Exhibit A

Implementation Plan

Implementation Plan
WECC-0111 TOP-007-WECC-1a
System Operating Limits
Request to Retire

In accordance with the Reliability Standards Development Procedures (Procedures), Step 5- Post for Comment, "[a]n implementation plan shall be included in at least one iterative posting during the development of the [Regional Reliability Standard] and shall be a part of the final record for consideration prior to ballot."

The Implementation Plan was included in the WECC-0111, Supporting Narrative and Crosswalk to Retire preamble, and was augmented in its Section 4: Implementation Plan.

On December 17, 2014, WECC accepted a Standard Authorization Request (SAR) asking, "To the extent the TOP's Requirements are no longer needed for reliability they should be retired."

Standards Authorization Request

WECC-0111 TOP-007-WECC-1s System Operating Limits - SAR Request to Retire

Approvals Required

- WECC Board of Directors December 2, 2015
- NERC Board of Trustees February 11, 2016
- FERC TBD

Prerequisite Approvals

The project was balloted at WECC from September 16 through October 8, 2015. On October 8, 2015, the WECC Ballot Pool approved retirement of TOP-007-WECC-1a, System Operating Limits, in its entirety. Results of that ballot are included elsewhere in this filing.

On October 29, 2015, the WECC Standards Committee approved forwarding the standard to the WECC Board of Directors with a request for approval.

On December 1, 2015, the WECC Board of Directors (Board) approved retirement of the standard during the WECC December Board meeting.

Applicable Entities

Transmission Operators for the transmission paths in the most current Table titled "Major WECC Transfer Paths in the Bulk Electric System"

Conforming Changes to Other Standards

No precursory steps are required to immediately retire TOP-007-WECC-1a in its entirety because the reliability-related substance is covered by peripheral NERC Standards. As such, no additional action is required to immediately implement retirement of the entire document, subject to all required regulatory approvals.

Effective Date

The Effective Date is proposed to be the first day of the first quarter following appropriate regulatory approval.

Justification of Effective Date

The WECC-0111, TOP-007-WECC-1a, System Operating Limits (TOP) Drafting Team (DT) has reviewed NERC Standards, both in effect and those standards that are NERC Board of Trustees approved pending regulatory filing. The DT and the WECC Ballot Pool have concluded that the substance of WECC Regional Reliability Standard (RRS) [1] should be retired immediately and in its entirety because the reliability-related substance is addressed in peripheral NERC Standards. The DT does not believe any further actions are necessary to implement the proposed retirement.

Consideration of Early Compliance

Because the reliability-related substance of the standard is covered elsewhere, there are no reliability-related ramifications to early compliance.

Retirements

Only the retirement of TOP-007-WECC-1a, System Operating Limits is sought. No other retirements are requested or required.

[1] Unless otherwise specified, capitalized terms are those defined in the NERC Glossary of Terms Used in Reliability Standards, the NERC Functional Model, and the NERC Rules of Procedures.

Exhibit B

Order No. 672 Criteria

Order 672 Criteria
WECC-0111 TOP-007-WECC-1a
System Operating Limits

NERC is responsible for ensuring that the Reliability Standards, Violation Risk Factors (VRF), Violation Severity Levels (VSL), definitions, Variances, and Interpretations developed by drafting teams are developed in accordance with NERC processes. They must also meet NERC's benchmarks for Reliability Standards, as well as criteria for governmental approval.

In FERC Order No. 672,[1] the Federal Energy Regulatory Commission (FERC) identified a number of criteria that it will use to analyze Reliability Standards proposed for approval to ensure that they are just, reasonable, not unduly discriminatory or preferential, and in the public interest. The discussion below identifies these factors, and explains how the proposed retirement of the Regional Reliability Standard meets or exceeds the criteria:

1. Proposed Reliability Standards must be designed to achieve a specified, reliability goal.

NERC Reliability Standards are based on certain reliability principles that define the foundation of reliability for North American bulk power systems. Each Reliability Standard shall enable or support one or more of NERC's reliability principles, thereby ensuring that each standard serves a purpose in support of reliability of the North American bulk power systems.

This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards.

The principle on which the currently approved underlying NERC Standard is premised is as follows:

- **Reliability Principle 1** — Interconnected Bulk Electric 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. Proposed Reliability Standards must contain a technically sound method to achieve the goal.

The proposed Reliability Standard must be designed to achieve a specified reliability goal and must contain a technically sound means to achieve this goal. Although any person may propose a topic for a Reliability Standard to the Electric Reliability Organization (ERO), in the ERO's process, the specific

[1] http://www.nerc.com/files/final_rule_reliability_Order_672.pdf

proposed Reliability Standard should be developed by persons within the electric power industry and community who have a high level of technical expertise and it should be based on sound technical and engineering criteria. It should be based on actual data and lessons learned from past operating incidents, where appropriate. The process for ERO approval of a proposed Reliability Standard should be fair and open to all interested persons. Order No. 672 at Paragraph 324.

Standard Development

This request to retire currently approved NERC Standard TOP-007-WECC-1a, System Operating Limits, was developed using the NERC and WECC Standards development processes approved by FERC.

Among other things, these processes include drafting of the standard by a drafting team composed of subject matter experts (SME). Biographies of those SMEs are provided with this filing. These processes also include repeated public iterative comment/response cycles whereby comments are received from the industry and considered by the drafting team, and responses to those comments are provided by the drafting team.

Technically Sound

A detailed analysis of existing NERC Standards as well as those approved and pending regulatory approval was conducted by the WECC-0111 drafting team. That technical analysis is included in this filing as Attachment B1, Supporting Narrative and Crosswalk to Retire, Section 1: Tabular Crosswalk and Section 2: Supporting Narrative. Those sections depict where the reliability-related substance is already covered as well as a narrative describing that conclusion.

3. **Proposed Reliability Standards must be applicable to users, owners, and operators of the Bulk-Power System, and not others.**

The proposed Reliability Standard may impose a requirement on any user, owner, or operator of such facilities, but not on others. Order No. 672 at P322.

TOP-007-WECC-1a, System Operating Limits, complies with Order 672 in that it applies only to applicable entities, stated in the standard as follows:

"4. Applicability:

4.1 Transmission Operators for the transmission paths in the most current Table titled "Major WECC Transfer Paths in the Bulk Electric System" provided at:

https://www.wecc.biz/Reliability/TableMajorPaths4-28-08.pdf"

4. **Proposed Reliability Standards must be clear and unambiguous as to what is required and who is required to comply.**

The proposed Reliability Standard should be clear and unambiguous regarding what is required and who is required to comply. Users, owners, and operators of the Bulk Power System must know what they are required to do to maintain reliability. Order No. 672 at P325.

Each Requirement identifies the specific applicable entity assigned to an associated task. Each Requirement follows the typical NERC drafting construct that, "Each [Applicable Entity] shall [perform the assigned task] [and, where applicable, under what stated circumstances]."

Although this filing does not propose any added regulatory language, the drafting team made every endeavor to ensure the narrative describing its rationale for retirement of TOP-001-WECC-1a, System Operating Limits was clear and unambiguous.

The project was posted for comment on two different occasions. In Posting 1, three respondents submitted comments. In Posting 2, only one respondent provided a comment. None of the comments received indicated a concern with the clarity of the language or raised any question as to the intent of the project.

The project was also posted at NERC for a 45-day comment period. All respondents reported the project was developed in an open, inclusive, balanced and transparent manner, and that the process afforded adequate due process.

5. **Proposed Reliability Standards must include clear and understandable consequences and a range of penalties (monetary and/or non-monetary) for a violation.**

This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards. As such, addition or modification of compliance elements was not required.

6. **Proposed Reliability Standards must identify clear and objective criteria or measures for compliance, so that they can be enforced in a consistent and non-preferential manner.**

   This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards. As such, addition or modification of measures was not required.

7. **Proposed Reliability Standards should achieve a reliability goal effectively and efficiently - but does not necessarily have to reflect "best practices" without regard to implementation cost.**

   This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards. Because the reliability-related tasks are already being performed in accordance with other reliability standards there should be no adverse reliability or financial impact as a result of immediately implementing the retirement of the standard.

8. **Proposed Reliability Standards cannot be "lowest common denominator," meaning that they cannot reflect a compromise that does not adequately protect bulk power system reliability.**

   The proposed Reliability Standard must not simply reflect a compromise in the ERO's Reliability Standard development process based on the least effective North American practice — the so-called "lowest common denominator" — if such practice does not adequately protect Bulk Power System reliability. Although the Commission will give due weight to the technical expertise of the ERO, it will not hesitate to remand a proposed Reliability Standard if it is convinced the proposed Reliability Standard is not adequate to protect reliability. Order No. 672 at Paragraph 329.

   This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards. Because the reliability-related tasks are already being performed there is no proposed change to the level of reliability or to the practices in place to achieve the existing level of reliability; thus, there is no lower of the standard and no migration to a lowest common denominator.

9. **Proposed Reliability Standards may consider costs to implement for smaller entities but not at consequence of less than excellence in operating system reliability.**

   A proposed Reliability Standard may take into account the size of the entity that must comply with the Reliability Standard and the cost to those entities of implementing the proposed Reliability Standard. However, the ERO should not propose a "lowest common denominator" Reliability Standard that would achieve less than excellence in operating system reliability solely to protect against reasonable expenses for supporting this vital national infrastructure. For example, a small owner or operator of the Bulk Power System must bear the cost of complying with each Reliability Standard that applies to it. Order No. 672 at P330.

   This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards. Because the reliability-related tasks are already being performed there should be no adverse reliability or financial impact as a result of immediately implementing the retirement of the standard. None of the respondents reported any concerns regarding the financial impact of retiring the document.

10. **Proposed Reliability Standards must be designed to apply throughout North America to the maximum extent achievable with a single reliability standard while not favoring one area or approach.**

    A proposed Reliability Standard should be designed to apply throughout the interconnected North American Bulk Power System, to the maximum extent this is achievable with a single Reliability Standard. The proposed Reliability Standard should not be based on a single geographic or regional model, but should take into account geographic variations in grid characteristics, terrain, weather, and other such factors. It should also take into account regional variations in the organizational and corporate structures of transmission owners and operators, variations in generation fuel type and ownership patterns, and regional variations in market design - if these affect the proposed Reliability Standard. Order No. 672 at P331.

    This project is designed to retire TOP-007-WECC-1a, System Operating Limits, a Regional Reliability Standard. If the retirement is approved, the reliability-related tasks will continue to be performed in accordance with other currently approved NERC Standards that are applicable across the continent. This project eliminates a regional standard that duplicates existing NERC Reliability Standard requirements.

