this standard and the previously approved version cannot easily be made. We believe this additional detail has made the standard and VSL more stringent than previous versions.
- FERC’s Guideline 2 — The VSL is binary in nature and therefore at the “Severe” level, and the VSL uses no ambiguous language.
- FERC’s Guideline 3 — The language of the VSL is consistent with that of the requirement, only omitting the specific details of the actions to instruct
- FERC’s Guideline 4 — The VSL is based on a single violation of the requirement.

**V. Implementation of IRO-006-5 and IRO-006-EAST-1**

NERC has requested an effective date of the first day of the first calendar quarter after the date the standards are approved. NERC believes the standards make no changes to current practice, and therefore can be implemented within one calendar quarter of approval.

At that time, the new standards will supersede the existing IRO-006-4.1 and its associated Attachment 1; IRO-006-4 should be retired coincident with the effective date of the new standards. The Regional Differences within IRO-006-4 should be also be retired when IRO-006-5 and IRO-006-EAST-1 become effective. Finally, the definition of “Reallocation” should be removed from the Glossary when IRO-006-5 and IRO-006-EAST-1 become effective. The term “Reallocation” is a commercial term used to describe a process for determining which entities are curtailed when curtailments are required, and is therefore outside the scope of the reliability standard. NERC has verified that “Reallocation” is not used in any other approved standard.

**VI. Order No. 693 Directives Relative to IRO-006-5 and IRO-006-EAST-1**

FERC has issued directives related to the standards in three general areas. The first area has to do with the use of TLR in response to an actual IROL. The second is related to practices



currently in use in WECC and ERCOT. The third has to do with the Violation Risk Factors for the standard.

The following directives are related to the use of TLR in response to an actual IROL:

***From Order No. 713-A***

36. As discussed above, based on the ERO's response we believe that our understanding of Requirement R1.1 comports with that of the ERO. While IRO-006-4, Requirement R1.1, should be implemented and enforced with the above understanding, we believe that the term "alone" in the provision could be improved to more precisely convey that it is a violation of Requirement R1.1 to rely on the TLR procedure when an entity is in the process of mitigating an IROL violation and the entity has not taken more immediate and effective means to achieve relief. Accordingly, pursuant to section 215(d)(5) of the FPA, the Commission directs the ERO to develop a modification of Requirement R1.1 with respect to the term "alone," consistent with this discussion.

Requirement R1 of IRO-006-EAST-1 reads as follows:

- R1. When acting or instructing others to act to mitigate the magnitude and duration of the instance of exceeding an IROL within that IROL's  $T_V$ , each Reliability Coordinator shall initiate, prior to or concurrently with the initiation of the Eastern Interconnection TLR procedure (or continuing management of this procedure if already initiated), one or more of the following actions: [Violation Risk Factor: High] [ Time Horizon: Real-time Operations]
- Inter-area redispatch of generation
  - Intra-area redispatch of generation
  - Reconfiguration of the transmission system
  - Voluntary load reductions (e.g., Demand-side Management)
  - Controlled load reductions (e.g., load shedding)

Stakeholders have agreed that the word "alone" did not clearly convey the full intent of the standard, and modified the requirement to make it unambiguous. When acting to mitigate the magnitude and duration of an IRO exceedance, entities are required to implement alternate procedures either prior to or concurrent with the invocation of the TLR procedure. Delaying the implementation of alternate procedures in order to implement TLR would not be consistent with

implementing those procedures “prior to or concurrently with” the invocation of TLR as described in the requirement, and would constitute a violation of the standard. This language more fully captures the intent of the word “alone” as it was used in IRO-006-4.1.

The following directive relates to practices currently in use in WECC and ERCOT:

***From Order No. 693***

964. ... In addition, the Commission approves the WECC and ERCOT load relief procedures as superior to the national Reliability Standard. As identified in the NOPR, the Commission directs the ERO to modify the WECC and ERCOT procedures to ensure consistency with the standard form of the Reliability Standards including Requirements, Measures and Levels of Non- Compliance.

