

Standard Development Roadmap

This section is maintained by the drafting team during the development of the standard and will be removed when the standard becomes effective.

Development Steps Completed:

1. SC authorized the SAR and assembled a drafting team on December 5, 2006.
2. The revisions to IRO-006 to transfer business practice content to NAESB were approved as IRO-006-4 by the Board of Trustees on October 23, 2007.
3. The SDT has developed this first draft for industry consideration.

Description of Current Draft:

This is the first draft of the proposed standard posted for stakeholder comments.

Future Development Plan:

Anticipated Actions	Anticipated Date
1. Respond to Comments (Draft 1).	February 26, 2009
2. Posting for Comment (Draft 2).	February 26, 2009
3. Respond to Comments (Draft 2).	June 26, 2009
4. Posting for 30-day Pre-Ballot Review.	June 26, 2009
5. Initial Ballot.	July 27, 2009
6. Respond to comments.	September 10, 2009
7. Recirculation ballot.	September 10, 2009
8. Board adoption.	October 2009

Definitions of Terms Used in Standard

This section includes all newly defined or revised terms used in the proposed standard. Terms already defined in the Reliability Standards Glossary of Terms are not repeated here. New or revised definitions listed below become approved when the proposed standard is approved. When the standard becomes effective, these defined terms will be removed from the individual standard and added to the Glossary.

~~**Reallocation:** The total or partial curtailment of Transactions during TLR Level 3a or 5a to allow Transactions using higher priority to be implemented.~~ (To be retired.)

Market Flow: the amount of energy flowing across a specified facility or set of facilities due to the operation of a market that has implemented a “Market Flow Calculation” methodology.

A. Introduction

1. **Title: Transmission Loading Relief Procedure for the Eastern Interconnection**
2. **Number:** IRO-006-EI-1
3. **Purpose:** 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) violations to maintain reliability of the bulk electric system.
4. **Applicability:**
 - 4.1. Reliability Coordinators in the Eastern Interconnection.
5. **Effective Date:** First day of the first calendar quarter that after the date this standard is approved by applicable regulatory authorities, or in those jurisdictions where regulatory approval is not required, the standard becomes effective on the first day of the first calendar quarter after the date this standard is approved by the NERC Board of Trustees.

B. Requirements

- R1.** The Reliability Coordinator shall not use the Eastern Interconnection TLR procedure alone to mitigate an actual IROL violation. When responding to an actual IROL violation, each Reliability Coordinator shall implement other actions prior to or in conjunction with the initiation of this TLR procedure, including, but not limited to, the following: reconfiguration, redispatch, use of demand-side management, load shedding.
- R2.** When initiating the Eastern Interconnection TLR procedure to prevent or mitigate a SOL or IROL violation, and at least every clock hour 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*]
 - R2.1.** The TLR level in accordance with the criteria in Appendix A, and
 - R2.2.** A proposal for actions to take, based on the TLR level chosen.
- R3.** Upon the identification of the TLR level and a proposal for actions to take based on the TLR level chosen, the Reliability Coordinator initiating this TLR procedure shall: [*Violation Risk Factor: Medium*] [*Time Horizon: Real-time Operations*]
 - R3.1.** Notify all Reliability Coordinators in the Eastern Interconnection of the identified TLR level
 - R3.2.** Communicate the proposed actions to take to:
 - R3.2.1.** All Reliability Coordinators in the Eastern Interconnection, and
 - R3.2.2.** Those Reliability Coordinators in other Interconnections responsible for curtailing or reloading Interchange Transactions crossing Interconnection boundaries identified in the proposed actions.

- R3.3.** Request that the following entities implement the proposed actions identified in R2.2: [*Violation Risk Factor: Medium*] [*Time Horizon: Real-time Operations*]
- R3.3.1.** Each Reliability Coordinator associated with a Sink Balancing Authority in the Eastern Interconnection for which Interchange Transactions are proposed for curtailment or reloading
- R3.3.2.** Each Reliability Coordinators associated with a Balancing Authority in the Eastern Interconnection for which Network Integration Transmission Service or Native Load is proposed for curtailment or reloading
- R3.3.3.** Each Reliability Coordinator associated with a Balancing Authority in the Eastern Interconnection proposed to provide Market Flow curtailment or reloading.
- R3.3.4.** Each Reliability Coordinators associated with a Balancing Authority in the Eastern Interconnection operating a DC-tie for an Interchange Transaction sinking outside the Eastern Interconnection and crossing an interconnection boundary with an Interchange Transaction proposed for curtailment or reloading.
- R4.** Each Reliability Coordinator in the Eastern Interconnection that responds to a request as described in R3.3. shall comply with the request by taking one or more of the following actions: [*Violation Risk Factor: Medium*] [*Time Horizon: Real-time Operations*]
- R4.1.** Implement the communicated actions requested by the issuing Reliability Coordinator as follows:
- Direct its Balancing Authorities to implement the Interchange Transaction schedule change requests.
 - Direct its Balancing Authorities to provide the Network Integrated Transmission Service and Native Load schedule changes for which the Balancing Authorities are responsible.
 - Direct its Balancing Authorities to provide the Market Flow schedule changes for which the Balancing Authorities are responsible.
- R4.2.** Implement a procedure pre-approved by the ERO for use by the responding Reliability Coordinator in lieu of implementing some or all of the requested actions in R4.1, provided that its implementation is expected to prevent or mitigate the SOL or IROL violation with the same or greater effect than the actions not implemented in R4.1.
- R4.3.** Implement alternate actions to those in R4.1 or R4.2 provided that
- R4.3.1.** Analysis shows that some or all of the actions in R4.1 or R4.2 will result in a reliability concern or will be ineffective, and
- R4.3.2.** The alternate actions have been agreed to by the initiating Reliability Coordinator, and
- R4.3.3.** Analysis shows that the alternate actions will not adversely affect reliability.