11. Proposed Reliability Standards should cause no undue negative effect on competition or restriction of the grid.

As directed by section 215 of the FPA, the Commission itself will give special attention to the effect of a proposed Reliability Standard on competition. The ERO should attempt to develop a proposed Reliability Standard that has no undue negative effect on competition. Among other possible considerations, a proposed Reliability Standard should not unreasonably restrict available transmission capability on the Bulk Power System beyond any restriction necessary for reliability and should not limit use of the Bulk Power System in an unduly preferential manner. It should not create an undue advantage for one competitor over another. Order No. 672 at Paragraph 332

> This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards. Because the reliability-related tasks are already being performed in accordance with other currently-approved NERC Standards, there should be no undue negative effect on competition or restriction of the grid.

12. The implementation time for the proposed Reliability Standards must be reasonable.

In considering whether a proposed Reliability Standard is just and reasonable, the Commission also will consider the timetable for implementation of the new requirements, including how the proposal balances any urgency in the need to implement it against the reasonableness of the time allowed for those who must comply to develop the necessary procedures, software, facilities, staffing or other relevant capability. Order No. 672 at P333.

> This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards. Because the reliability-related tasks are already being performed in accordance with other currently-approved NERC Standards, immediate retirement of the standard should be seamless.

13. The Reliability Standard development process must be open and fair.

Further, in considering whether a proposed Reliability Standard meets the legal standard of review, we will entertain comments about whether the ERO implemented its Commission-approved Reliability Standard development process for the development of the particular proposed Reliability Standard in a

proper manner, especially whether the process was open and fair. However, we caution that we will not be sympathetic to arguments by interested parties that choose, for whatever reason, not to participate in the ERO's Reliability Standard development process if it is conducted in good faith in accordance with the procedures approved by the Commission. Order No. 672 at P334.

In developing its request to retire TOP-007-WECC-1a, WECC followed the WECC Reliability Standards Development Procedures (Procedures) as approved by FERC.

All meetings were open to the public.

Between March 11 and August 6, 2015, the WECC-0111 drafting team conducted eight open meetings. Notice of the meetings was provided to NERC, posted on WECC's website, and embedded in the minutes of each meeting. Meeting minutes are posted on the WECC's website and accessible by the public.

All meetings were supported by a telephone conference bridge associated with an on-line Internet visual capability, allowing all participants to see the document(s) as they were being developed.

The proposed project was posted for public comment by WECC on two different occasions and by NERC on one additional occasion. Comments were solicited, received, considered, and answered. Comments and their responses are included with this filing and are currently located at the WECC-0111 TOP-007-WECC-1a Request to Retire Project Page on the Submit and Review Comments accordion.

While posted at NERC for 45-day comment, respondents were unanimously in accord that the development process was open, inclusive, balanced, transparent, and that the process afforded adequate due process.

14. Proposed Reliability Standards must balance with other vital public interests.

Finally, we understand that at times, the development of a proposed Reliability Standard may require that a particular reliability goal must be balanced against other vital public interests, such as environmental, social and other considerations. We expect the ERO to explain any such balancing in its application for approval of a proposed Reliability Standard. Order No. 672 at P335.

WECC is not aware of any vital public interests impacted by retirement of this standard. No such balancing concerns were raised or noted.

15. Proposed Reliability Standards must consider any other relevant factors.

In considering whether a proposed Reliability Standard is just and reasonable, we will consider the following general factors, as well as other factors that are appropriate for the particular Reliability Standard proposed. Order No. 672 at P 323.

This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards. Because the reliability-related tasks are already being performed in accordance with other currently-approved NERC Standards, retirement of this standard should be seamless to the industry.

Exhibit C

Summary of Retirement History and Complete Record of Retirement Development

Summary of Retirement History

The retirement record for Reliability Standard TOP-007-WECC-1a is summarized below.

I. Overview of the Retirement TOP-007-WECC-1a

On June 18, 2014, FERC approved the Regional Reliability Standard Interpretation of TOP-007-WECC-1a. In response to the Commission's Order, on December 17, 2014, a Standards Authorization Request (SAR) was submitted to WECC, stating that the entire reliability-related substance of TOP-007-WECC-1a is redundant to other continent-wide Reliability Standards and is no longer needed to support reliability.

II. Retirement Ballot History

A. Initial and First Comment Period, Initial Ballot, and Non-Binding Poll

On March 27, 2015, the WECC Drafting Team (WECC DT) distributed a notice of posting for a 45-day comment period asking stakeholders to provide feedback on the proposed retirement of the TOP Reliability Standard consisting of two Requirements. On June 4, 2015, the WECC DT agreed by consensus to forward the WECC project to the WECC Standards Committee (WSC) with a request for ballot; however, a review of the project indicated that a posting of an implementation plan with greater granularity would be in order. Thus, on June 30, 2015, the WECC DT approved an Implementation Plan and a second comment period was distributed for feedback.

B. Second Comment Period, Additional Ballot and Non-Binding Poll

On July 1, 2015, the WECC DT distributed a notice of a second 45-day comment period asking for stakeholders to provide feedback. On August 12, 2015, all WECC stakeholders and the WSC agreed that TOP-007-WECC-1a should be retired.

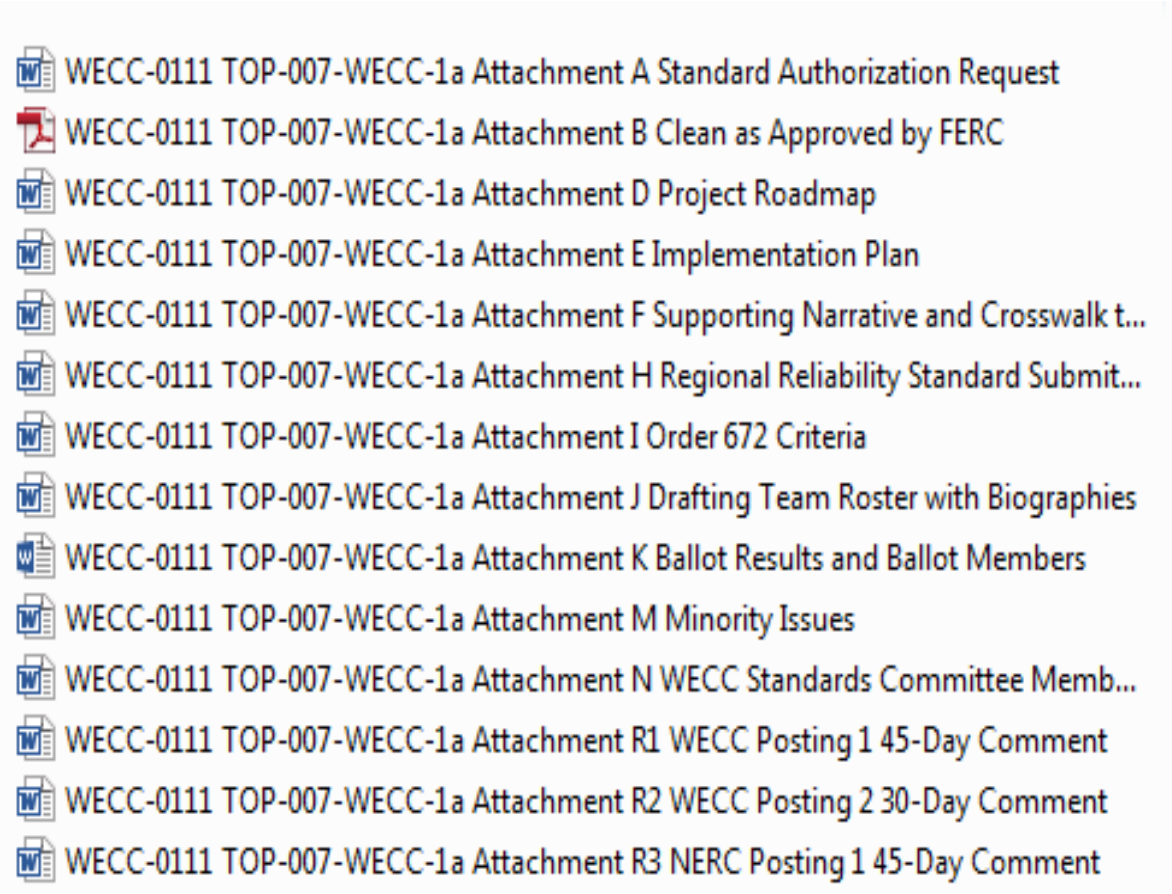
C. Final Ballot

On August 13, 2015, NERC distributed a notice for a third, 45-day public comment period. No comments were received.

D. Board of Trustees Adoption

On December 1, 2015, the WECC Board of Directors approved its retirement. Finally, on February 11, 2016, the NERC Board of Trustees approved the retirement of TOP-007-WECC-1a.

TOP-007-WECC-1a System Operating Limits
WECC Document List



Attachment A
Standard Authorization Request
WECC-0111 TOP-007-WECC-1a
System Operating Limits

Introduction

The Standard Authorization Request (SAR) is used to propose a new or revised document, to retire an existing document, request interpretation of a document, or request an exemption from a requirement contained in a document. The actual SAR as submitted is currently found here at the WECC-0111 TOP-007-WECC-1a, System Operating Limits project page on the SAR Form accordion.

Requester Information

1. Provide your contact information and your alternates contact information:
    - William Shannon Black
    - sblack@wecc.biz
    - (503) 307-5782
    - Western Electricity Coordinating Council (WECC)
    - Matthew Hunsaker
    - mhunsaker@wecc.biz
    - (801) 819-7670

Type of Request

2. Specify the type of request:
    - Request to Retire

Create, Modify or Retire a Document Questions

Provide the requested information for your request to create, modify, or retire the document.

3. Requested Action:
    - Retire/Withdraw an Existing Document
4. Document Type:
    - WECC Regional Reliability Standard
5. Issue: Specify what industry problem this request is trying to resolve.

1) The "WECC Transfer Paths in the Bulk Electric System" (Table) is in need of review and update. The Table is referenced in multiple NERC Standards.[1]
2) Large portions of TOP-007-WECC-1a, if not all of the document, are redundant to other standards or are no longer needed to support reliability.

6. Proposed Remedy: Specify how this request proposes to address the issue described.

1) Review and update the Table.
2) To the extent the TOP's Requirements are no longer on point for reliability they should be modified. To the extent the TOP's Requirements are no longer needed for reliability they should be retired.

7. Functions (Applicable Entity):
   - Transmission Operator

8. Detailed Description:

Table Review

An assigned DT will review any reliability concerns regarding the Table as its review and update proceeds through the Reliability Standards Development Procedures (Procedures).

