

Standard Development Timeline

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. SAR-009 SDT Kickoff Call (August 12, 2010).
2. SAR-009 SDT meeting; designated target date at meeting (August 17, 2010).
3. SAR-009 SDT meeting (September 20, 2010).
4. SAR-009 SDT meeting (October 11, 2010).
5. SAR-009 SDT meeting (November 8, 2010).
6. SAR-009 SDT meeting (January 20, 2011).
7. Standard IRO-006-TRE-1 was posted on the Texas RE Standards Tracking site for a 30-day public comment period. (February 3-March 7, 2011).
8. SAR-009 SDT meeting (March 17, 2011 - teleconference).
9. Standard approved by SDT for submission to RSC for approval to post for ballot (March 28, 2011).
10. RSC approved posting regional standard IRO-006-TRE-1 for ballot (April 6, 2011)
11. Standard IRO-006-TRE-1 was posted for a pre-ballot review and 15-day ballot period. (April 11-May 26, 2011).
12. RSC approved the ballot results and forwarded the standard to the Texas RE BoD (June 10, 2011).
13. Presented IRO-006-TRE-1 Regional Standard and supporting documents to the Texas RE BoD for approval to submit to NERC (June 28, 2011).

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1. RSM accepted SAR as revised (July 1, 2010)
 2. SAR posted for comment (posted July 2, comments accepted July 6 to July 20, 2010).
 3. RSC approved SDT members and authorized moving the SAR forward to standard development (August 4, 2010).

Proposed Action Plan and Description of Current Draft

This is the first draft of the proposed Regional Standard, which is coordinated with the continent-wide revisions to IRO-006.

Future Development Plan:

Anticipated Actions	Anticipated Date
Texas RE Board of Directors Approval	June 2011
Submit to NERC/FERC	July 2011

Introduction

- 1. Title:** IROL and SOL Mitigation in the ERCOT Region
- 2. Number:** IRO-006-TRE-1
- 3. Purpose:** To provide and execute transmission loading relief procedures that can be used to mitigate SOL or IROL exceedances for the purpose of maintaining reliable operation of the bulk electric system in the ERCOT Region.
- 4. Applicability:**
- 4.1 Functional Entities:**
Reliability Coordinator
- 5. Effective Date:** The first day of the first calendar quarter after applicable regulatory approval.
- 6. Background** (Will not be included in Standard):

NERC Reliability Standards require the establishment of Operating Plans, monitoring of the system, and mitigation of limit exceedances by operational actions which may include implementing re-dispatch of system resources and facilities. The ERCOT regional congestion management process is used to achieve this purpose in the ERCOT Region. The requirements and responsibilities for the process are described in the ERCOT Nodal Protocols (Protocols) and Nodal Operating Guides. The Protocols and Nodal Operating Guides are binding documents established by the ERCOT Nodal electricity market.

The ERCOT Nodal electricity market construct provides for meeting reliability requirements through a robust system of operating actions that use ancillary services in dispatch actions by the ERCOT Independent System Operator (ISO). The ancillary services are procured and deployed through a comprehensive market system to ensure reliable operations in accordance with the NERC Reliability Standards, as well as with the Protocols and Nodal Operating Guides. ERCOT uses a centralized energy dispatch process as described in the Protocols and applies Equipment Operating Ratings and Limits as described in the Protocols.

ERCOT market dispatch is done using the energy dispatch process according to the Protocols. Market-based congestion management techniques are embedded in a Security Constrained Economic Dispatch (SCED) process. This IRO-006-TRE-1 Regional Standard is not intended to apply to routine system dispatch using SCED. This standard applies when an IROL or SOL exceedance is identified (or anticipated), and extraordinary transmission loading relief procedures (non-market dispatch) are required to mitigate (or avoid) the exceedance.

For the purposes of this standard, the following are considered to be part of routine system dispatch and are not subject to this standard: (1) dispatch under normal SCED operation; (2) redispatch using manual SCED operation; (3) remedial action plans; and (4) pre-contingency action plans.

