# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

North American Electric Reliability	)	<b>Docket No.</b>
Corporation	)	

# JOINT PETITION OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION AND TEXAS RELIABILITY ENTITY, INC. FOR APPROVAL OF RETIREMENT OF REGIONAL RELIABILITY STANDARD IRO-006-TRE-1

Tammy Cooper General Counsel and Corporate Secretary Texas Reliability Entity Inc. 805 Las Cimas Parkway, Suite 200 Austin, TX 78746 (512) 583-4960 tammy.cooper@texasre.org Shamai Elstein
Senior Counsel
North American Electric Reliability
Corporation
1325 G Street, N.W., Suite 600
Washington, D.C. 20005
(202) 400-3000
(202) 644-8099– facsimile
shamai.elstein@nerc.net

Counsel for the North American Electric Reliability Corporation

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Pursuant to Section 215(d)(1) of the Federal Power Act ("FPA")<sup>1</sup> and Section 39.5<sup>2</sup> of the Federal Energy Regulatory Commission's ("FERC" or "Commission") regulations, the North American Electric Reliability Corporation ("NERC")<sup>3</sup> and the Texas Reliability Entity, Inc. ("Texas RE") respectfully request that the Commission approve the retirement of Texas RE Regional Reliability Standard IRO-006-TRE-1 (IROL and SOL Mitigation in the ERCOT Region).

The purpose of Regional Reliability Standard IRO-006-TRE-1 is to provide and execute transmission loading relief procedures that can be used to mitigate System Operating Limits ("SOLs") or Interconnection Reliability Operating Limits ("IROLs") exceedances for the purpose of maintaining reliable operation of the Bulk Electric System in the Electric Reliability Council of Texas ("ERCOT") region. As discussed below and in Exhibits A and C, since the initial development of this regional standard, other continent-wide Reliability Standards have been developed that have made the requirements of this regional standard redundant and no longer necessary for reliability in the ERCOT Interconnection. The retirement of the regional

<sup>&</sup>lt;sup>1</sup> 16 U.S.C. § 824o (2018).

<sup>&</sup>lt;sup>2</sup> 18 C.F.R. § 39.5 (2018).

The Commission certified NERC as the electric reliability organization ("ERO") in accordance with Section 215 of the FPA on July 20, 2006. *N. Amer. Elec. Reliability Corp.*, 116 FERC ¶ 61,062 (2006).

standard will have no adverse effect on the reliability of the Bulk-Power System and is in the public interest.

#### I. <u>NOTICES AND COMMUNICATIONS</u>

Notices and communications with respect to this filing may be addressed to the following:<sup>4</sup>

Shamai Elstein\*
Senior Counsel
North American Electric Reliability Corporation
1325 G Street, N.W., Suite 600
Washington, D.C. 20005
(202) 400-3000
shamai.elstein@nerc.net

Tammy Cooper\*
General Counsel and Corporate Secretary
Texas Reliability Entity Inc.
805 Las Cimas Parkway, Suite 200
Austin, TX 78746
(512) 583-4960
tammy.cooper@texasre.org

#### II. <u>BACKGROUND</u>

#### A. Regulatory Framework

By enacting the Energy Policy Act of 2005,<sup>5</sup> Congress entrusted the Commission with the duties of approving and enforcing rules to ensure the reliability of the Bulk-Power System, and with the duties of certifying an ERO that would be charged with developing and enforcing mandatory Reliability Standards, subject to Commission approval. Section 215(b)(1)<sup>6</sup> of the FPA states that all users, owners, and operators of the Bulk-Power System in the United States will be subject to Commission-approved Reliability Standards. Section 215(d)(5)<sup>7</sup> of the FPA authorizes the Commission to order the ERO to submit a new or modified Reliability Standard. Section 39.5(a)<sup>8</sup> of the Commission's regulations requires the ERO to file with the Commission for its approval each Reliability Standard that the ERO proposes should become mandatory and enforceable in the United States, each modification to a Reliability Standard that the ERO

Persons to be included on the Commission's service list are identified by an asterisk. NERC respectfully requests a waiver of Rule 203 of the Commission's regulations, 18 C.F.R. § 385.203, to allow the inclusion of more than two persons on the service list in this proceeding.

<sup>5 16</sup> U.S.C. § 824o.