Procedurally, in FERC Order 752, Docket No. RM09-14-000, FERC approved the TOP to replace TOP-STD-007-0, Operating Transfer Capability. Because the Table is incorporated by reference into the three Regional Reliability Standards (RRS) (see below), FERC expressed concern that "the applicability of [the TOP] could change without Commission and industry notice and opportunity to respond," and instructed WECC to submit a compliance filing to address FERC's concern. P37.

The Commission accepted "WECC's commitment to publicly post any revisions to the WECC Transfer Path Table on the WECC website with concurrent notification to the Commission, NERC, and industry." P43.

In FERC Order 751 and 752 Compliance Filing, Docket RM09-9-000 and RM-09-14-000, WECC reported that it "is using an open, transparent, stakeholder process…to develop the criteria" for

[1] Subsequent Entry: The WECC-0111 drafting team did not alter the Table; therefore, the suggested updates were not required.

modifying the Table. After approval by the WECC Board of Directors, WECC will post the criteria on its website and provide notice to FERC, NERC and the industry through a subsequent Compliance Filing, unless otherwise directed by the Commission." WECC has agreed not to modify "the Tables in the interim, unless directed by the Commission." (All references are in Section III. WECC Transfer Path Table and WECC Remedial Action Schemes Table)

TOP Review

A review of the TOP by the WECC Path Operator Task Force (TF) indicates that the TOP is duplicated in peripheral NERC Reliability Standards and associated Reliability Coordinator procedures (See Attachment A). To the extent that the TOP is found to be duplicative, this SAR requests that those portions be presented to a WECC Ballot Pool with a request for retirement. Should the DT and/or the WECC Ballot Pool determine that portions of the TOP are not redundant and are still needed for reliability, those portions should be updated and retained.

Review of Related Documents

As a matter of due diligence, because the Table is also referenced in two additional RRSs, a review of those RRSs should be conducted to evaluate potential reliability impacts (see Referenced Documents).

This SAR does not suggest making changes to any of the peripheral RRSs; however, if the assigned DT concludes that either the FAC or the PRC should be modified as a result of changes to the Table, the DT will bring that report to the WECC Standards Committee (WSC) with a recommendation that appropriate SARs be drafted to achieve that goal, or in the alternative to expand the scope of this SAR.

It is recommended that the assigned DT also review the WECC Path Rating Catalogue and identify any peripheral changes that might be considered by the assigned Standing Committee.

(Please see SAR attachment A for a Crosswalk describing those Requirements that are no longer needed or that are addressed in peripheral NERC Standards.)

Drafting Team

The Table and associated documents have been reviewed by the Path Operator Task Force (POTF). It is suggested that the WECC Standards Committee (WSC) assign the following

informed SMEs to constitute the drafting team for this SAR. These individuals have volunteered for the DT.

It is recommended that Mr. Vic Howell be assigned as the DT chair.

Vic Howell	Peak Reliability
Robert (Bob) Johnson	Xcel
Phillip Shafeei	Colorado Springs Utilities
Keith Carman	Tri-State
Rich Ellison	Bonneville Power Administration
Chifong Thomas	Smart Wire Grid
Bert Peters	Arizona Public Service

9. Affected Reliability Principles: Which of the following reliability principles is MOST affected by this request?
    - **Reliability Principle 1** — Interconnected Bulk-Electric Systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards.

Reference Uploads

Please reference or upload any affected standards, regional business practices, criterion, policies, white papers, technical reports or other relevant documents. If this request is based on a conflict of law, please include a copy of, or accessible reference to, the specific law or regulatory mandate in conflict.

- FERC Order 751 and 752
- Phase II WECC RC SOL Methodology Final
- WECC-0111 TOP-007-WECC-1a SAR Attachment A

The above three documents are currently located at the WECC-0111 project page on the SAR Form accordion.

A. Introduction

1. **Title:** **System Operating Limits**

2. **Number:** TOP-007-WECC-1a

3. **Purpose:** When actual flows on Major WECC Transfer Paths exceed System Operating Limits (SOL), their associated schedules and actual flows are not exceeded for longer than a specified time.

4. **Applicability**

   4.1. Transmission Operators for the transmission paths in the most current Table titled "Major WECC Transfer Paths in the Bulk Electric System" provided at:

   https://www.wecc.biz/Reliability/TableMajorPaths4-28-08.pdf

5. **Effective Date:** On the first day of the first quarter, after applicable regulatory approval.

B. Requirements

R1. When the actual power flow exceeds an SOL for a Transmission path, the Transmission Operators shall take immediate action to reduce the actual power flow across the path such that at no time shall the power flow for the Transmission path exceed the SOL for more than 30 minutes. *[Violation Risk Factor: High] [Time Horizon: Real-time Operations]*

R2. The Transmission Operator shall not have the Net Scheduled Interchange for power flow over an interconnection or Transmission path above the path's SOL when the Transmission Operator implements its real-time schedules for the next hour. For paths internal to a Transmission Operator Area that are not scheduled, this requirement does not apply. *[Violation Risk Factor: Medium] [Time Horizon: Real-time Operations]*

R2.1. If the path SOL decreases within 20 minutes before the start of the hour, the Transmission Operator shall adjust the Net Scheduled Interchange within 30 minutes to the new SOL value. Net Scheduled Interchange exceeding the new SOL during this 30-minute period will not be a violation of R2.

C. Measures

M1. Evidence that actual power flow has not exceeded the SOL for the specified time limit in R1.

M2. Evidence that Net Scheduled Interchange has not exceeded the SOL when the Transmission Operator implements real-time schedules as required by R2.

M2.1. Evidence that Net Scheduled Interchange was at or below the new SOL within 30- minutes of when the SOL decreased.

D. Compliance

1. **Compliance Monitoring Process**

   1.1 Compliance Monitoring Responsibility

   Compliance Enforcement Authority

   1.2 Compliance Monitoring Period

Compliance Enforcement Authority may use one or more of the following methods to assess compliance:

- Self-report for each incident within three-business day
- Self-report quarterly
- Spot check audits conducted anytime with 30 days notice given to prepare
- Periodic audit as scheduled by the Compliance Enforcement Authority
- Investigations
- Other methods as provided for in the Compliance Monitoring Enforcement Program

Reset Period: One calendar month.

1.3 Data Retention

The Transmission Operators shall keep evidence for Measure M.1 through M2 for three years plus current, or since the last audit, whichever is longer.

1.4. Additional Compliance Information

2. Violation Severity Levels

For Requirement R1:

2.1. Lower: There shall be a Lower Level of non-compliance for Transmission Operators as set forth in the table in Attachment 1–TOP-007-WECC-1.

2.2. Moderate: There shall be a Moderate Level of non-compliance for Transmission Operators as set forth in the table in Attachment 1–TOP-007-WECC-1.

2.3. High: There shall be a High Level of non-compliance for Transmission Operators as set forth in the table in Attachment 1–TOP-007-WECC-1.

2.4. Severe: There shall be a Severe Level of non-compliance for Transmission Operators as set forth in the table in Attachment 1–TOP-007-WECC-1.

For Requirement R2:

2.1. Lower: There shall be a Lower Level of non-compliance for Transmission Operators when the net schedule for power flow over an interconnection or Transmission path is above the path's SOL but is less than or equal to 105% of the path's SOL.

2.2. Moderate: There shall be a Moderate Level of non-compliance for Transmission Operators when the net schedule for power flow over an interconnection or Transmission path is above 105% of the path's SOL but less than or equal to 110% of the path's SOL.

2.3. High: There shall be a High Level of non-compliance for Transmission Operators when the net schedule for power flow over an interconnection or Transmission path is above 110% of the path's SOL.

2.4 **Severe:** None

Version History — Shows Approval History and Summary of Changes in the Action Field

Version	Date	Action	Change Tracking
1	April 16, 2008	Permanent Replacement Standard for TOP-STD-007-0	
1	October 29, 2008	Adopted by the Board of Trustees	
1	April 21, 2011	Order issued by FERC approving TOP-007-WECC-1 (approval effective June 27, 2011)	
1	June 10, 2013	Modified the VRF for Requirement R1 from "Medium" to "High" and the VRF for Requirement R2 from "Low" to "Medium"	
1a	February 6, 2014	Interpretation adopted by the NERC Board of Trustees	
1a	June 18, 2014	FERC letter order approving TOP-007-WECC-1a	

Attachment 1 — TOP-007-WECC-1

Violation Severity Level Table

Percentage by which SOL is exceeded*	Limit exceeded for more than 30 minutes, up to 35 minutes	Limit exceeded for more than 35 minutes, up to 40 minutes	Limit exceeded for more than 40 minutes, up to 45 minutes	Limit exceeded for more than 45 minutes
greater than 0%, up to and including 5%	Lower	Moderate	Moderate	High
greater than 5%, up to and including 10%	Moderate	Moderate	High	High
greater than 10%, up to and including 15%	Moderate	High	High	Severe
greater than 15%, up to and including 20%	High	High	Severe	Severe
greater than 20%, up to and including 25%	High	Severe	Severe	Severe
greater than 25%	Severe	Severe	Severe	Severe

* Measured after 30 continuous minutes of actual flows in excess of SOL.

Appendix 1

Requirement Number and Text of Requirement
R1. When the actual power flow exceeds an SOL for a Transmission path, the Transmission Operators shall take immediate action to reduce the actual power flow across the path such that at no time shall the power flow for the Transmission path exceed the SOL for more than 30 minutes.
Question:
APS asks for clarification that the Requirement R1 applies "to Transmission Operators, as defined in the NERC Glossary of Terms, and not to the *path operators* who have no compliance responsibilities under TOP-007-WECC-1 (TOP), other than any responsibilities they may have as a Transmission Operator for facilities in their respective Transmission Operator Areas." (Emphasis added.)
Response:
APS' Request is governed by the Procedures, Step 3 – Drafting Team Begins Drafting Phase and Submits Draft Standard to WSC, at page 6, stating: "All WECC Standards will follow a standard format that refers to the *"Responsible Entities" included in the NERC Functional Model* and includes compliance measures according to the WECC standard template." (Emphasis added.) The NERC Functional Model 4, in effect at the time the standard was drafted, did not include Path Operators as an approved applicable entity; therefore, the document only applies to the stated Transmission Operators and does not apply to Path Operators. Neither the TOP's predecessor document, *TOP-STD-007-0, Operating Transfer Capability*, nor *TOP-007-WECC-1, System Operating Limits*, lists the Path Operator as an applicable entity. Both list the Transmission Operator. Even though TOP-STD-007-0 referred to an Operating Agent in the column header of its Attachment A, that reference did not impose a task or responsibility on a Path Operator nor did its reference change the applicability of the document to any entity other than the Transmission Operator. During the development of TOP-STD-007-0, the drafting team acknowledged that certain tasks were generally being performed by Path Operators; however, the Procedures prohibited assigning tasks to a Path Operator because the Path Operator is not "included in the NERC Functional Model."

