Standard Authorization Request Form

E-mail completed form to rsm@texasre.org

Texas RE to Complete
SAR No:

Title of Proposed Standard	IRO-006-TRE-1 IROL and SOL Mitigation in the ERCOT Region
Request Date	June 27, 2017

SAR Requester Information		**SAR Type** (*Check a box for each one that applies.*)	
Name	Elizabeth Axson	☐	New Standard
Primary Contact	Elizabeth Axson	☐	Revision to existing Standard
		☐	Revision to the Standard Development Process
Telephone	512-275-7439	☒	Withdrawal of existing Standard
Fax	512-225-7079	☐	Variance to a NERC Standard (Indicate which one)
E-mail	Elizabeth.axson@ercot.com	☐	Urgent Action

Purpose (Describe what the standard action will achieve in support of bulk power system reliability.)
Retire IRO-006-TRE-1 due to redundancy with existing NERC requirements.

Industry Need (Provide a justification for the development or revision of the standard, including an assessment of the reliability and market interface impacts of implementing or not implementing the standard action.)

IRO-006-TRE-1 should be retired because its requirements are redundant of those in NERC standards IRO-002-4, IRO-008-2, IRO-009-2, TOP-001-3, and TOP-002-4. Eliminating this redundancy will not impact reliability or market interface principles.

Brief Description (Provide a paragraph that describes the scope of this standard action.)

ERCOT recommends the retirement of regional reliability standard IRO-006-TRE-1 – *IROL and SOL Mitigation in the ERCOT Region*. Reliability Standards IRO-002-4, IRO-008-2, TOP-001-3, and TOP-002-4 became effective on April 1, 2017 and cover the same obligations as the requirements in IRO-

006-TRE-1, rendering the regional standard redundant and eligible for retirement. IRO-009-2, effective since January 1, 2016, also covers certain requirements in IRO-006-TRE-1.

Detailed Description (Provide a description of the proposed project with sufficient details for the standard drafting team to execute the SAR.)

ERCOT recommends the retirement of regional reliability standard IRO-006-TRE-1 – *IROL and SOL Mitigation in the ERCOT Region*. Reliability Standards IRO-002-4, IRO-008-2, TOP-001-3, and TOP-002-4 became effective on April 1, 2017 and cover the same obligations as the requirements in IRO-006-TRE-1, rendering the regional standard redundant and eligible for retirement. IRO-009-2, effective since January 1, 2016, also covers certain requirements in IRO-006-TRE-1.

Paragraph 81 Criteria
FERC's 2012 order approving NERC's Find, Fix, and Track (FFT) compliance program included a recommendation that NERC develop criteria for retirement of reliability standard requirements that are "unnecessary or redundant." 138 FERC ¶ 61,193 at P 81 (2012). In Paragraph 81 of the order, the Commission stated: "If NERC believes that specific Reliability Standards or specific requirements within certain Standards should be revised or removed, we invite NERC to make specific proposals to the Commission identifying the Standards or requirements and setting forth in detail the technical basis for its belief." *Id.*

In response, NERC developed the "Paragraph 81 project." *See* NERC Project 2013-02. Under this project, NERC created criteria to identify requirements that should be retired or modified. One of these criteria considers whether "[t]he Reliability Standard requirement is redundant with: (i) another FERC-approved Reliability Standard requirement(s); (ii) the ERO compliance and monitoring program or (iii) a governmental regulation (e.g., Open Access Transmission Tariff, North American Energy Standards Board ("NAESB"), etc.)." IRO-006-TRE-1 qualifies for retirement under this criterion.

IRO-006-TRE-1 Background
IR0-006-TRE-01 was originally intended to codify existing ERCOT congestion relief procedures under the NERC standard template, similar to other IRO-006 Standards that address such procedures for other regions like WECC and the Eastern Interconnection. Requirement 1 of IRO-006-TRE-1 requires ERCOT, as the sole RC in the ERCOT Region, to have procedures to identify and mitigate exceedances of any System Operating Limit (SOL) or Interconnection Reliability Operating Limit (IROL), and Requirement 2 of the Standard requires ERCOT to act on those procedures when IROLs and SOLs are exceeded. These same obligations are already captured in Reliability Standards IRO-002-4, IRO-008-2, IRO-009-2, TOP-001-3, TOP-002-4.