<sup>6</sup> *Id.* § 824o(b)(1).

<sup>&</sup>lt;sup>7</sup> *Id.* § 824o(d)(5).

<sup>&</sup>lt;sup>8</sup> 18 C.F.R. § 39.5(a).

proposes should be made effective, and each Reliability Standard that the ERO proposes for retirement.

The Commission has the regulatory responsibility to approve Reliability Standards that protect the reliability of the Bulk-Power System and to ensure that Reliability Standards are just, reasonable, not unduly discriminatory or preferential, and in the public interest. Pursuant to Section 215(d)(2) of the FPA<sup>9</sup> and Section 39.5(c)<sup>10</sup> of the Commission's regulations, the Commission will give due weight to the technical expertise of the ERO with respect to the content of a Reliability Standard.

Similarly, the Commission approves Regional Reliability Standards proposed by a Regional Entity if it is just, reasonable, not unduly discriminatory or preferential, and in the public interest. <sup>11</sup> In addition, Order No. 672 requires further criteria that a Regional Reliability Standard must satisfy. Specifically, a regional difference from a continent-wide Reliability Standard must either be: (1) more stringent than the continent-wide Reliability Standard the continent-wide Reliability Standard (which includes a regional standard that addresses matters that the continent-wide Reliability Standard does not), or (2) necessitated by a physical difference in the Bulk-Power System. <sup>12</sup> The Commission must give due weight to the technical expertise of a Regional Entity, like Texas RE, that is organized on an Interconnection-wide basis with respect to a Regional Reliability Standard to be applicable within that Interconnection. <sup>13</sup>

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<sup>&</sup>lt;sup>9</sup> 16 U.S.C. § 824o(d)(2).

<sup>&</sup>lt;sup>10</sup> 18 C.F.R. § 39.5(c)(1).

<sup>16</sup> U.S.C. § 824o(d)(2) and 18 C.F.R. § 39.5(a).

Order No. 672, Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards, FERC Stats. & Regs. ¶ 31,204 at P 291, order on reh'g, Order No. 672-A, FERC Stats. & Regs. ¶ 31,212 (2006).

Order No. 672 at P 344.

#### B. Texas RE Regional Reliability Standards Development Process

The proposed Regional Reliability Standard was developed in an open and fair manner and in accordance with the Commission-approved *Texas Reliability Entity Standards*Development Process ("SDP"). <sup>14</sup> Texas RE's standards are developed according to the following characteristic attributes:

- Developed in a fair and open process that provides an opportunity for all interested parties to participate;
- Does not have an adverse impact on commerce that is not necessary for reliability;
- Provides a level of BPS reliability that is adequate to protect public health, safety, welfare, and national security and does not have a significant adverse impact on reliability; and
- Based on a justifiable difference between regions or between sub-regions within the Regional geographic area.

Proposed Texas RE standards are subject to approval by the NERC Board of Trustees ("Board") and FERC before becoming mandatory and enforceable under Section 215 of the FPA. NERC Standards and the Texas RE Regional Reliability Standards are both monitored and enforced through the Texas RE Compliance Monitoring and Enforcement Program. The Texas RE SDP enables all parties within an interest in the standard to participate in its development.

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The Texas Reliability Entity Standards Development Process is available at <a href="https://www.texasre.org/CPDL/TexasRE\_RSDP\_20100506\_posted20160323.pdf#search=Standards%20Development%20Process">https://www.texasre.org/CPDL/TexasRE\_RSDP\_20100506\_posted20160323.pdf#search=Standards%20Development%20Process</a>.

<sup>&</sup>lt;sup>15</sup> 16 U.S.C. 824o.

#### C. Procedural History

This section provides an overview of the initial development and approval of Regional Reliability Standard IRO-006-TRE-1 and the development process for the proposed retirement of the standard.