FOR INFORMATIONAL PURPOSES ONLY *

Enforcement Dates: Standard TOP-007-WECC-1a – System Operating Limits

United States

Standard	Requirement	Enforcement Date	Inactive Date
TOP-007-WECC-1a	All	06/18/2014	

*** FOR INFORMATIONAL PURPOSES ONLY ***

Enforcement Dates: Standard TOP-007-WECC-1a — System Operating Limits

United States

Standard	Requirement	Enforcement Date	Inactive Date
TOP-007-WECC-1a	All	06/18/2014	

Attachment D
Project Roadmap
WECC-0111 TOP-007-WECC-1a
System Operating Limits
Request to Retire

Actions	Proposed Date
1. SAR Filed	12-17-2014
2. WSC approved the SAR	1-8-2015
3. DT solicitation notice dispatched	1-9-2015
4. Notice of DT Assignment	1-9-2015
5. Posting 1 Comments Open	3-27-2015
6. Posting 1 Comments Closed (45-day)	5-11-2015
7. DT Meets to answer Comments	5-14-2015
8. DT Meets to approve Implementation Plan	6-30-2015
9. Posting 2 Comments Open	7-1-2015
10. Posting 2 Comments Close	7-31-2015
11. DT Meets to answer Comments	8-6-2015
12. WSC approves for ballot	8-12-2015
13. NERC Posting for 45 days – Open	8-13-2015
14. Notice of Standards Briefing	8-18-2015
15. Notice of Ballot Pool Forming	8-18-2015
16. Ballot Pool – Open	8-18-2015
17. Standards Briefing	9-2-2015
18. Ballot Pool – Closed	9-3-2015
19. Ballot Open	9-16-2015

20. NERC Posting for 45 days – Closed	9-28-2015
21. Ballot Closes	10-8-2015
22. DT meets to address NERC Comments	10-27-2015
23. WSC approves forwarding document to the WECC Board of Directors / Standards Documents to Admin	10-29-2015
24. WECC Board of Directors – Approved	12-1-2015
25. NERC Board of Trustees – Approved	TBA
26. FERC – Approved	TBA

Attachment E
Implementation Plan
WECC-0111 TOP-007-WECC-1a
System Operating Limits
Request to Retire

In accordance with the Reliability Standards Development Procedures (Procedures), Step 5- Post for Comment, "[a]n implementation plan shall be included in at least one iterative posting during the development of the [Regional Reliability Standard] and shall be a part of the final record for consideration prior to ballot."

The Implementation Plan was included in the WECC-0111, Supporting Narrative and Crosswalk to Retire preamble, and was augmented in its Section 4: Implementation Plan.

On December 17, 2014, WECC accepted a Standard Authorization Request (SAR) asking, "To the extent the TOP's Requirements are no longer needed for reliability they should be retired."

Standards Authorization Request

WECC-0111 TOP-007-WECC-1s System Operating Limits - SAR Request to Retire

Approvals Required

- WECC Board of Directors December 2, 2015
- NERC Board of Trustees February 11, 2016
- FERC TBD

Prerequisite Approvals

The project was balloted at WECC from September 16 through October 8, 2015. On October 8, 2015, the WECC Ballot Pool approved retirement of TOP-007-WECC-1a, System Operating Limits, in its entirety. Results of that ballot are included elsewhere in this filing.

On October 29, 2015, the WECC Standards Committee approved forwarding the standard to the WECC Board of Directors with a request for approval.

On December 1, 2015, the WECC Board of Directors (Board) approved retirement of the standard during the WECC December Board meeting.

Applicable Entities

Transmission Operators for the transmission paths in the most current Table titled "Major WECC Transfer Paths in the Bulk Electric System"

Conforming Changes to Other Standards

No precursory steps are required to immediately retire TOP-007-WECC-1a in its entirety because the reliability-related substance is covered by peripheral NERC Standards. As such, no additional action is required to immediately implement retirement of the entire document, subject to all required regulatory approvals.

Effective Date

The Effective Date is proposed to be the first day of the first quarter following appropriate regulatory approval.

Justification of Effective Date

The WECC-0111, TOP-007-WECC-1a, System Operating Limits (TOP) Drafting Team (DT) has reviewed NERC Standards, both in effect and those standards that are NERC Board of Trustees approved pending regulatory filing. The DT and the WECC Ballot Pool have concluded that the substance of WECC Regional Reliability Standard (RRS) [1] should be retired immediately and in its entirety because the reliability-related substance is addressed in peripheral NERC Standards. The DT does not believe any further actions are necessary to implement the proposed retirement.

Consideration of Early Compliance

Because the reliability-related substance of the standard is covered elsewhere, there are no reliability-related ramifications to early compliance.

Retirements

Only the retirement of TOP-007-WECC-1a, System Operating Limits is sought. No other retirements are requested or required.

[1] Unless otherwise specified, capitalized terms are those defined in the NERC Glossary of Terms Used in Reliability Standards, the NERC Functional Model, and the NERC Rules of Procedures.

Attachment F
Supporting Narrative and Crosswalk to Retire WECC-0111 TOP-007-WECC-1a System Operating Limits – Retire or Modify

MEMO

Date: August 6, 2015

Subject: Retirement of TOP-007-WECC-1a (TOP)
System Operating Limits
Posting 2[1]

The WECC-0111, TOP-007-WECC-1a, System Operating Limits (TOP) – Retire or Modify – Drafting Team (DT) has reviewed NERC Standards, both in effect and those standards that are approved pending regulatory filing. The DT has concluded that the substance of WECC Regional Reliability Standard (RRS) [2] should be retired immediately and in its entirety because the reliability-related substance is addressed in peripheral NERC Standards. The DT does not believe any further actions are necessary to implement the proposed changes.

Request to Retire

On March 27, 2015 and again on June 30, 2015, WECC distributed a notice of posting for comment asking stakeholders to provide feedback on the proposed retirement of the TOP consisting of the following two Requirements:

B. Requirements

> **R1.** When the actual power flow exceeds an SOL for a Transmission path, the Transmission Operators shall take immediate action to reduce the actual power flow across the path such that at no time shall the power flow for the Transmission path exceed the SOL for more than 30 minutes. *[Violation Risk Factor: High] [Time Horizon: Real-time Operations]*
>
> **R2.** The Transmission Operator shall not have the Net Scheduled Interchange for power flow over an interconnection or Transmission path above the path's SOL when the Transmission Operator implements its real-time schedules for the next hour. For paths internal to a Transmission Operator Area that are not scheduled, this requirement does not apply. *[Violation Risk Factor: Medium] [Time Horizon: Real-time Operations]*
>
> > **R2.1.** If the path SOL decreases within 20 minutes before the start of the hour, the Transmission Operator shall adjust the Net Scheduled Interchange within 30 minutes to the new SOL value. Net Scheduled Interchange exceeding the new SOL during this 30-minute period will not be a violation of R2.

In each posting, comments were received through a standardized electronic template.

[1] Posting 2 became the final version. A redline is not provided because the recommendation is to retire the document in its entirety.

[2] Unless otherwise specified, capitalized terms are those defined in the NERC Glossary of Terms Used in Reliability Standards, the NERC Functional Model, and the NERC Rules of Procedures.

Posting 1 was posted for comment from March 27 through May 11, 2015. Posting 2 was posted for comment from July 1 through July 31, 2015.

In Posting 1, comments were received from three entities representing five of the eight WECC Standards Voting Sectors. Of the three comments received, all three agreed Requirement R1 should be retired and would not result in any negative impacts to the Bulk Electric System (BES). One entity (Idaho Power) commented that Requirement R2 should not be retired as to do so would leave reliability-related tasks uncovered. After reviewing Idaho's concerns, the DT disagreed with Idaho's positions. Although the DT made no further substantive changes to the project it did further buttress its previous arguments in response to Idaho's concerns.

In Posting 2, comments were received from one entity representing two of the eight WECC Standards Voting Sectors. That entity, the California Independent System Operator was in support of complete retirement of the document.

On June 4, 2015, the DT agreed by consensus to forward the WECC-0111 project to the WECC Standards Committee (WSC) with a request for ballot; however, a review of the project indicated that posting of an implementation plan with greater granularity would be in order. Posting 2 met that requirement.

Structure and Overview

The following narrative and table are offered in support of the retiring Requirements R1 and R2. The narrative is presented in four parts: 1) presentation of analysis in tabular form (crosswalk) illustrating current and future requirements under NERC Standards, 2) a supportive narrative, 3) a proposed project roadmap, and 4) a proposed Implementation Plan.

If you have questions on the narrative, the DT encourages you to contact the DT chair, Mr. Vic Howell, vhowell@peakrc.com at 970-776-5573, or WECC Staff support, Mr. W. Shannon Black, sblack@wecc.biz, at (503) 307-5782.

Section 1: Tabular Crosswalk

Requirement R1

When a System Operating Limit (SOL) is exceeded, TOP Requirement R1 requires a Transmission Operator (TOp) to take immediate action, reduce power flow, and do so within 30 minutes.

In approved NERC Standards currently in effect, the TOp is required to:

1) plan not to exceed an SOL,[3]
2) implement that plan,[4]
3) operate to prevent violating an SOL,[5]
4) operate within the SOL,[6] and to
5) take immediate action if an SOL is exceeded.[7 & 8]

Thus, the TOP R1 is redundant to the existing NERC Standards and should be retired.

Analysis Table: Requirement R1		
TOP-007-WECC-1 Requirements	**NERC Standards, Approved and in Effect**	**NERC Standards, Approved Pending Regulatory Filing**
R1. When the actual power flow exceeds an SOL for a Transmission path, the Transmission Operators shall take immediate action to reduce the actual power flow across the path such that at no time shall the power flow for the Transmission path exceed the SOL for more than 30 minutes. [Violation Risk Factor: High] [Time Horizon: Real-time Operations]	TOP-004-2 R6. Transmission Operators, individually and jointly with other Transmission Operators, shall develop, maintain, and implement formal policies and procedures to provide for transmission reliability. These policies and procedures shall address the execution and coordination of activities that impact inter- and intra-Regional reliability, including:	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). [Violation Risk Factor: Medium] [Time Horizon: Operations Planning]

[3] TOP-002-2.1b, R10
[4] TOP-004-2, R6
[5] TOP-008-4, R2
[6] TOP-004-2, R1 and R2
[7] TOP-008-1, R1
[8] Arguably, the TOP's plans are then coordinated with the Reliability Coordinator. IRO-001-1.1, Reliability Coordination of Responsibilities and Authorities, R7.