Coverage of IRO-006-TRE-1 Requirement 1
R1 of IRO-006-TRE-1 requires ERCOT, as a Reliability Coordinator (RC), to have procedures to identify and mitigate exceedances of IROLs and SOLs. Several other existing requirements already require these procedures. IRO-008-2, R1, requires ERCOT, as an RC, to perform an Operational Planning Assessment (OPA) to determine if next-day planned operations will exceed any SOL or IROL. R2 of this same standard requires ERCOT to have an Operating Plan to address SOL and IROL exceedances. IRO-009-2, R1, requires RCs who identify an IROL one or more days in advance to have Operating Processes, Procedures, or Plans for RCs to take or direct actions to prevent or mitigate each IROL exceedance. Similarly, TOP-002-4, R1, requires ERCOT, in its capacity as a Transmission Operator (TOP), to have an OPA to determine if next-day operations will exceed any SOL. (Under the TOP Coordinated Functional Registration for the Texas RE region, ERCOT is the only TOP responsible for performing OPAs and Real-Time Assessments (RTAs).)

Coverage of IRO-006-TRE-1 Requirement 2

R2 of IRO-006-TRE-1 requires ERCOT, as RC, to identify and mitigate exceedances of identified IROLs and SOLs. These actions are also covered by requirements in other standards. IRO-002-4, R3, requires RCs to "monitor Facilities, the status of Special Protection Systems, and non-BES facilities… within its Reliability Coordinator Area and neighboring Reliability Coordinator Areas to identify any System Operating Limit exceedances and to determine any Interconnection Reliability Operating Limit exceedances within its Reliability Coordinator Area." IRO-008-2, R4, requires ERCOT to perform an RTA at least once every 30 minutes, and R5 of the same standard requires ERCOT to share results of an RTA that identifies an SOL or IROL exceedance with those entities who need to take action to prevent or mitigate the exceedance. IRO-009-2, R2 and R3, direct RCs to initiate actions to prevent or mitigate IROL exceedances. Similarly, TOP-001-3 requires ERCOT, as a TOP, to determine SOL exceedances through monitoring (R10) and to conduct a Real-Time Assessment every 30 minutes (R13), including an identification of SOL exceedances (R14). R14 of TOP-001-3 further requires ERCOT to initiate its Operating Plan to mitigate an identified SOL exceedance.

ERCOT provides the attached mapping table to show how existing standards fully cover the two IRO-006-TRE-1 requirements (see "IRO-006-TRE-1 Retirement Mapping Document.

Reliability Functions

*For a more detailed description of the Reliability Functions, please refer to **NERC Function Model_V5***

The Standard will Apply to the Following Functions *(Check box for each one that applies.)*	
☐ Transmission Owner	☐ Transmission Service Provider
☐ Generator Owner	☐ Generator Operator
☐ Balancing Authority	☐ Interchange Authority
☒ Reliability Coordinator	☐ Purchasing-Selling Entity
☐ Resource Planner	☐ Load-Serving Entity
☐ Distribution Provider	☐ Planning Coordinator
☐ Transmission Planner	☐ Transmission Operator

Reliability and Market Interface Principles

Applicable Reliability Principles (*Check box for all that apply.)*	
☐	1. Interconnected bulk power systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards.
☐	2. The frequency and voltage of interconnected bulk power systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand.
☐	3. Information necessary for the planning and operation of interconnected bulk power systems shall be made available to those entities responsible for planning and operating the systems reliably.
☐	4. Plans for emergency operation and system restoration of interconnected bulk power systems shall be developed, coordinated, maintained and implemented.

☐	5. Facilities for communication, monitoring and control shall be provided, used and maintained for the reliability of interconnected bulk power systems.
☐	6. Personnel responsible for planning and operating interconnected bulk power systems shall be trained, qualified, and have the responsibility and authority to implement actions.
☐	7. The security of the interconnected bulk power systems shall be assessed, monitored and maintained on a wide area basis.
☐	8. Bulk power systems shall be protected from malicious physical or cyber attacks.