Situations where the Market system fails to reach a solution are addressed as failure(s) of the SCED process and are considered reason for an Emergency Notice. Typically, actions taken for transmission loading relief which would be subject to this standard would be taken within the context of an Emergency Notice. Such actions may include, for example: (1) system reconfiguration (pre- and

post-contingency); (2) non-synchronous transfer of load to other systems not within the ERCOT Interconnection; and (3) reduction of interruptible or firm load.

This proposed ERCOT regional standard provides enforceable requirements and measures relating to the process that is used in the ERCOT Interconnection to effect transmission loading relief. NERC Project 2006-08 includes the continent-wide standard IRO-006-5, which prescribes a requirement for all Interconnections in the North American continent, and regional standard IRO-006-EAST-1, which prescribes Interconnection-wide requirements for the Eastern Interconnection. A corresponding WECC Regional Standard was recently approved by FERC. The NERC Transmission Loading Relief drafting team requested ERCOT to address the FERC directive (Paragraph 964 of Order 693) regarding the description of the ERCOT Interconnection-wide congestion management process. This Regional Standard is responsive to that request.

Requirements and Measures

R1. The RC shall have procedures to identify and mitigate exceedances of identified Interconnection Reliability Operating Limits (IROL) and System Operating Limits (SOL) that will not be resolved by the automatic actions of the ERCOT Nodal market operations system. The procedures shall address, but not be limited to, one or more of the following:

The methodology for identifying IROLs and SOLs is addressed in FAC standards, including FAC-014.

- redispatch of generation;
- reconfiguration of the Transmission system;
- controlled load reductions (including both firm and non-firm load shedding).

[Violation Risk Factor: Medium] [Time Horizon: Operations Planning]

M1. The RC shall provide evidence including documentation of procedures to identify and mitigate exceedances of identified IROLs and SOLs to demonstrate compliance with Requirement R1.

R2. The RC shall act to identify and mitigate exceedances of identified Interconnection Reliability Operating Limits and System Operating Limits that will not be resolved by the automatic actions of the ERCOT Nodal market operations system, in accordance with the procedures required by R1.

IRO-005-2a (Requirements 3 and 5) calls for relieving IROL violations in no longer than 30 minutes.

[Violation Risk Factor: High] [Time Horizon: Real Time Operations]

M2. To demonstrate compliance with Requirement R2, the RC shall provide evidence, such as system logs, voice recordings, or operating messages that shows that it acted to identify and to mitigate exceedances of IROLs and SOLs in accordance with the procedures required by R1.

Compliance

Compliance Enforcement Authority

- Texas Reliability Entity, Inc.

Compliance Monitoring and Assessment Processes

- Compliance Audits
- Self-Certifications
- Spot Checks
- Compliance Violation Investigations
- Self-Reporting
- Complaints

Evidence Retention

The Reliability Coordinator shall keep data or evidence to show compliance as identified below unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation:

- The Reliability Coordinator shall retain evidence to show compliance with requirements R1 and R2 for the period since it became subject to these requirements or since its last compliance audit, whichever is shorter.
- If a Reliability Coordinator is found non-compliant, it shall retain all evidence for the period in which it was non-compliant until it is found compliant or for the duration specified above, whichever is longer.

The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

Additional Compliance Information

None.

Time Horizons, Violation Risk Factors, and Violation Severity Levels

Table 1						
R#	Time Horizon	VRF	Violation Severity Level			
			Lower	Moderate	High	Severe
R1	Operations Planning	Medium	N/A	N/A	N/A	The RC did not have procedures to identify and mitigate exceedances of identified IROLs and SOLs.
R2	Real-time Operations	High	N/A	N/A	The RC failed to follow its procedures in identifying and mitigating an exceedance of an SOL.	The RC failed to follow its procedures in identifying and mitigating an exceedance of an IROL.