	R6.1. Monitoring and controlling voltage levels, and real and reactive power flows. R6.2. Switching transmission elements. R6.3. Planned outages of transmission elements. R6.4. Responding to IROL and SOL violations. TOP-002-2.1b R10. Each Balancing Authority and Transmission Operator shall plan to meet all System Operating Limits (SOL) and Interconnection Reliability Operating Limits (IROL). TOP-008-1 R2. Each Transmission Operator shall operate to prevent the likelihood that a disturbance, action, or inaction will result in an IROL or SOL violation in its area or another area of the Interconnection. In instances where there is a difference in derived operating limits, the Transmission Operator shall always operate the Bulk Electric System to the most limiting parameter.	TOP-002-4 R2. Each Transmission Operator shall have an Operating Plan(s)[9] for next-day operations to address potential System Operating Limit (SOL) exceedances identified as a result of its Operational Planning Analysis, as required in Requirement R1. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning] TOP-002-4 R3. Each Transmission Operator shall notify entities identified in the Operating Plan(s) cited in Requirement R2 as to their role in those plan(s). [Violation Risk Factor: Medium] [Time Horizon: Operations Planning] TOP-001-3 R1. Each Transmission Operator shall act to maintain the reliability of its Transmission Operator Area via its own actions or by issuing Operating Instructions. [Violation Risk Factor: High][Time Horizon: Same-Day Operations, Real-time Operations]

[9] Unless otherwise specified, all capitalized terms carry the definition supported in the NERC Glossary of Terms and the NERC Functional Model.

Per the NERC System Operating Limit (SOL) White Paper, timing requirements are expected to be addressed in Operating Plans. Page 8 of the NERC SOL White Paper states:

> Operating Plans contain details to include appropriate timelines to escalate the level of mitigating plans/strategies to ensure BES performance is maintained as per approved FAC-011-2, Requirement R2, preventing SOL exceedances from becoming an IROL. Operating Plan(s) must include the appropriate time element to return the system to within acceptable Normal and Emergency (short-term) Ratings and/or operating limits identified above.

	TOP-004-2 R1. Each Transmission Operator shall operate within the Interconnection Reliability Operating Limits (IROL) and System Operating Limits (SOL). TOP-004-2 R2. Each Transmission Operator shall operate so that instability, uncontrolled separation, or cascading outages will not occur as a result of the most severe single contingency. TOP-008-1 R1. The Transmission Operator experiencing or contributing to an IROL or SOL violation shall take immediate steps to relieve the condition, which may include shedding firm load.	TOP-001-3 R2. Each Balancing Authority shall act to maintain the reliability of its Balancing Authority Area via its own actions or by issuing Operating Instructions. [Violation Risk Factor: High][Time Horizon: Same-Day Operations, Real-time Operations] 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: [Violation Risk Factor: High] [Time Horizon: Real-Time Operations] 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 R14. Each Transmission Operator shall initiate its Operating Plan to mitigate an SOL exceedance identified as part of its Real-time monitoring or Real-time Assessment. [Violation Risk Factor: High] [Time Horizon: Real-time Operations]

		Rationale for Requirement R14: The original Requirement, R8, was deleted and original Requirements R9 and R11 were revised to respond to NOPR paragraph 42, which raised the issue of handling all SOLs and not just a subset of SOLs. The drafting team has developed a white paper on SOL exceedances that explains its intent on what needs to be contained in such an Operating Plan. TOP-001-3 R18. Each Transmission Operator shall operate to the most limiting parameter in instances where there is a difference in SOLs. [Violation Risk Factor: High] [Time Horizon: Operations Planning, Same-Day Operations, Real-time Operations] Rationale for Requirement R18: Derived limits replaced by SOLs for clarity and specificity. SOLs include voltage, stability, and thermal limits and are thus the most limiting factor.

Requirement R2

The TOp is required to prevent Net Scheduled Interchange (NSI) from exceeding an SOL when the TOp implements its Real-time schedules for the next hour. If the SOL decreases within 20 minutes before the start of the hour, the TOp is required to adjust the NSI within 30 minutes to the new SOL value.

In approved NERC Standards, NSI is addressed by the Balancing Authority[10] – not the TOp, and the prevention and mitigation of SOL exceedances are addressed by the TOp requirements listed in the Analysis Table for Requirement R1. With the retirement of Requirement R2, BES reliability will continue to be upheld through the approved NERC Standards that require operation within SOLs and IROLs. Scheduling practices, business rules and procedures regarding scheduling – relative to Available Transfer Capability and Available Flow Capability – are more appropriately addressed in the North American Energy Standards Board's standards.

Analysis Table: Requirement R2		
R2. The Transmission Operator shall not have the Net Scheduled Interchange for power flow over an interconnection or Transmission path above the path's SOL when the Transmission Operator implements its real-time schedules for the next hour. For paths internal to a Transmission Operator Area that are not scheduled, this requirement does not apply. [Violation Risk Factor: Medium] [Time Horizon: Real-time Operations]	Planning and operating requirement references are contained in the Requirement R1 section and are not repeated here. NSI is addressed by the BA, not the TOp. A supporting narrative for the premise is contained in the analysis segment of this filing and is supported by the Glossary of Terms Used in NERC Reliability Standards as well as the NERC Functional Model.[11] TOP-002-2.1b R5. Each Balancing Authority and Transmission Operator shall plan to meet scheduled system configuration, generation dispatch, interchange scheduling and demand patterns.	Planning and operating requirement references are contained in the Requirement R1 section and are not repeated here. TOP-002-4 R4. Each Balancing Authority shall have an Operating Plan(s) for the next-day that addresses: [Violation Risk Factor: Medium] [Time Horizon: Operations Planning] 4.1 Expected generation resource commitment and dispatch 4.2 Interchange scheduling 4.3 Demand patterns 4.4 Capacity and energy reserve requirements, including deliverability capability
R2.1. If the path SOL decreases within 20 minutes prior to the start of	TOP-002-2.1b R6. Each Balancing Authority and Transmission Operator shall plan to meet unscheduled	TOP-002-4 R5. Each Balancing Authority shall notify entities

[10] INT-006-4, R1

[11] Additional supporting evidence can be found in the North American Energy Standards Board conventions; however, those conventions are not addressed in this filing.

the hour, the Transmission Operator shall adjust the Net Scheduled Interchange within 30 minutes to the new SOL value. Net Scheduled Interchange exceeding the new SOL during this 30-minute period will not be a violation of R2.	changes in system configuration and generation dispatch (at a minimum N-1 Contingency planning) in accordance with NERC, Regional Reliability Organization, sub-regional, and local requirements. IRO-005-3.1a R11. The Transmission Service Provider shall respect SOLs and IROLs in accordance with filed tariffs and regional Total Transfer Calculation and Available Transfer Calculation processes. TOP-002-2.1b R12. The Transmission Service Provider shall include known SOLs or IROLs within its area and neighboring areas in the determination of transfer capabilities, in accordance with filed tariffs and/or regional Total Transfer Capability and Available Transfer Capability calculation processes.	identified in the Operating Plan(s) cited in Requirement R4 as to their role in those plan(s). [Violation Risk Factor: Medium] [Time Horizon: Operations Planning] TOP-001-3 R2. Each Balancing Authority shall act to maintain the reliability of its Balancing Authority Area via its own actions or by issuing Operating Instructions. [Violation Risk Factor: High][Time Horizon: Same-Day Operations, Real-time Operations]

Section 2: Supporting Narrative

Requirement R1

The essentials of the TOP, Requirement R1, call for the TOp to complete the following tasks:

1) Reduce the actual flow when a System Operating Limit (SOL) is exceeded.
2) Reduce the flow in less than 30 minutes.

A review of NERC Standards currently in effect, and those standards approved but pending regulatory filing, shows the above two mandates are amply covered in numerous other NERC Standards; therefore, Requirement R1 should be retired. The premise is well represented in the referenced documents footnoted in the above table.

The DT also notes that in TOP-004-2, Transmission Operations, the TOp is required to protect against instability, uncontrolled separation, or cascading outages (R3), making every effort to stay connected to the system (R5), and to work with other TOps to achieve the goal (R6) while specifically focusing on monitoring and control of voltage levels, real power flows, and response to SOL violations (R6). Specifically, the TOp must explicitly operate with SOLs (R1) thereby negating the additional requirement of the TOP.

There is also a level of coordination between entities that will ensure continued reliability of the Interconnection in the event the TOP Requirement R1 is retired. This coordination extends to Balancing Authorities (BA) and Reliability Coordinators (RC) in TOP-002-2-2.1b, Normal Operations, in that TOps are required to work with BAs to maintain plans to ensure reliable operation (R1, R4, and R11) and the ability to meet scheduled system configuration (R5). In short, if the TOP Requirement R1 is retired, there are ample peripheral NERC requirements to ensure the task is addressed.

Review of NERC Standards Approved but Pending Regulatory Filing

Although the DT is confident that existing NERC Standards amply cover Requirement R1, the DT also reviewed NERC Standards that were approved but pending regulatory filing to ensure that no future conflicts were anticipated. That review supported the DT's position, found no potential conflicts, and revealed additional standards in support of the DT's position.

For example: TOP-002-4, Operations Planning, requires the TOp to have an Operational Planning Analysis (OPA) to determine whether planned operations for the next day will exceed SOLs and IROLs,[12] to develop Operating Plans (OP) that address potential SOL exceedances identified in OPAs,[13] and to notify entities identified in the OP as to their role in those plans.[14] Further, each TOp is required to initiate its OP to mitigate a SOL exceedance identified as part of its Real-time monitoring or Real-time

[12] TOP-002-4, R1
[13] TOP-002-4, R2
[14] TOP-002-4, R3

Assessment.[15] These OPs are expected to include, among other things, company-specific system restoration plans that detail an Operating Procedure for blackstarting units, and Operating Processes for communicating restoration progress with other entities.

[15] TOP-001-3, R14

Requirement R2

The essentials of TOP, Requirement R2, call for the TOp to complete the following tasks:

1) Ensure the Net Scheduled Interchange (NSI) for power flow over an interconnection or Transmission path does not exceed the SOL when the TOp implements its real-time schedules for the next hour; (and)
2) Downward adjust its schedules if the SOL decreases within 20 minutes before the start of the hour.

Requirement R2 should be retired as it is fundamentally flawed in requiring the TOp to address NSI.