Does the proposed Standard comply with all of the following Market Interface Principles? *(Select 'yes' or 'no' from the drop-down box.)*
1. A reliability standard shall not give any market participant an unfair competitive advantage. Yes
2. A reliability standard shall neither mandate nor prohibit any specific market structure. Yes
3. A reliability standard shall not preclude market solutions to achieving compliance with that standard. Yes
4. A reliability standard shall not require the public disclosure of commercially sensitive information. All market participants shall have equal opportunity to access commercially non-sensitive information that is required for compliance with reliability standards. Yes

Related Standards

Standard No.	Explanation
IRO-002-4	Reliability Coordination – Responsibilities
IRO-008-2	Reliability Coordinator Operational Analyses and Real-time Assessments
IRO-009-2	Reliability Coordinator Actions to Operate Within IROLs
TOP-001-3, TOP-002-4	Transmission Operations; Operations Planning

Related SARs

SAR ID	Explanation

ERCOT – IRO-006-TRE-1 Retirement Mapping Document

IRO-006-TRE-1 Requirement Language	Standard	Requirement	Existing Requirement Language
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).	IRO-008-2	R1	Each Reliability Coordinator shall perform an Operational Planning Analysis that will allow it to assess whether the planned operations for the next-day will exceed System Operating Limits (SOLs) and Interconnection Operating Reliability Limits (IROLs) within its Wide Area.
	IRO-008-2	R2	Each Reliability Coordinator shall have a coordinated Operating Plan(s) for next-day operations to address potential System Operating Limit (SOL) and Interconnection Reliability Operating Limit (IROL) exceedances identified as a result of its Operational Planning Analysis as performed in Requirement R1 while considering the Operating Plans for the next-day provided by its Transmission Operators and Balancing Authorities.
	IRO-009-2	R1	For each IROL (in its Reliability Coordinator Area) that the Reliability Coordinator identifies one or more days prior to the current day, the Reliability Coordinator shall have one or more Operating Processes, Procedures, or Plans that identify actions the Reliability Coordinator shall take or actions the Reliability Coordinator shall direct others to take (up to and including load shedding): **1.1.** That can be implemented in time to prevent the identified IROL exceedance. **1.2.** To mitigate the magnitude and duration of an IROL exceedance such that the IROL exceedance is relieved within the IROL's Tv.
	TOP-002-4	R1	Each Transmission Operator shall have an Operational Planning Analysis that will allow it to assess whether its planned operations for the next day within its Transmission

			Operator Area will exceed any of its System Operating Limits (SOLs).
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-002-4	R3	Each Reliability Coordinator shall monitor Facilities, the status of Special Protection Systems, and non-BES facilities identified as necessary by the Reliability Coordinator, within its Reliability Coordinator Area and neighboring Reliability Coordinator Areas to identify any System Operating Limit exceedances and to determine any Interconnection Reliability Operating Limit exceedances within its Reliability Coordinator Area.
	IRO-008-2	R4	Each Reliability Coordinator shall ensure that a Real-time Assessment is performed at least once every 30 minutes.
	IRO-008-2	R5	Each Reliability Coordinator shall notify impacted Transmission Operators and Balancing Authorities within its Reliability Coordinator Area, and other impacted Reliability Coordinators as indicated in its Operating Plan, when the results of a Real-time Assessment indicate an actual or expected condition that results in, or could result in, a System Operating Limit (SOL) or Interconnection Reliability Operating Limit (IROL) exceedance within its Wide Area.
	IRO-009-2	R2	Each Reliability Coordinator shall initiate one or more Operating Processes, Procedures, or Plans (not limited to the Operating Processes, Procedures, or Plans developed for Requirement R1) that are intended to prevent an IROL exceedance, as identified in the Reliability Coordinator's Real-time monitoring or Real-time Assessment.
	IRO-009-2	R3	Each Reliability Coordinator shall act or direct others to act so that the magnitude and duration of an IROL exceedance is mitigated within the IROL's Tv, as identified in the Reliability Coordinator's Real-time monitoring or Real-time Assessment.
	TOP-001-3	R10	Each Transmission Operator shall perform the following as necessary for determining System Operating Limit (SOL) exceedances within its Transmission Operator Area: 10.1. Within its Transmission Operator Area, monitor Facilities and the status of Special Protection Systems, and 10.2. Outside its Transmission Operator Area, obtain and utilize status, voltages, and flow data for Facilities and the status of Special Protection Systems.

	TOP-001-3	R13	Each Transmission Operator shall ensure that a Real-time Assessment is performed at least once every 30 minutes.
	TOP-001-3	R14	Each Transmission Operator shall initiate its Operating Plan to mitigate a SOL exceedance identified as part of its Real-time monitoring or Real-time Assessment.

Implementation Plan

Project SAR-010 Retirement of Regional Standard IRO-006-TRE-1
IRO-006-TRE-1

Approvals Required
Retirement of Regional Standard IRO-006-TRE-1

Prerequisite Approvals
None

Revisions to Glossary Terms
None

Applicable Entities
Reliability Coordinator

Applicable Facilities
N/A

Effective Date
Regional Standard IRO-006-TRE-1, IROL and SOL Mitigation in the ERCOT Region, shall be retired upon the effective date of approval by regulatory authorities.