WECC has already developed and filed with FERC a regional standard related to its Interconnection-wide congestion management procedures, and is the subject of a current FERC Notice of Proposed Rulemaking.<sup>10</sup> We believe that IRO-006-5 and IRO-006-EAST-1 address FERC’s concerns related to the potential for conflict between the regional and continent-wide standard as expressed in the aforementioned NOPR. TRE is in the process of developing a regional standard related to the congestion management processes used within ERCOT, and expects to have the standard approved by its Board of Directors within the second quarter of 2011.

**VII. SUMMARY OF THE RELIABILITY STANDARD DEVELOPMENT PROCEEDINGS**

**a. Development History**

NERC and NAESB made the decision to separate the commercial and reliability standards of the TLR standard in August 2004. The Joint Interface Committee, consisting of NERC, NAESB, and the ISO/RTO Council, supported this decision. At that time, NERC and NAESB planned to use the IRO-006-0 standard as the basis and migrate to Version 1 (IRO-006-

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<sup>10</sup> *Western Electric Coordinating Council Qualified Transfer Path Unscheduled Flow Relief Regional Reliability Standard*. 133 FERC ¶ 61,074 (2010)

1) by the end of 2005, completely separating the commercial and reliability aspects of the standard.

NERC and the industry formed a Joint NERC/NAESB TLR Task Force and held eight meetings to complete this separation. In June 2005, this team voted unanimously on the details of the separation and agreed that each organization would begin work on the Version 1 portion of the separated reliability standards.

In accord with the NERC and NAESB process for joint development and maintenance of reliability standards, the NAESB Business Practice Subcommittee completed its process to develop the requisite business practice requirements as demonstrated by approval of the Wholesale Electric Quadrant (“WEQ”) Executive Committee and subsequent member ratification on April 10, 2006. NAESB decided to hold the ratified business practices until NERC completed its reliability portion of the split so that both organizations could make their filings with the FERC at the same time.

In 2005, as a precursor to the submission of a standards authorization request (“SAR”), NERC posted the split agreed to by NERC and NAESB for industry comment. NERC received 12 sets of comments, six in favor of the split and six against the split. Those who submitted negative comments expressed the following concerns: that the future management and coordination of the standards would be more difficult; there is a desire to keep the standards in one accessible location; and that NAESB business practices will be included in the Interchange Distribution Calculator (“IDC”) Reference Document. After extensive deliberation on the comments, the NERC Operating Reliability Subcommittee (“ORS”) submitted a SAR to the NERC Standard Authorization Committee (now the Standards Committee) in July 2005. In its December 2006 conference call, the Standards Committee approved the SAR and directed the

assembly of a standard drafting team, utilizing the individuals serving on the SAR development team as the initial members. Accordingly, NERC formed the NERC TLR Standard Drafting Team in late 2006 under Project 2006-08 in the *Reliability Standards Development Plan: 2007-2009*.

### **Scope of Work Assigned to Project 2006-08 Standard Drafting Team**

The TLR Standard Drafting team elected to undertake modifications to the standard in three phases. In the first phase, the team worked jointly with the North American Energy Standards Board (NAESB) to separate the reliability and commercial aspects of IRO-006-4. This work also included the development of measures, compliance elements, and other standard components to meet the requirements of the NERC *Reliability Standards Development Procedure*. In conducting the first phase of this work, the team retained the original requirements to the extent possible to avoid creating new elements that could have precipitated lengthy debates and delayed implementation of the split. However, where in the judgment of the team the reliability standard requirements as written were deemed to create difficulties in developing the necessary measures and compliance elements, the team re-worded and clarified the requirements to achieve those objectives. This work (Reliability Standard IRO-006-4) was approved by NERC's Board of Trustees on October 9, 2007, and subsequently approved by FERC on March 19, 2009.<sup>11</sup>

In the second phase, NERC worked with NAESB to determine the appropriate curtailment threshold for use in the PJM, MISO, and SPP calculations of Market Flow as

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<sup>11</sup> *Modification of Interchange and Transmission Loading Relief Reliability Standards; and Electric Reliability Organization Interpretation of Specific Requirements of Four Reliability Standards*. 126 FERC ¶ 61,252 (2009) (Order No. 713-A)

described in their IRO-006-4 Regional Differences.<sup>12</sup> It was determined that the work for NERC consisted solely of the administration and oversight of the related field trial; no changes to NERC’s Reliability Standard were required, other than the ultimate elimination of the Regional Differences specified in the standard (which is included in this filing).