The TOP was originally approved on April 16, 2008.[16] The NERC Functional Model (FM) Version 5 was last published in May 12, 2010. The tasks assigned to the TOp in the TOP do not align with the roles and responsibilities described in the current version of the FM. The DT notes that the assignment of the TOp as the Applicable Entity for TOP, Requirement R2 is fundamentally flawed because the TOp does not control NSI.[17] As such those entities assigned to address NSI under the FM should retain that task. The DT has determined that retirement of Requirement R2 will not result in reliability gap as control and responsibility for NSI will remain covered by the appropriate functional entities in other NERC Standards. NSI, by definition, is the "algebraic sum of all Interchange Schedules across a given path or between Balancing Authorities for a given period or instant in time." Restated, the TOp is required in the TOP, Requirement R2 to be responsible for NSI that is the sum of all agreed upon Interchange Transactions to include:

1) Megawatt size,
2) Start and end time,
3) Beginning and ending ramp times and rates, and
4) Type required for delivery and receipt of power and energy between the Source and the Sink Balancing Authorities – AKA: the Interchange Schedule.[18]

An Interchange Schedule cannot take place without an Interchange Transaction, the details of which are requested via a Request-for-Interchange (RFI),[19] submitted for approval as an Arranged Interchange, implemented via an Interchange Transaction Tag or e-Tag, and communicated by the Interchange Authority. As the TOp is not part of the aforementioned chain, and whereas the Request-for-Interchange is generally submitted by the Purchasing-Selling Entity and/or the Load-Serving Entity,[20] and

[16] The earlier designation was TOP-STD-007-0.
[17] Of the 22 "relationships with Other Functional Entities" assigned to the TOp in the NERC Functional Model, none address NSI or scheduling.
[18] See defining for Interchange Schedule.
[19] A collection of data as defined in the NAESB Business Practice Standards submitted for the purpose of implementing bilateral Interchange between Balancing Authorities or an energy transfer within a single Balancing Authority.
[20] See NAESB WEQ-004-1 and 004-2.

approved or denied by the Balancing Authority[21] and Transmission Service Provider,[22] it is not in the purview of the TOp to ensure the NSI does not exceed an SOL, nor is that a reliability issue since several Reliability Standards exist which require the TOp to operate within SOLs and to prevent and mitigate SOL exceedances, thus preserving the reliability aspect of the BES. Thus, Requirement R2 in the TOP is incorrectly assigned and should be retired.

In INT-006-4, Evaluation of Interchange Transactions, Requirement R1, the BA is required to approve or deny Arranged Interchange (AI) if it does not expect to be capable of supporting the magnitude of the interchange or ramping throughout the duration of the AI. To further clarify the intent of the Requirement, the standard's Background section makes it clear that Requirement R1 describes those circumstances when a BA "must" deny an AI (see below). Because the BA has access to all of the information required to perform the assigned task, the BA is an appropriate Applicable Entity to carry out the assigned task. By contrast, the TOp does not have access to each of these informational elements and is therefore not the best choice to perform the associated tasks. This distinction is noted by the obvious absence of reference to the TOp in any of the existing standards of the NERC INT suite.

Furthermore INT-006-4 contains a requirement that specifically addresses changes to AI for reliability purposes. Requirement R3 states:

> R3. The Source Balancing Authority and the Sink Balancing Authority receiving a Reliability Adjustment Arranged Interchange shall approve or deny it prior to the expiration of the time period defined in Attachment 1, Column B. [Violation Risk Factor: Lower] [Time Horizon: Operations Planning, Same-day Operations, Real-time Operations]
>
> 3.1. If a Balancing Authority denies a Reliability Adjustment Arranged Interchange, the Balancing Authority must communicate that fact to its Reliability Coordinator no more than 10 minutes after the denial.

Requirement R2 should be retired because coordination of Real-time schedules for the next-hour is covered in other NERC Standards.

The TOP Requirement R2 requires that the TOp ensure that power flows over an interconnection or path do not exceed assigned SOL's when the TOp implements its real-time schedules for the next hour. Under TOP-002-2.1b, Normal Operations Planning, Requirement R4, the TOp is required to coordinate its current-day plans with the RC. Current day plans would include Real-time operations (present time as opposed to future time), "so that normal Interconnection operation will proceed in an orderly and consistent manner." The same standard at Requirement R10 states:

> **R10.** Each Balancing Authority and Transmission Operator shall plan to meet all System Operating Limits (SOL) and Interconnection Reliability Operating Limits (IROL). (See also…)

[21] INT-006-4, Evaluation of Interchange Transactions, Requirement R1.
[22] INT-006-4, Evaluation of Interchange Transactions, Requirement R2.

R1. Each Transmission Operator shall operate within the Interconnection Reliability Operating Limits (IROL) and System Operating Limits (SOL). (TOP-004-2, Transmission Operations.)[23]

The TOp is required to plan to meet all SOLs and also to operate within SOLs when operating in Real-time, irrespective of scheduling practices.

Finally, as to covering any situational awareness contained in TOP, Requirement R2, this is addressed in TOP-002-2.1b, Requirement R.11, which requires the TOp to perform cyclical studies to determine potential changing SOLs. Again, if the intent of the TOP Requirement R2 is to enhance situational awareness, the TOp's cyclical SOL review should meet that need.

TOP-007-WECC-1a, System Operating Limits, Requirement R2 should be retired because it is redundant to other NERC Standards. Those standards require: 1) BAs to implement NSI, not the TOp, 2) oversight of SOLs to be shared between TOps and the RC, and 3) TOps to maintain SOL awareness, all of which are covered in the NERC TOP suite of standards as addressed above. The DT has concluded that there is no need to retain the Requirement R2 as its function is redundant and unnecessary for reliability.

[23] A majority of this TOP addresses treatment of SOLs.

Section 3: Roadmap

Actions	Proposed Date
1. SAR Filed	12-17-2014
2. WSC approved the SAR	1-8-2015
3. DT solicitation notice dispatched	1-9-2015
4. Notice of DT Assignment	1-9-2015
5. Posting 1 Comments Open	3-27-2015
6. Posting 1 Comments Closed (45-day)	5-11-2015
7. DT Meets to answer Comments	5-14-2015
8. DT Meets to approve Implementation Plan	6-30-2015
9. Posting 2 Comments Open	7-1-2015
10. Posting 2 Comments Close	7-31-2015
11. DT Meets to answer Comments	8-6-2015
12. WSC approves for ballot	8-12-2015
13. NERC Posting for 45 days – Open	8-12-2015
14. Ballot Pool – Closed	9-3-2015
15. Ballot Closes	10-8-2015
16. NERC Posting for 45 days – Closed	9-28-2015
17. Ballot Opens	9-16-2015
18. Notice of Standards Briefing	8-18-2015
19. Notice of Ballot Pool Forming	8-18-2015
20. Ballot Pool – Open	8-18-2015

21. Standards Briefing	9-2-2015
22. DT meets to address NERC Comments – if needed	10-27-2015
23. WSC Approves	10-29-2015
24. WECC Board of Directors – Approves	12-1-2015

Section 4: Implementation Plan

No-precursory steps are required to immediately retire the TOP in its entirety because the reliability-related substance is covered by peripheral NERC Standards. As such, no additional action is required to implement retirement of the entire document, subject to all required regulatory approvals.

In accordance with the Reliability Standards Development Procedures (Procedures), Step 5- Post for Comment, "[a]n implementation plan shall be included in at least one iterative posting during the development of the [Regional Reliability Standard] and shall be a part of the final record for consideration prior to ballot."

On December 17, 2014, WECC accepted a Standards Authorization Request (SAR) requesting, "To the extent the TOP's Requirements are no longer needed for reliability they should be retired."

On March 27, 2015, WECC distributed on behalf of the WECC-0111, TOP-007-WECC-1a, System Operating Limits (TOP) – Retire or Modify – Drafting Team (DT) notice of posting for comment (Posting 1). Posting 1 noticed the project's intent "that the substance of [the TOP] should be retired in its entirety because the reliability-related substance is addressed in peripheral NERC Standards"[24]; thus, immediate retirement would have no detrimental impact on the BES. In Section 3 of Posting 1, the DT indicated its intent to file a request for retirement with NERC during the last quarter of 2015 with the final retirement date to be set by the appropriate regulatory entity.

On June 9, 2015, the DT posted Responses to Comments for Posting 1 indicating: 1) because retirement of the standard will have no detrimental impact on the reliability of the BES, the DT recommends retirement become effective on the first day of the first quarter following appropriate regulatory approval, and 2) that [a]fter reviewing the associated standards and practices, the DT concluded that there are no pre-cursory steps required to implement retirement of the standard as of the above recommended Effective Date.

[24] Posting 1 Preamble

Regional Reliability Standard Submittal Request
Attachment H

Region:	**Western Electricity Coordinating Council**
Regional Standard Number:	**TOP-007-WECC-1a**
Regional Standard Title:	**System Operating Limits**
Date Submitted:	**January 8, 2016**
Regional Contact Name:	**Steven Rueckert**
Regional Contact Title:	**Director of Standards**
Regional Contact Telephone Number:	**(801) 883-6878**

Request (check all that apply):

- ☒ Retire an Existing Standard
- ☐ Approval of a new standard
- ☐ Revision of an existing standard
- ☐ Withdrawal of an existing standard
- ☐ Urgent Action

Has this action been approved by your Board of Directors:

- ☒ Yes – December 1, 2015
- ☐ No

(If no please indicate date standard action is expected along with the current status (e.g., third comment period with anticipated board approval on mm/dd/year)):

On December 1, 2015, the WECC Board of Directors approved retirement of the document.

[Note: The purpose of the remaining questions is to provide NERC with the information needed to file the regional standard(s) with FERC. The information provided may to a large degree be used verbatim. It is extremely important for the entity submitting this form to provide sufficient detail that clearly delineates the scope and justification of the request.]

Concise statement of the basis and purpose (scope) of request:	The entire reliability-related substance of TOP-007-WECC-1a, System Operating Limits is redundant to other standards or is no longer needed to support reliability. The drafting team recommends complete retirement of the document.
Concise statement of the justification of the request:	A detailed analysis of existing NERC Standards as well as those approved and pending regulatory approval was conducted by the WECC-0111 drafting team. That analysis is included in Attachment F, Supporting Narrative and Crosswalk to Retire, Section 1: Tabular Crosswalk and Section 2: Supporting Narrative. Those sections depict where the reliability-related substance is already covered as well as a narrative describing that conclusion.

Attachment I
Order 672 Criteria
WECC-0111 TOP-007-WECC-1a
System Operating Limits

NERC is responsible for ensuring that the Reliability Standards, Violation Risk Factors (VRF), Violation Severity Levels (VSL), definitions, Variances, and Interpretations developed by drafting teams are developed in accordance with NERC processes. They must also meet NERC's benchmarks for Reliability Standards, as well as criteria for governmental approval.