Justification for Retirement

Project SAR-010 Retirement of Regional Standard IRO-006-TRE-1
IRO-006-TRE-1

The Regional Standard Drafting Team (SDT) for Project SAR-010 Retirement of Texas RE Regional Standard IRO-006-TRE-1 reviewed Regional Standard IRO-006-TRE-1 and concluded Regional Standard IRO-006-TRE-1 should be retired. The SDT found the Regional Standard to be redundant with other continent-wide Reliability Standards.

Background

On May 31, 2012, FERC approved Regional Standard IRO-006-TRE-1, IROL and SOL Mitigation in the ERCOT Region. The standard went into effect on July 1, 2012. This standard is a result of a FERC directive in Order No. 693, which directed this interconnection to modify its load relief procedures to ensure consistency with the standard form of the Reliability Standards including Requirements, Measures, and Levels of Non-Compliance.

In 2017, Texas RE conducted a five-year review in accordance with the Standards Development Process. Reviewers recommended Regional Standard IRO-006-TRE-1 be retired. On June 27, 2017, the Electric Reliability Council of Texas (ERCOT) submitted a Standard Authorization Request (SAR) for the retirement of Regional Standard IRO-006-TRE-1.

The IRO-006-TRE-1 SDT reviewed the information provided by ERCOT in the SAR and concludes Regional Standard IRO-006-TRE-1 should be retired.

Regional Reliability Standard IRO-006-TRE-1, which is applicable to the Reliability Coordinator (RC), contains two requirements:

> **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).
>
> **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.

NERC Reliability Standards IRO-002-5, IRO-008-2, TOP-001-3, TOP-001-4 and TOP-002-4 became effective on April 1, 2017 and cover the same obligations as the requirements in IRO-006-TRE-1, rendering the regional standard redundant and eligible for retirement. Reliability Standard IRO-009-2, effective since January 1, 2016, also covers certain requirements in Regional Standard IRO-006-TRE-1.

Paragraph 81 Criteria

FERC's 2012 order approving NERC's Find, Fix, and Track (FFT) compliance program included a recommendation that NERC develop criteria for retirement of Reliability Standard requirements that are "unnecessary or redundant." 138 FERC ¶ 61,193 at P 81 (2012). In Paragraph 81 of the order, the Commission stated: "If NERC believes that specific Reliability Standards or specific requirements within certain Standards should be revised or removed, we invite NERC to make specific proposals to the Commission identifying the Standards or requirements and setting forth in detail the technical basis for its belief." *Id.*

In response, NERC developed the "Paragraph 81 project." Under this project, NERC created criteria to identify requirements that should be retired or modified. One of these criteria considers whether "[t]he Reliability Standard requirement is redundant with: (i) another FERC-approved Reliability Standard requirement(s); (ii) the ERO compliance and monitoring program or (iii) a governmental regulation (e.g., Open Access Transmission Tariff, North American Energy Standards Board ("NAESB"), etc.)." Regional Standard IRO-006-TRE-1 qualifies for retirement under this criterion.

IRO-006-TRE-1 Background

The original intent of Regional Standard IR0-006-TRE-01 was to codify existing ERCOT congestion relief procedures under the NERC standard template, similar to other IRO-006 Standards that address such procedures for the Western and the Eastern Interconnections. Requirement R1 of Regional Standard IRO-006-TRE-1 requires ERCOT, as the sole Reliability Coordinator (RC) in the ERCOT Region, to have procedures to identify and mitigate exceedances of any System Operating Limit (SOL) or Interconnection Reliability Operating Limit (IROL), and Requirement R2 of the standard requires ERCOT to act on those procedures when IROLs and SOLs are exceeded.