- R5.** Each Reliability Coordinator that responds to a TLR event shall acknowledge to the initiating Reliability Coordinator the actions it will take pursuant to Requirement R4 within thirty minutes of receiving the request. [*Violation Risk Factor: Medium*] [*Time Horizon: Real-time Operations*]

C. Measures (Measures and Compliance Information Will Be Added Later)

M1.

D. Compliance

1. Compliance Monitoring Process

- 1.1. Compliance Monitoring Responsibility:**
- 1.2. Compliance Monitoring Period and Reset Time Frame:**
- 1.3. Data Retention**

Measure	Entity	Data Retention Period

2. Additional Compliance Information:

- 2.1.**
- 2.2.**

3. Violation Severity Levels

R #	Lower VSL	Moderate VSL	High VSL	Severe VSL

E. Regional Differences

None.

F. Associated Documents

Revision History

Version	Date	Action	Tracking
1		Creation of new standard, incorporating concepts from IRO-006-4 Attachment; elimination of Regional Differences, as they standard allows the use of Market Flow	New

Appendix A

The following criteria are intended to assist the Reliability Coordinator in determining what level of TLR to call. However, the Reliability Coordinator has the discretion to choose any of these levels regardless of the criteria listed below, provided the Reliability Coordinator has reliability reasons to take such action.

Level	System Condition
TLR-1	<ul style="list-style-type: none"> • At least one Transmission Facility is expected to approach or exceed its SOL or IROL within 8 hours.
TLR-2	<ul style="list-style-type: none"> • At least one Transmission Facility is approaching or is at its SOL or IROL. <ul style="list-style-type: none"> ○ Analysis shows that holding new and increasing non-firm transactions and energy flows for the next hour can prevent exceeding this SOL or IROL.
TLR-3a	<ul style="list-style-type: none"> • At least one Transmission Facility is expected to exceed its SOL or IROL within the next hour. <ul style="list-style-type: none"> ○ Analysis shows that full or partial curtailment or reallocation of non-firm transactions and energy flows can prevent exceeding this SOL and IROL.
TLR-3b	<ul style="list-style-type: none"> • At least one Transmission Facility is exceeding its SOL or IROL, or • At least one Transmission Facility is expected to exceed its SOL or IROL within the current hour. <ul style="list-style-type: none"> ○ Analysis shows that full or partial curtailment or reallocation of non-firm transactions and energy flows can prevent exceeding this SOL or IROLs .
TLR-4	<ul style="list-style-type: none"> • At least one Transmission Facility is expected to exceed its SOL or IROL. • Analysis shows that full curtailment of non-firm transactions and energy flows, or reconfiguration of the transmission system can prevent exceeding this SOL or IROL.
TLR-5a	<ul style="list-style-type: none"> • At least one Transmission Facility is expected to exceed its SOL or IROL when the next-hour's transactions start. • Analysis shows that either of the following sets of actions can prevent exceeding the SOL or IROL: <ul style="list-style-type: none"> ○ Full curtailment non-firm transactions and energy flows, or ○ Reconfiguration of the transmission system, and full or partial curtailment or reallocation of firm transactions and energy flows.
TLR-5b	<ul style="list-style-type: none"> • At least one Transmission Facility is exceeding its SOL or IROL, or • At least one Transmission Facility is expected to exceed its SOL or IROL within the current hour. • Analysis shows that either of the following sets of actions can prevent exceeding the SOL or IROL:

	<ul style="list-style-type: none">○ Full curtailment of non-firm transactions and energy flows, or○ Reconfiguration of the transmission system, and full or partial curtailment or reallocation of firm transactions and energy flows.○
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