The third and final phase, which is the subject of this filing, includes the changes needed to elevate the overall quality of the reliability standard and to address additional technical issues identified by stakeholders during prior comment periods and by FERC in its orders and assessments.

### **The First Posting**

NERC posted the first drafts of these standards for a thirty-day comment period, from October 30, 2008, to December 1, 2008 (for this posting, IRO-006-EAST-1 was referred to as IRO-006-EI-1).

There were 12 sets of comments received from 40 different people from approximately 30 companies representing 9 of the 10 industry segments that make up the NERC constituency.

- Commenters suggested that “reallocation” be footnoted to reference NAESB’s business practices.
- Commenters proposed the definition of “Market Flow” be modified to replace the phrase “Market Flow Calculation Methodology” with more explicit language.
- Commenters expressed concerns with how the concepts of “interconnection wide” and/or “regional” standards were being addressed.
- Commenters pointed out that TLR-0 was undefined.

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<sup>12</sup> The Regional differences were primarily based on the implementation of market based mechanisms for interfacing with the TLR process. These differences were absorbed into IRO-006-EAST-1, necessitating the creation of the term “market flow” to describe the related concepts. This definition of this term was balloted and approved as part of the standard through the standards development process.

In response to these comments, the drafting team began working on the next draft of the standards. The team added the footnote regarding NAESB, made modifications to the definition of Market flow, and added TLR-0 to the Appendix of the Eastern Interconnection standard. Based on concerns expressed regarding potential conflicts inherent in the relationship between the Continent-wide standard and regional standards, the SDT eliminated IRO-006-5 R1 (which explicitly required the Reliability Coordinator to use a specific Interconnection-wide congestion management procedure). Instead, it was determined that IRO-006-EI-1 will continue to be treated as an Eastern Interconnection standard, and therefore apply to all Reliability Coordinators within the Eastern Interconnection, and the other regions (WECC and ERCOT) would develop separate regional standards to address their Interconnection-wide procedures. In order to comply with NERC's published numbering convention, the standard was renamed as IRO-006-EAST-01.

On January 22, 2008, NERC staff met with FERC staff briefly to answer questions regarding the use of the Interchange Distribution Calculator and the TLR process. Based on comments expressed at that meeting, the TLR Drafting Team made changes to IRO-006-EAST-1 R1 to make clear that when experiencing an actual Interconnection Reliability Operating Limit (IROL) violation, the first responsibility of a Reliability Coordinator is to mitigate the IROL violation, which may then be followed with initiation or continuing management of the TLR process as appropriate. The modifications makes the standard more consistent with Recommendation 31 from the Blackout Report, which states that the TLR process is “not fast and predictable enough for use (in) situations in which an Operating Security Limit is close to or actually being violated. NERC should develop an alternative to TLRs that can be used quickly to address alert and emergency conditions.”<sup>13</sup>

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<sup>13</sup> See Final Report on the August 14, 2003 Blackout in the United States and Canada: Causes and Recommendations at pg. 163 (<http://www.nerc.com/docs/docs/blackout/ch7-10.pdf>)

## **The Second Posting**

NERC posted the second draft of these standards for a forty-five-day comment period from February 19, 2009, to April 6, 2009. There were 17 sets of comments received from 60 different people from approximately 40 companies representing 8 of the 10 industry segments that make up the NERC constituency. Most comments received on the standards were favorable.