Coverage of Regional Standard IRO-006-TRE-1 Requirement R1

Requirement R1 of IRO-006-TRE-1 requires ERCOT, as the RC, to have procedures to identify and mitigate exceedances of IROLs and SOLs. These same obligations are captured in the following currently effective Reliability Standards: IRO-002-5, IRO-008-2, IRO-009-2, TOP-001-3, TOP-001-4, and TOP-002-4. IRO-008-2 Requirement R1 requires ERCOT, as the RC, to perform an Operational Planning Assessment (OPA) to determine if next-day planned operations will exceed any SOL or IROL. Requirement R2 of this same standard requires ERCOT to have an Operating Plan to address SOL and IROL exceedances. IRO-009-2 Requirement R1 requires RCs who identify an IROL one or more days in advance to have Operating Processes, Procedures, or Plans for RCs to take or direct actions to prevent or mitigate each IROL exceedance. Similarly, TOP-002-4 Requirement R1 requires ERCOT, in its capacity as a Transmission Operator (TOP), to have an OPA to determine if next-day operations will exceed any SOL. (Under the TOP Coordinated Functional Registration for the Texas RE region, ERCOT is the only TOP responsible for performing OPAs and Real-Time Assessments (RTAs).)

Coverage of Regional Standard IRO-006-TRE-1 Requirement R2

Requirement R2 of Regional Standard IRO-006-TRE-1 requires ERCOT, as the RC, to identify and mitigate exceedances of identified IROLs and SOLs. These actions are also covered by requirements in other standards. Reliability Standard IRO-002-5 Requirement R3 requires RCs to "monitor Facilities, the status of Remedial Action Schemes, and non-BES facilities… within its

Reliability Coordinator Area and neighboring Reliability Coordinator Areas to identify any System Operating Limit exceedances and to determine any Interconnection Reliability Operating Limit exceedances within its Reliability Coordinator Area." Reliability Standard IRO-008-2 Requirement R4 requires ERCOT to perform an RTA at least once every 30 minutes, and Requirement R5 of the same standard requires ERCOT to share results of an RTA that identifies an SOL or IROL exceedance with those entities who need to take action to prevent or mitigate the exceedance. Reliability Standard IRO-009-2 Requirements R2 and R3 direct RCs to initiate actions to prevent or mitigate IROL exceedances. Similarly, Reliability Standards TOP-001-3 and TOP-001-4 require ERCOT, as a TOP, to determine SOL exceedances through monitoring (Requirement R10) and to conduct a Real-Time Assessment every 30 minutes (Requirement R13), including an identification of SOL exceedances (Requirement R14). Requirement R14 of Reliability Standards TOP-001-3 and TOP-001-4 further requires ERCOT to initiate its Operating Plan to mitigate an identified SOL exceedance.

The attached mapping table shows how existing NERC Reliability Standards fully cover the two requirements of Regional Standard IRO-006-TRE-1.

Effective Date

Regional Standard IRO-006-TRE-1, IROL and SOL Mitigation in the ERCOT Region, shall be retired upon the effective date of approval by regulatory authorities.

Justification of Effective Date

Because the SDT determined all requirements of Regional Standard IRO-006-TRE-1 are covered by existing, currently effective NERC Reliability Standards, the Regional Standard may be retired upon the effective date of approval by regulatory authorities.

Retirement Mapping Table
Project SAR-010 Retirement of Regional Standard IRO-006-TRE-1
IRO-006-TRE-1

Regional Standard IRO-006-TRE-1 Requirement Language	Currently Effective NERC Reliability Standard	Requirement	Requirement Language
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).	IRO-008-2	R1	Each Reliability Coordinator shall perform an Operational Planning Analysis that will allow it to assess whether the planned operations for the next-day will exceed System Operating Limits (SOLs) and Interconnection Operating Reliability Limits (IROLs) within its Wide Area.
	IRO-008-2	R2	Each Reliability Coordinator shall have a coordinated Operating Plan(s) for next-day operations to address potential System Operating Limit (SOL) and Interconnection Reliability Operating Limit (IROL) exceedances identified as a result of its Operational Planning Analysis as performed in Requirement R1 while considering the Operating Plans for the next-

			day provided by its Transmission Operators and Balancing Authorities.
	IRO-009-2	R1	For each IROL (in its Reliability Coordinator Area) that the Reliability Coordinator identifies one or more days prior to the current day, the Reliability Coordinator shall have one or more Operating Processes, Procedures, or Plans that identify actions the Reliability Coordinator shall take or actions the Reliability Coordinator shall direct others to take (up to and including load shedding): 1.1 That can be implemented in time to prevent the identified IROL exceedance. 1.2 To mitigate the magnitude and duration of an IROL exceedance such that the IROL exceedance is relieved within the IROL's Tv.
	TOP-002-4	R1	Each Transmission Operator shall have an Operational Planning Analysis that will allow it to assess whether its planned operations for the next day within its Transmission Operator Area will exceed any of its System Operating Limits (SOLs).
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-002-5	R5	Each Reliability Coordinator shall monitor Facilities, the status of Remedial Action Schemes, and non-BES facilities identified as necessary by the Reliability Coordinator, within its Reliability Coordinator Area and neighboring Reliability Coordinator Areas to identify any System Operating Limit exceedances within its Reliability Coordinator Area.
	IRO-008-2	R4	Each Reliability Coordinator shall ensure that a Real-time Assessment is performed at least once every 30 minutes.
	IRO-008-2	R5	Each Reliability Coordinator shall notify impacted Transmission Operators and Balancing Authorities