In FERC Order No. 672,[1] the Federal Energy Regulatory Commission (FERC) identified a number of criteria that it will use to analyze Reliability Standards proposed for approval to ensure that they are just, reasonable, not unduly discriminatory or preferential, and in the public interest. The discussion below identifies these factors, and explains how the proposed retirement of the Regional Reliability Standard meets or exceeds the criteria:

1. Proposed Reliability Standards must be designed to achieve a specified, reliability goal.

NERC Reliability Standards are based on certain reliability principles that define the foundation of reliability for North American bulk power systems. Each Reliability Standard shall enable or support one or more of NERC's reliability principles, thereby ensuring that each standard serves a purpose in support of reliability of the North American bulk power systems.

This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards.

The principle on which the currently approved underlying NERC Standard is premised is as follows:

- **Reliability Principle 1** — Interconnected Bulk Electric 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. Proposed Reliability Standards must contain a technically sound method to achieve the goal.

The proposed Reliability Standard must be designed to achieve a specified reliability goal and must contain a technically sound means to achieve this goal. Although any person may propose a topic for a Reliability Standard to the

[1] http://www.nerc.com/files/final_rule_reliability_Order_672.pdf

Electric Reliability Organization (ERO), in the ERO's process, the specific proposed Reliability Standard should be developed by persons within the electric power industry and community who have a high level of technical expertise and it should be based on sound technical and engineering criteria. It should be based on actual data and lessons learned from past operating incidents, where appropriate. The process for ERO approval of a proposed Reliability Standard should be fair and open to all interested persons. Order No. 672 at Paragraph 324.

Standard Development

This request to retire currently approved NERC Standard TOP-007-WECC-1a, System Operating Limits, was developed using the NERC and WECC Standards development processes approved by FERC.

Among other things, these processes include drafting of the standard by a drafting team composed of subject matter experts (SME). Biographies of those SMEs are provided with this filing. These processes also include repeated public iterative comment/response cycles whereby comments are received from the industry and considered by the drafting team, and responses to those comments are provided by the drafting team.

Technically Sound

A detailed analysis of existing NERC Standards as well as those approved and pending regulatory approval was conducted by the WECC-0111 drafting team. That technical analysis is included in this filing as Attachment B1, Supporting Narrative and Crosswalk to Retire, Section 1: Tabular Crosswalk and Section 2: Supporting Narrative. Those sections depict where the reliability-related substance is already covered as well as a narrative describing that conclusion.

3. Proposed Reliability Standards must be applicable to users, owners, and operators of the Bulk-Power System, and not others.

The proposed Reliability Standard may impose a requirement on any user, owner, or operator of such facilities, but not on others. Order No. 672 at P322.

TOP-007-WECC-1a, System Operating Limits, complies with Order 672 in that it applies only to applicable entities, stated in the standard as follows:

"4. **Applicability:**

4.1 Transmission Operators for the transmission paths in the most current Table titled "Major WECC Transfer Paths in the Bulk Electric System" provided at:

https://www.wecc.biz/Reliability/TableMajorPaths4-28-08.pdf"

4. **Proposed Reliability Standards must be clear and unambiguous as to what is required and who is required to comply.**

The proposed Reliability Standard should be clear and unambiguous regarding what is required and who is required to comply. Users, owners, and operators of the Bulk Power System must know what they are required to do to maintain reliability. Order No. 672 at P325.

Each Requirement identifies the specific applicable entity assigned to an associated task. Each Requirement follows the typical NERC drafting construct that, "Each [Applicable Entity] shall [perform the assigned task] [and, where applicable, under what stated circumstances]."

Although this filing does not propose any added regulatory language, the drafting team made every endeavor to ensure the narrative describing its rationale for retirement of TOP-001-WECC-1a, System Operating Limits was clear and unambiguous.

The project was posted for comment on two different occasions. In Posting 1, three respondents submitted comments. In Posting 2, only one respondent provided a comment. None of the comments received indicated a concern with the clarity of the language or raised any question as to the intent of the project.

The project was also posted at NERC for a 45-day comment period. All respondents reported the project was developed in an open, inclusive, balanced and transparent manner, and that the process afforded adequate due process.

5. **Proposed Reliability Standards must include clear and understandable consequences and a range of penalties (monetary and/or non-monetary) for a violation.**

This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other

existing NERC Standards. As such, addition or modification of compliance elements was not required.

6. **Proposed Reliability Standards must identify clear and objective criteria or measures for compliance, so that they can be enforced in a consistent and non-preferential manner.**

   This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards. As such, addition or modification of measures was not required.

7. **Proposed Reliability Standards should achieve a reliability goal effectively and efficiently - but does not necessarily have to reflect "best practices" without regard to implementation cost.**

   This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards. Because the reliability-related tasks are already being performed in accordance with other reliability standards there should be no adverse reliability or financial impact as a result of immediately implementing the retirement of the standard.

8. **Proposed Reliability Standards cannot be "lowest common denominator," meaning that they cannot reflect a compromise that does not adequately protect bulk power system reliability.**

   The proposed Reliability Standard must not simply reflect a compromise in the ERO's Reliability Standard development process based on the least effective North American practice — the so-called "lowest common denominator" — if such practice does not adequately protect Bulk Power System reliability. Although the Commission will give due weight to the technical expertise of the ERO, it will not hesitate to remand a proposed Reliability Standard if it is convinced the proposed Reliability Standard is not adequate to protect reliability. Order No. 672 at Paragraph 329.

   This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards. Because the reliability-related tasks are already being performed there is no proposed change to the level of reliability or to the practices in place to achieve the existing level of reliability; thus,

there is no lower of the standard and no migration to a lowest common denominator.

9. **Proposed Reliability Standards may consider costs to implement for smaller entities but not at consequence of less than excellence in operating system reliability.**

A proposed Reliability Standard may take into account the size of the entity that must comply with the Reliability Standard and the cost to those entities of implementing the proposed Reliability Standard. However, the ERO should not propose a "lowest common denominator" Reliability Standard that would achieve less than excellence in operating system reliability solely to protect against reasonable expenses for supporting this vital national infrastructure. For example, a small owner or operator of the Bulk Power System must bear the cost of complying with each Reliability Standard that applies to it. Order No. 672 at P330.

This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards. Because the reliability-related tasks are already being performed there should be no adverse reliability or financial impact as a result of immediately implementing the retirement of the standard. None of the respondents reported any concerns regarding the financial impact of retiring the document.

10. **Proposed Reliability Standards must be designed to apply throughout North America to the maximum extent achievable with a single reliability standard while not favoring one area or approach.**

A proposed Reliability Standard should be designed to apply throughout the interconnected North American Bulk Power System, to the maximum extent this is achievable with a single Reliability Standard. The proposed Reliability Standard should not be based on a single geographic or regional model, but should take into account geographic variations in grid characteristics, terrain, weather, and other such factors. It should also take into account regional variations in the organizational and corporate structures of transmission owners and operators, variations in generation fuel type and ownership patterns, and regional variations in market design - if these affect the proposed Reliability Standard. Order No. 672 at P331.

This project is designed to retire TOP-007-WECC-1a, System Operating Limits, a Regional Reliability Standard. If the retirement is approved, the

reliability-related tasks will continue to be performed in accordance with other currently approved NERC Standards that are applicable across the continent. This project eliminates a regional standard that duplicates existing NERC Reliability Standard requirements.

11. Proposed Reliability Standards should cause no undue negative effect on competition or restriction of the grid.

As directed by section 215 of the FPA, the Commission itself will give special attention to the effect of a proposed Reliability Standard on competition. The ERO should attempt to develop a proposed Reliability Standard that has no undue negative effect on competition. Among other possible considerations, a proposed Reliability Standard should not unreasonably restrict available transmission capability on the Bulk Power System beyond any restriction necessary for reliability and should not limit use of the Bulk Power System in an unduly preferential manner. It should not create an undue advantage for one competitor over another. Order No. 672 at Paragraph 332

This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards. Because the reliability-related tasks are already being performed in accordance with other currently-approved NERC Standards, there should be no undue negative effect on competition or restriction of the grid.

12. The implementation time for the proposed Reliability Standards must be reasonable.

In considering whether a proposed Reliability Standard is just and reasonable, the Commission also will consider the timetable for implementation of the new requirements, including how the proposal balances any urgency in the need to implement it against the reasonableness of the time allowed for those who must comply to develop the necessary procedures, software, facilities, staffing or other relevant capability. Order No. 672 at P333.

This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards. Because the reliability-related tasks are already being performed in accordance with other currently-approved NERC Standards, immediate retirement of the standard should be seamless.

13. The Reliability Standard development process must be open and fair.

Further, in considering whether a proposed Reliability Standard meets the legal standard of review, we will entertain comments about whether the ERO implemented its Commission-approved Reliability Standard development process for the development of the particular proposed Reliability Standard in a proper manner, especially whether the process was open and fair. However, we caution that we will not be sympathetic to arguments by interested parties that choose, for whatever reason, not to participate in the ERO's Reliability Standard development process if it is conducted in good faith in accordance with the procedures approved by the Commission. Order No. 672 at P334.

In developing its request to retire TOP-007-WECC-1a, WECC followed the WECC Reliability Standards Development Procedures (Procedures) as approved by FERC.

All meetings were open to the public.

Between March 11 and August 6, 2015, the WECC-0111 drafting team conducted eight open meetings. Notice of the meetings was provided to NERC, posted on WECC's website, and embedded in the minutes of each meeting. Meeting minutes are posted on the WECC's website and accessible by the public.

All meetings were supported by a telephone conference bridge associated with an on-line Internet visual capability, allowing all participants to see the document(s) as they were being developed.

The proposed project was posted for public comment by WECC on two different occasions and by NERC on one additional occasion. Comments were solicited, received, considered, and answered. Comments and their responses are included with this filing and are currently located at the WECC-0111 TOP-007-WECC-1a Request to Retire Project Page on the Submit and Review Comments accordion.

While posted at NERC for 45-day comment, respondents were unanimously in accord that the development process was open, inclusive, balanced, transparent, and that the process afforded adequate due process.

14. Proposed Reliability Standards must balance with other vital public interests.

Finally, we understand that at times, the development of a proposed Reliability Standard may require that a particular reliability goal must be balanced against other vital public interests, such as environmental, social and other considerations. We expect the ERO to explain any such balancing in its application for approval of a proposed Reliability Standard. Order No. 672 at P335.

WECC is not aware of any vital public interests impacted by retirement of this standard. No such balancing concerns were raised or noted.

15. Proposed Reliability Standards must consider any other relevant factors.

In considering whether a proposed Reliability Standard is just and reasonable, we will consider the following general factors, as well as other factors that are appropriate for the particular Reliability Standard proposed. Order No. 672 at P 323.