- Some entities questioned whether NERC was allowed to create an Interconnection-wide standard
- Some entities suggested that including the Transmission Operator as a responding entity in IRO-006- did not make sense, while others suggested that the Interchange Authority should be included in the standard
- Several entities questioned whether reloading should be included in the standard.
- Several entities expressed concern with the VSLs for the standards.

The team felt that an Interconnection-wide standard was both allowed under the ERO rules and appropriate in this specific case. The drafting team removed the Transmission Operator from IRO-006-5 as suggested, but did not add the Interchange Authority, believing that any role for the Interchange Authority should be addressed in the Interchange, Scheduling, and Coordination (“INT”) standards. The drafting team also removed the concept of mandatory reloading, as reloading is generally not required to meet reliability objectives and may in some cases not be desired by the transmission customer. Finally, the drafting team attempted to clarify the VSLs in the next draft of the standards.

## **The Third Posting**

NERC posted the third draft of these standards for a thirty-day comment period from July 13, 2009, to August 13, 2009. There were 15 sets of comments received from 70 different

people from approximately 50 companies representing 9 of the 10 industry segments that make up the NERC constituency.

In general, the majority of comments received were supportive of the changes proposed by the drafting team. Based on stakeholder comments, the drafting team made the following changes:

The drafting team combined Requirements R4 and R5, and established the time for the Reliability Coordinator to take action as 15 minutes.

- The drafting team clarified in IRO-006-5, Requirement R1 that an entity must comply with a request to curtail an Interchange Transaction “unless it provides to the requestor a reliability reason that it cannot comply with the request.”
- The drafting team deleted Appendix A of IRO-006-EAST-1 and instead incorporated the table from the Appendix into Requirement R2. The system conditions were relabeled as examples, a footnote was added to explain the role of the table, and a sentence was added that stated “TLR levels are neither required nor expected to be issued in numerical order of level.”
- The drafting team clarified that a Reliability Coordinator’s experience may be used to determine if requested TLR actions are appropriate, and made this clear by replacing “analysis” with “assessment” in IRO-006-EAST-1 Requirement R4.
- Additionally, the drafting team reviewed the use of the verb “direct” in the previous version of the standard. Following discussion regarding the steps of TLR and what is expected to happen in each of those steps, it was determined that the Reliability Coordinator is not issuing directives when implementing TLR. The issuance of TLR and the associated instructions to take action are made unilaterally by the Reliability



Coordinator(s). Balancing Authorities are expected to review the requests for action and verify that they can be implemented reliably. To the extent they cannot be implemented reliably, Balancing Authorities are expected to work with their Reliability Coordinator in determining the best course of action. For Interchange Transactions, this Balancing Authority discretion is discussed in INT-005-3 R1.1 and INT- 006-3 R1.1. For NITS, Native Load, and Market Flow, it is addressed implicitly in IRO-005-3 R6 and TOP-002-2a R4. Accordingly, rather than use the verb “direct,” the team modified the standard to use the verb “instruct.”

### **The Fourth Posting**

NERC posted the fourth draft of these standards for a forty-five-day comment period from October 27, 2009, to November 30, 2009. There were 15 sets of comments received from 70 different people from approximately 40 companies representing 9 of the 10 industry segments that make up the NERC constituency.

Several minor changes were made to the standards based on suggestions received during the comment period:

- Several entities suggested that it be clear that Reliability Coordinators must initiate, not complete, the actions requested within 15 minutes. IRO-006-EAST-1 R4 was modified to make it clear that the actions must be initiated, not completed.
- Several entities expressed concern that the TLR levels listed in IRO-006-EAST-1 still seemed to imply an obligation to adhere to the criteria as provided in the examples. In response, the drafting team removed the examples into a separate reference document.