			within its Reliability Coordinator Area, and other impacted Reliability Coordinators as indicated in its Operating Plan, when the results of a Real-time Assessment indicate an actual or expected condition that results in, or could result in, a System Operating Limit (SOL) or Interconnection Reliability Operating Limit (IROL) exceedance within its Wide Area.
	IRO-009-2	R2	Each Reliability Coordinator shall initiate one or more Operating Processes, Procedures, or Plans (not limited to the Operating Processes, Procedures, or Plans developed for Requirement R1) that are intended to prevent an IROL exceedance, as identified in the Reliability Coordinator's Real-time monitoring or Real-time Assessment.
	IRO-009-2	R3	Each Reliability Coordinator shall act or direct others to act so that the magnitude and duration of an IROL exceedance is mitigated within the IROL's Tv, as identified in the Reliability Coordinator's Real-time monitoring or Real-time Assessment.
	TOP-001-3 (inactive 6/30/2018)	R10	Each Transmission Operator shall perform the following as necessary for determining System Operating Limit (SOL) exceedances within its Transmission Operator Area: 10.1. Within its Transmission Operator Area, monitor Facilities and the status of Special Protection Systems, and 10.2. Outside its Transmission Operator Area, obtain and utilize status, voltages, and flow data for Facilities and the status of Special Protection Systems.
	TOP-001-3 (inactive 6/30/2018)	R13	Each Transmission Operator shall ensure that a Real-time Assessment is performed at least once every 30 minutes.

	TOP-001-3 (inactive 6/30/2018)	R14	Each Transmission Operator shall initiate its Operating Plan to mitigate a SOL exceedance identified as part of its Real-time monitoring or Real-time Assessment.
	TOP-001-4 (effective 7/1/2018)	R10	Each Transmission Operator shall perform the following as necessary for determining System Operating Limit (SOL) exceedances within its Transmission Operator Area: 10.1 Monitor Facilities within in Transmission Operator Area; 10.2 Monitor the status of Remedial Action Schemes within its Transmission Operator Area; 10.3 Monitor non-BES facilities within its Transmission Operator Area identified as necessary by the Transmission Operator; 10.4 Obtain and utilize status, voltages, and flow data for Facilities outside its Transmission Operator Area identified as necessary by the Transmission Operator.
	TOP-001-4 (effective 7/1/2018)	R13	Each Transmission Operator shall ensure that the Real-time Assessment is performed at least once every 30 minutes.
	TOP-001-4 (effective 7/1/2018)	R14	Each Transmission Operator shall initiate its Operating Plan to mitigate a SOL exceedance identified as part of its Real-time monitoring or Real-time Assessment.

Project Roadmap
Texas RE Regional Standard IRO-006-TRE-1 Timeline
SAR-010 Retirement of Regional Standard IRO-006-TRE-1

Activity	Date Completed
Interested party (originator) submitted Standard Authorization Request (SAR)	ERCOT submitted SAR on 6/27/17
Reliability Standards Manager (RSM) verified receipt of the SAR with the originator	6/27/17
RSM posted the SAR on Texas RE website for public viewing and comment	7/6/2017 – 7/21/2017
After the comment period ended, RSM forwarded SAR to Members Representatives Committee (MRC)	9/1/2017
MRC determined SAR disposition	9/8/2017
MRC accepted the SAR and directed the RSM to solicit standard drafting team (SDT) members.	9/8/2017
RSM solicited SDT members	9/20/17 – 10/5/2017
SDT formed	11/6/2018
MRC elected an interim Chair	12/6/2017
SDT met and worked • Elected Chair and Vice Chair • Developed the work plan and work product	2/14/18
SDT reported the work plan to MRC. MRC directed the RSM to post the work product for a public comment period.	2/28/2018
RSM posted SDT work product for comment	3/1/2018 – 4/2/2018
RSM notified the Registered Ballot Body (RBB) that the Registered Ballot Pool (RBP) was forming	3/2/2018
SDT reviewed comments and prepared a modification report	4/10/2018
MRC concurred all requirements for development were met.	5/1/2018
RSM posted work product for ballot	5/1/2018 (after MRC meeting)
Ballot period for Registered Ballot Pool to vote	5/16/2018 – 5/31/2018
NERC posting for 45 days	6/21/2018 – 8/6/2018
If the ballot passes, MRC forwards the work product to the Texas RE Board	TBA
Work product is publicly posted ahead of the Texas RE Board meeting	TBA
Texas RE Board approves retirement of Regional Standard IRO-006-TRE-1	TBA