1. <u>Development and Approval of Regional Reliability Standard IRO-006-TRE-1</u>

On May 31, 2012, the Commission approved Regional Reliability Standard IRO-006-TRE-1 as a mandatory and enforceable Regional Reliability Standard for registered entities within the ERCOT Interconnection. <sup>16</sup> The regional standard was developed to address a FERC directive in Paragraph 964 of Order 693 "to modify the ... ERCOT procedures to ensure consistency with the standard form of the Reliability Standards including Requirements, Measures and Levels of Non-Compliance. <sup>17</sup> IRO-006-TRE-1 covered issues not yet addressed by any continent-wide Reliability Standards. Moreover, Regional Reliability Standard IRO-006-TRE-1 built upon ERCOT's existing transmission loading relief procedures ("TLR") that FERC described as superior to the continent-wide standard. <sup>18</sup>

The Regional Reliability Standard organized existing ERCOT TLR procedures under the NERC Standard template, similar to the IRO-006-EAST-1 and IRO-006-WECC-1 regional standards that addressed similar reliability objectives for the Western and the Eastern Interconnections. Regional Reliability Standard IRO-006-TRE-1 requires applicable Reliability Coordinators to have and implement procedures to provide transmission loading relief for critical transmission facilities. Specifically, it required ERCOT to have procedures to identify and

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Order Approving Regional Reliability Standard, 139 FERC ¶ 61,169 (2012) at P 8.

Mandatory Reliability Standards for the Bulk-Power System, Order No. 693, FERC Stats. & Regs. ¶ 31,242, order on reh'g, Order No. 693-A, 120 FERC ¶ 61,053 (2007) ("Order No. 693").

<sup>&</sup>lt;sup>18</sup> Order No. 693 at P 964.

mitigate SOL and IROL exceedances that would not be resolved by the automatic actions of the ERCOT Nodal market operations system.

#### 2. Retirement of IRO-006-TRE-1

In June 2017, a regional Standard Authorization Request ("SAR") was submitted by ERCOT after a five-year review of Regional Reliability Standard IRO-006-TRE-1 revealed the Regional Reliability Standard to be redundant of continent-wide standards. The SAR, which requested retirement of the Standard, was accepted by the Texas RE Member Representatives Committee ("MRC") on September 8, 2017.

Texas RE initiated Project SAR-010 to review the regional standard. The standard drafting team for this project recommended that the regional standard be retired for the reasons explained in the following section. In accordance with the Texas RE SDP, the proposed retirement of IRO-006-TRE-1 was posted for a 30-day public comment period from March 1, 2018 through April 2, 2018. Following the public comment period, the Texas RE MRC concurred that all of the requirements for development of the proposed retirement of the standard had been met and approved the ballot for posting on May 1, 2018. The ballot pool was open from May 16, 2018 through May 31, 2018.

In accordance with Section 312 of NERC's Rules of Procedure, NERC posted the proposed retirement of IRO-006-TRE-1 for a 45-day comment period from June 21, 2018 through August 6, 2018. The Texas RE Board of Directors approved the retirement of IRO-006-TRE-1 on September 12, 2018. The NERC Board subsequently approved the retirement on November 7, 2018.

#### III. JUSTIFICATION FOR RETIREMENT

As discussed above, Regional Reliability Standard IRO-006-TRE-1 was developed to provide and execute TLR procedures that can be used to avoid and mitigate IROL and SOL

exceedances for the purpose of maintaining reliable operation of the Bulk Power System in the ERCOT Interconnection. In the intervening years, NERC developed continent-wide Reliability Standards which covers the same reliability goals as the requirements in IRO-006-TRE-1, rendering the Regional Reliability Standard redundant.

This section provides a requirement-by-requirement discussion of how the reliability goals of the regional standard are addressed in the continent-wide Reliability Standards. Further detail is provided in the proposed justification for retirement document attached to this petition as **Exhibit A**. In light of the strong protection these continent-wide standards provide for reliability, the Texas RE regional standard is no longer necessary for reliability in the ERCOT Interconnection and should be retired.

# A. IRO-006-TRE-1 Requirement for Procedures Identifying and Mitigating Exceedances of IROLs and SOLs are Addressed by the Continent-wide Reliability Standards

Requirement R1 of IRO-006-TRE-1 requires that Reliability Coordinators have procedures to identify and mitigate exceedances of IROLs and SOLs that will not be resolved by the automatic actions of the ERCOT Nodal market operations systems. This requirement is now addressed in the continent-wide Reliability Standards through the requirement for Reliability Coordinator's to (1) perform Operational Planning Assessments ("OPAs") and Real-time Assessments ("RTAs") and (2) develop and implement Operating Plans to mitigate any SOL or IROL exceedances identified as a result of an OPA or RTA.