- Several entities suggested that there was no need to explicitly identify “responding Reliability Coordinators” in the Applicability section of IRO-006-EAST-1. Upon further reflection, the drafting team agreed, and modified the applicability accordingly.
- One entity expressed concern that IRO-006-5 R1 allowed entities to simply supply a reliability reason without clearly indicating that the reason must be justified. The drafting team added the word “valid” to make this clear.
- One entity identified a typographical error where Measure 1 of IRO-006-5 was missing a word. The error was corrected.
- One entity suggested improvements to the definition of Market Flow to make it clear that market flow was caused by generation internal to a market serving load internal to that same market. The definition was changed.
- Several commenters objected to the requirement to update a TLR-1 on an hourly basis. However, the requirement to re-issue TLR Level 1 every hour is already required in IRO-006-4, Attachment 1, Section 1.4.4. This standard does not change this obligation.
- Some commenters suggested that the standard, by not explicitly allowing for them, could restrict the use of proxy Flowgates. The drafting team clarified that this is not the intent.
- Some commenters suggested that the standard not limit the actions that can be performed concurrently with TLR as specified in IRO-006-EAST-1 R1. The drafting team believed that if a new method to mitigate congestion is developed other than the five actions listed, it can be included in the standard following industry review of its effectiveness in achieving the mitigation objective. No change was made.
- Some entities questioned if IDC logs were acceptable evidence to show compliance with the standard. The drafting team pointed out that all four of the measures clearly indicate

that Logs are an acceptable form of evidence, and that the measure allows for the provision of “other information.”

### **The Fifth Posting and Balloting**

NERC posted the fifth draft of these standards for a forty-five-day comment period from May 21, 2010, to July 6, 2010. The standards were balloted during this period from June 23, 2010 to July 6, 2010, and a non-binding poll of the Violation Risk Factors and Violation Severity Levels was conducted concurrently. There were 12 sets of comments received from 40 different people from approximately 30 companies representing 9 of the 10 industry segments that make up the NERC constituency. The ballot results were as follows:

Quorum: 87.04%

Weighted Segment Vote for Approval: 84.98%

In the non-binding poll of the VRFs and VSLs, 80% of those who registered to participate provided an opinion, and 86% of those who provided an opinion indicated support.

Entities suggested minor clarifications, corrections, and language changes that the drafting team believed improved the overall quality of the standard.

- Some entities had concerns with the potential subjectivity of the requirement in IRO-006-5 Requirement R1 for a “valid” reason. The drafting team acknowledged their concerns, reconsidered the reasoning behind the addition of the word “valid,” determined that the word was not needed, and eliminated the word from the requirement.
- Several entities objected to the need to reissue TLR-1 each hour as specified in IRO-006-EAST-1 Requirement R2. Upon further review of the current standard, as well as the current implementation of the Interchange Distribution Calculator (IDC), it was

determined that such updates are not required for TLR-1. The phrase “with the exception of TLR-1, where an hourly update is not required” was added to the requirement.

- Some entities expressed concern that the list of TLR levels and conditions, which was moved into a supporting document, would be more appropriately included as an attachment or a requirement. The drafting team responded that since the information does not actually represent any specific required action, it is more appropriate to maintain this information in a separate document. To assist entities in locating the information, the drafting team added a footnote to standard.

Following these minor changes, the standards proceed to recirculation ballot. The ballot results were as follows:

Quorum: 88.26%

Weighted Segment Vote for Approval: 93.93%

NERC staff presented the standards to the Board of Trustees at their November 4, 2010 meeting. At that meeting, the Board of Trustees approved the standards for filing with the applicable governmental authorities.

## **VIII. CONCLUSION**

NERC requests that the AESO take the steps necessary to adopt the proposed new Reliability Standard, IRO-006-5, and the new Glossary term as set out in **Exhibit A** in accordance with the effective date provisions set forth in the proposed Reliability Standard, as set out in Exhibit A.

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**EXHIBITS A – E**  
(Available on the NERC Website at

[http://www.nerc.com/fileUploads/File/Filings/Attachments\\_IRO-006-5\\_and\\_IRO-006-EAST-1.pdf](http://www.nerc.com/fileUploads/File/Filings/Attachments_IRO-006-5_and_IRO-006-EAST-1.pdf))