The development documents are submitted to NERC for approval and filing with FERC	TBA

Standard Drafting Team Roster

Project SAR-010 Retirement of Regional Standard IRO-006-TRE-1
IRO-006-TRE-1

Name	Biography
Colleen Frosch, ERCOT ISO, Chair of the SDT	Colleen has 23 years of system operations experience; 21 years have been with ERCOT ISO. Within the 23 years, 13 years were as an operator and supervisor, eight years as Manager over the ERCOT control room, and the past two years as a Manager in Compliance. Colleen has served as chair of the NERC Operating Reliability Subcommittee and holds a current Reliability Coordinator Certification.
Michael Cruz-Montes, CenterPoint Energy, Vice Chair of the SDT	Michael has over 19 years of electric transmission and distribution related experience with CenterPoint Energy, including Real Time Operations (RTO)/System Control, Distribution Control Operations, and Geographic Information Services. His current responsibilities within CNP Policy and Compliance include participating in the development of a comprehensive NERC Reliability Standards compliance program which entails developing comments and recommending voting positions on draft NERC Reliability Standards. Recently, he has served and actively participated in six NERC Standard Drafting Teams and Periodic Review Teams. Michael is currently the Chair of the NERC Reliability Working Group (NRWG) and also participates in the Black Start Working Group (BSWG), the Operations Working Group (OWG), and the Operations Training Working Group (OTWG), along with representatives from other NERC Registered Entities in the ERCOT region. While in RTO/System Control, Michael held several positions, including Training Specialist, Voltage Desk Operator, Substation & Cut-in Desk Operator, and Senior System Operator. He has the following certifications: ERCOT Certified System Operator - July 2005 NERC Certified System Operator Transmission - awarded July 2005; expires July 2019.
Mark Henry, Texas RE	Mark has experience in the electric power industry including generation, transmission, and control center assignments as an electrical engineer and engineering supervisor at the Lower Colorado River Authority for nearly 15 years. He has worked with the bulk power system compliance program since joining the ERCOT ISO in December 1999. Mark is a licensed professional engineer in Texas and holds a BSEE from the University of Texas at Austin.

SAR-010 Project to Retire Regional Standard IRO-006-TRE-1 Registered Ballot Pool

		Standards Development Sectors					
Name	Entity	System Coordination and Planning	Transmission	Cooperative or Utility	Municipal Utility	Generation	Load-Serving and Marketing
Daniela Hammons	CenterPoint Energy		x				
W. Dwayne Preston	Austin Energy					x	
Greg Froehling	Rayburn Country Electric Cooperative Inc.			x			
Matt Mereness	ERCOT	x					
Teresa Cantwell	LCRA					x	
Gladys DeLaO	CPS Energy		x				
Robert Stevens	CPS Energy					x	
James Grimshaw	CPS Energy				x		

SAR-010 Project to Retire Regional Standard IRO-006-TRE-1 Ballot Results								
			Standards Development Sectors					
Name	Entity	Ballot	System Coordination and Planning	Transmission	Cooperative or Utility	Municipal Utility	Generation	Load-Serving and Marketing
Daniela Hammons	CenterPoint Energy	Affirmative		x				
W. Dwayne Preston	Austin Energy	Affirmative					x	
Greg Froehling	Rayburn Country Electric Cooperative Inc.	Affirmative			x			
Matt Mereness	ERCOT	Affirmative	x					
Teresa Cantwell	LCRA	Affirmative					x	
Gladys DeLaO	CPS Energy	Affirmative		x				
Robert Stevens	CPS Energy	Affirmative					x	
James Grimshaw	CPS Energy	Affirmative				x		

Modification Report
Standard Drafting Team's Responses to Comments
Comment Period: March 1 – April 2, 2018
Project SAR-010 Retirement of Regional Standard IRO-006-TRE-1

Introduction

On May 31, 2012, FERC approved Regional Standard IRO-006-TRE-1, IROL and SOL Mitigation in the ERCOT Region. The standard went into effect on July 1, 2012. This standard is a result of a FERC directive in Order No. 693, which directed this interconnection to modify its load relief procedures to ensure consistency with the standard form of the Reliability Standards including Requirements, Measures, and Levels of Non-Compliance.

