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.

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:
 - 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.

[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.		

Guideline and Technical Basis

Rationale:

During development of this standard, text boxes were embedded within the standard to explain the rationale for various parts of the standard. Upon BOT approval, the text from each of the rationale text boxes was moved to this section.

Rationale for R1:

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

Rationale for R2:

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

Version History

Version	Date	Action	Change Tracking
1	June 28, 2011	Texas RE Board Approval	
1	November 3, 2011	Adopted by NERC Board of Trustees	
1	May 31, 2012	FERC Order issued approving IRO-006-TRE-1	