Specifically, Reliability Standards IRO-008-2 Requirement R1 requires ERCOT, in its capacity as the Reliability Coordinator for the ERCOT Interconnection, to perform an OPA to determine if next-day planned operations will exceed any SOL or IROL. Requirement R2 of IRO-008-2 requires ERCOT to have an Operating Plan to address any potential SOL and IROL exceedances identified as a result of the OPA.

Similarly, Requirement R4 of IRO-008-2 require ERCOT, in its capacity as the Reliability Coordinator for the ERCOT Interconnection, to perform a Real-time Assessment every 30 minutes to determine if there are any actual or expected SOL or IROL exceedances. Requirement R5 of IRO-008-2 requires the Reliability Coordinators to notify other impacted entities of such actual or expected exceedances.

In addition, IRO-009-2 Requirement R1 requires Reliability Coordinators who identify an IROL one or more days in advance to have Operating Processes, Procedures, or Plans to take or direct actions to prevent or mitigate each IROL exceedance.

Reliability Standards TOP-002-4, Requirements R1 and R2, and TOP-001-4,
Requirements R13 and R14, also require ERCOT, in its capacity as a Transmission Operator
("TOP"), to perform OPAs and RTAs to determine if there are or will be exceedances of any
SOL and develop and initiate Operating Plans to mitigate any such exceedances. Under the
Transmission Operator Coordinated Functional Registration for the Texas RE region, ERCOT is
the only Transmission Operator responsible for performing OPAs and RTAs.

B. IRO-006-TRE-1 Requirement for Identifying and Mitigating Exceedances of Identified IROLs and SOLs are Addressed by the Continent-wide Reliability Standards

Under Requirement R2 of IRO-006-TRE-1, ERCOT, as the Reliability Coordinator for the ERCOT region, must identify and mitigate exceedances of identified IROLs and SOLs that will not be resolved by the automatic actions of the ERCOT Nodal market operations system, in accordance with the procedures required by Requirement R1. This requirement is now addressed in the continent-wide Reliability Standards.

Reliability Standard IRO-002-5 Requirement R3 requires Reliability Coordinators 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 SOL exceedances and to determine any IROL exceedances within its Reliability Coordinator Area.

Additionally, as noted above, 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. Similarly, Reliability Standard TOP-001-4 Requirement R10 requires ERCOT, as a Transmission Operator, to determine SOL exceedances through monitoring and to conduct a RTA every 30 minutes (Requirement R13) to identify SOL and IROL exceedances. Requirement R14 of Reliability Standard TOP-001-4 further requires ERCOT to initiate its Operating Plan to mitigate an identified SOL exceedance.

Because the continent-wide Reliability Standards will ensure that adequate monitoring and action procedures are in place, the Texas RE Regional Reliability Standard requirement may be retired with no adverse effect on reliability.

#### IV. <u>EFFECTIVE DATE</u>

NERC and Texas RE respectfully request that the Commission approve the retirement of Regional Reliability Standard IRO-006-TRE-1 to be effective as of the date of regulatory approval in accordance with the proposed implementation plan attached hereto as **Exhibit B**.

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<sup>&</sup>lt;sup>19</sup> IRO-009-2 Requirements R2 and R3 direct Reliability Coordinators to initiate actions to prevent or mitigate IROL exceedances.

#### V. <u>CONCLUSION</u>

For the reasons set forth above, NERC and Texas RE respectfully request that the Commission approve the proposed retirement of Regional Reliability Standard IRO-006-TRE-1, effective as proposed herein.

Respectfully submitted,

/s/ Shamai Elstein

Tammy Cooper General Counsel and Corporate Secretary Texas Reliability Entity Inc. 805 Las Cimas Parkway, Suite 200 Austin, TX 78746 (512) 583-4960 tammy.cooper@texasre.org Shamai Elstein
Senior Counsel
North American Electric Reliability
Corporation
1325 G Street, N.W., Suite 600
Washington, D.C. 20005
(202) 400-3000
shamai.elstein@nerc.net

Counsel for the North American Electric Reliability Corporation

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## EXHIBIT A



#### **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.

### EXHIBIT B



#### **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.

## EXHIBIT C



### **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



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		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.



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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.