In 2017, Texas RE conducted a five-year review in accordance with the Standards Development Process. Reviewers recommended Regional Standard IRO-006-TRE-1 be retired. On June 27, 2017, the Electric Reliability Council of Texas (ERCOT) submitted a Standard Authorization Request (SAR) for the retirement of Regional Standard IRO-006-TRE-1.

The IRO-006-TRE-1 Standard Drafting Team (SDT) reviewed the information provided by ERCOT in the SAR and concludes Regional Standard IRO-006-TRE-1 should be retired. At the direction of the Members Representative Committee (MRC), the Texas RE posted following documents for a 30-day public comment period:

- Retirement Justification
- Retirement Mapping Table
- Retirement Implementation Plan

Summary of Comments

Texas RE conducted a comment period from March 1 - April 2, 2018. Texas RE received three responses from three individual commenters. One commenter agreed that Regional Standard IRO-006-TRE-1 should be retired and did not provide comments. The other two commenters also agreed Regional Standard IRO-006-TRE-1 should be retired and explained the standard is duplicative of national Reliability Standards.

The standard drafting team (SDT) appreciates industry's consideration of Project SAR-010 Retirement of Regional Standard IRO-006-TRE-1. Based up on the response received, the SDT did not make changes to the documents listed above.

Standard Drafting Team's Responses to Comments
Comment Period: March 1 – April 2, 2018
Project SAR-010 Retirement of Regional Standard IRO-006-TRE-1

Question 1	Do you agree Regional Standard IRO-006-TRE-1 should be retired?

Answers	Frequency
Yes	3
No	0

Commenter	Answer	Comment	SDT Response
Lee Maurer, Oncor Electric Delivery	Yes	[None]	Thank you for your comment.
Matt Mereness, Electric Reliability Council of Texas (ERCOT)	Yes	As described in greater detail in ERCOT's Standards Authorization Request and in the Standard Drafting Team's Justification for Retirement, the requirements of IRO-006-TRE-1 are duplicative of requirements in the existing NERC Reliability Standards and should therefore be retired under FERC's Paragraph 81 criteria.	Thank you for your comment.
Daniela Hammons, CenterPoint Energy Houston Electric, LLC	Yes	CenterPoint Energy Houston Electric, LLC agrees that the Regional Standard IRO-006-TRE-1 should be retired. We believe that the	Thank you for your comment.

		reliability objectives required by IRO-006-TRE-1, Requirements R1 and R2 are redundant with recent changes to requirements in continent-wide Reliability Standards that are currently in effect.	

Question 2	**Retirement Justification - Do you agree with the justification for retirement and that the requirements of Regional Standard IRO-006-TRE-1 are covered by the NERC Reliability Standards indicated in the Mapping Table?**

Answers	Frequency
Yes	3
No	0

Commenter	Answer	Comment	SDT Response
Lee Maurer, Oncor Electric Delivery	Yes	[None]	Thank you for your comment.
Matt Mereness, Electric Reliability Council of Texas (ERCOT)	Yes	See response to Question 1.	Thank you for your comment.
Daniela Hammons, CenterPoint Energy Houston Electric, LLC	Yes	The Retirement Justification and Mapping Table identifies redundancies with the reliability objectives and provides the justification for retirement of the Regional Requirements under Paragraph 81 Criteria.	Thank you for your comment.

Question 3	**Implementation Plan - Do you agree the Regional Standard should be retired upon the effective date of approval by regulatory authorities?**

Answers	Frequency
Yes	3

No	0

Commenter	Answer	Comment	SDT Response
Lee Maurer, Oncor Electric Delivery	Yes	[None]	Thank you for your comment.
Matt Mereness, Electric Reliability Council of Texas (ERCOT)	Yes	[None]	Thank you for your comment.
Daniela Hammons, CenterPoint Energy Houston Electric, LLC	Yes	The currently effective continent-wide Reliability Standards facilitate the retirement of the Regional Standard upon the effective date of approval by regulatory authorities, since the reliability objectives are covered by the currently enforceable continent-wide requirements.	Thank you for your comment.