This project is designed to retire TOP-007-WECC-1a, System Operating Limits because the reliability-related substance is contained in other existing NERC Standards. Because the reliability-related tasks are already being performed in accordance with other currently-approved NERC Standards, retirement of this standard should be seamless to the industry.

Attachment J
Drafting Team Roster
WECC-0111 TOP-007-WECC-1a
System Operating Limits
Request to Retire

Below please find a biographical snapshot for the drafting team members of the WECC-0111, TOP-007-WECC-1a, System Operating Limits Request to Retire project.

Name	Biography
Vic Howell – Chair	Since September of 2012, Mr. Howell has served as Manager of Operations Planning at PEAK Reliability (PEAK), the Reliability Coordinator for the Western Interconnection. PEAK was formed as a result of the bifurcation in 2014 of the Western Electricity Coordinating Council (WECC) into a regional reliability authority (WECC) and a regional Reliability Coordinator (PEAK). Mr. Howell has been instrumental in the development of PEAK policies, methodologies, and procedures aimed at improving reliability in the Western Interconnection for the operations horizon. He has also contributed to several WECC and NERC initiatives including the TOP/IRO Standards Drafting Team and was a primary author of the NERC System Operating Limits Whitepaper. Prior to joining PEAK in early 2011, Mr. Howell worked for Duke Energy Carolinas in the Operations Engineering and EMS Engineering groups. Seven of his twelve years at Duke Energy Carolinas included serving on rotation with five other engineers as a Reliability Coordinator for the VACAR South Reliability Coordinator. During his time at Duke Vic served on several industry work groups including the NERC Reliability Coordinator Working Group, the NERC Interchange Distribution Calculator Working Group, the NERC Distribution Factor Working Group, and the SERC Near-Term Studies Group. Prior to his work at Duke Energy, Vic spent three years at PECO Energy in Philadelphia, PA in Project Management and Distribution Analysis. Mr. Howell holds a Master of Science degree in Electrical Engineering from New Mexico State University's Electric Utility Management Program and a Bachelor of Science degree in Electrical Engineering from North Carolina State University. He is a registered Professional Engineer in North Carolina and a NERC Certified System Operator at the Reliability Coordinator level.
Bert Peters	Bert Peters joined Arizona Public Service in May of 1985 and is currently serving as the Corporate Area Functional Leader for the Transmission Operations area where he is responsible for process and procedural oversight ensuring operational effectiveness and represents the company as the subject matter expert for regional standards and compliance. Previously Mr. Peters served as the Transmission Operations Section Leader where he was responsible for the safe reliable operation of the APS transmission system. Mr. Peters served 13 years as the Chief Dispatcher for APS and is currently serving as the APS

	representative on the WECC Operating Committee. He served 5 years on the WECC Reliability Coordinator Sub Committee; served as an auditor team member on four NERC readiness audits; served and continues to serve as the Subject Matter Expert for NERC audits; is certified as a certification team member for WECC, and has participated as a team member in the certification of five companies registering to operate in the western interconnection including BA, TOP, and RC certifications.
Chifong Thomas	Chifong Thomas is the Director, Transmission Planning and Strategy at Smart Wires Inc., where she supports the various applications and deployment of distributed series reactors and other developing smart grid products. Prior to joining Smart Wires Inc., Ms. Thomas managed transmission interconnections at BrightSource Energy, Inc. for the development of utility scale solar thermal power plants ranging from 200 MW to 1,000 MW. She has more than 44 years of electric utility experience, more than 37 of which is in electric transmission planning for the Pacific Gas and Electric Company (PG&E) transmission system from 60 kV to 500 kV. Ms. Thomas has conducted and supervised transmission planning studies to develop plans for the PG&E transmission system. Ms. Thomas has served as an expert witness in various regulatory and judicial forums. She participated in developing planning methodologies, processes and criteria for PG&E and WECC; is the past secretary of the WECC Planning Coordination Committee; is the past chair of the WECC Technical Studies Subcommittee; has served on various WECC task forces, NERC Standards Drafting Teams, Industry Advisory Committees of the California Energy Commission, and of EPRI and on the Technical Advisory Committee (Electrical Engineering) to the California Board of Registration for Professional Engineers and Land Surveyors. Ms. Thomas also served on the Technical Review Committee (TRC) of the Hawaii Solar Integration Study facilitated by the National Renewable Energy Laboratory (NREL); co-developed the concept and methodology to calculate the Location Attribute for the PG&E system adopted in the CPUC Biennial Resource Plan Update (BRPU); and, served as the technical Lead for the CEC-PIER Project, Regional Integration of Renewables for Northern California. Ms. Thomas holds a Bachelor of Science Degree in Electrical Engineering from Washington State University and is a registered Electrical Engineer in the State of California.

Keith Carman	Keith Carman has over 26 years of utility experience and is currently employed by Tri-State Generation and Transmission Association headquartered in the Denver suburb of Westminster Colorado. Mr. Carman holds both a BSEE and MSEE from New Mexico State University and began his utility career with Public Service Company of Colorado / Xcel Energy where he spent the first 18 years of his career. In 2007, Mr. Carman joined Tri-State where he currently holds the position of Sr. Manager of Transmission System Operations and is responsible for leading the department that is responsible for reliable operations of the Tri-State transmission system. He currently represents the Cooperative Utility Sector on the North American Reliability Corporation's Operating Committee and is an active member on the Western Electricity Coordination Council Operations Committee.
Phillip Shafeei	Mr. Shafeei holds a Bachelors of Electrical Engineering and Master of Engineering degree in Electric Power System Engineering from Rensselaer Polytechnic Institute, Troy NY. From 2012 to –present Mr. Shafeei worked for the Colorado Springs Utility (CSU) as a principle power systems engineer covering such issues as tariff rate design and development of NERC Standards (MOD/TOP/FAC). Mr. Shafeei manages Power System Studies; Winter/Summer seasons, Total Transfer Capability (TCC), Outage Studies (approve-deny), Weekly/next day studies and model validations, and also manages the Energy Management System model and studies. Mr. Shafeei attends the Peak RC and WECC Board of Director meetings and was member of Peak RC alternative Funding. From 2002-2012, he served at the New York Independent System Operator, NYISO, as senior engineer addressing feasibility studies, System Impact Studies, consultant interface, power flow analytics, and managed the NERC IDC internal to NYISO, NYISO representative in IDC, SDX, DFWG working group. Mr. Shafeei was NYISO representative in NPCC working groups; Control Performance Working Group and System Operational Tools Working Group. Mr. Shafeei has an additional ten years of experience with expertise covering industry training, data collection and modeling, and interface with the North American Energy Standards Board. Mr. Shafeei is experienced in Distribution designed, Distribution Management Systems, SCADA, Power Quality, Distribution Planning and Relay Coordination.

Robert (Bob) Johnson	Mr. Johnson has served as the Rocky Mountain Reserve Group administrator for the last 15 years; has 20-plus years as Senior Engineer for WECC Members (PSColorado, WAPA); and, is a member of numerous WECC and NERC technical committees. Presently, he serves on the WECC Operating Committee (Transmission) representative for PSColorado / Xcel, on the WECC Operating Issues Work Group and Variable Generation Operations Work Group; served on several drafting teams; and, is presently on the TOP-007-WECC-1s, System Operating Limits retirement team.
Salah Kitali	Mr. Salah Kitali has 25 years of experience in the energy and utility industry. As a graduate of Concordia University, he holds a bachelor's degree in science. He started his career as a technical analyst in Transmission Services at PacifiCorp. Fifteen years ago, Kitali accepted an opportunity as a lead in Real-Time Operations with the Bonneville Power Administration (BPA). During his tenure at BPA, Mr. Kitali has served in a number of managerial roles and is currently the Internal Operations Manager for Transmission's System Operations, where he oversees day-to-day system operations activities, System Operations, manages two regional control centers, supports congestion management initiatives, and implements and maintains regulatory cyber security requirements used to operate, control, and protect the transmission system.

Attachment K
Ballot Results and Ballot Pool Members
WECC-0111 TOP-007-WECC-1a
System Operating Limits
Request to Retire

Ballot Name: **WECC-0111 TOP-007-WECC-1a System Operating Limits**

Ballot Pool Opened:	8/18/2015 - 9/3/2015
Ballot Period:	9/16/15 - 10/22/2015
Total Ballot Pool:	**93**
Total Number of Votes:	**74**
Quorum:	**79.6%**
Weighted Vote:	**100.0%**
Ballot Results	**The Document has Passed**

Voting Sectors	Total In Ballot Pool	Votes Non-Abstain	Sector Weight	Yes Votes	Weighted Segment Vote	No Votes	Abstain	Total Votes* for Quorum	Didn't Vote
Distribution	17	13	1	13	100.0%	0	0	13	4
End User Representative	0	0	0	0	0.0%	0	0	0	0
Generation	23	15	1	15	100.0%	0	0	15	8
Marketers and Brokers	11	10	1	10	100.0%	0	0	10	1
Other Non-Registered WECC Members and Participating Stakeholders	2	2	0.2	2	20.0%	0	0	2	0
State and Provincial Representatives	0	0	0	0	0.0%	0	0	0	0
System Coordination	19	16	1	16	100.0%	0	0	16	3
Transmission	21	18	1	18	100.0%	0	0	18	3
Totals	93	74	5.2	74	**100.0%**	0	0	74	19

WECC
WESTERN ELECTRICITY COORDINATING COUNCIL
155 North 400 West, Suite 200
Salt Lake City, Utah 84103-1114

Ballot Pool Members

Title	Company	Sector	Vote	Comments	Created By
WECC-0111	Arizona Public Service Company	Marketers and Brokers	Yes	0	Todd Komaromy
WECC-0111	Arizona Public Service Company	Generation	Yes	0	Jeri Freimuth
WECC-0111	Arizona Public Service Company	System Coordination	Yes	0	Stephanie Little
WECC-0111	Arizona Public Service Company	Transmission	Yes	0	Gary Nolan
WECC-0111	Arizona Public Service Company	Distribution	Yes	0	Michelle Amarantos
WECC-0111	Avista Corporation	Marketers and Brokers	Yes	0	Scott Kinney
WECC-0111	Avista Corporation	Transmission	Yes	0	Bryan Cox
WECC-0111	Balancing Authority of Northern California	System Coordination	Yes	0	Joe Tarantino
WECC-0111	Bonneville Power Administration	System Coordination	Yes	0	Francis Halpin
WECC-0111	Bonneville Power Administration	Marketers and Brokers	Yes	0	Alex Spain
WECC-0111	Bonneville Power Administration	Transmission	Yes	0	Donald Watkins
WECC-0111	Bonneville Power Administration	Distribution	Yes	0	Rebecca Berdahl
WECC-0111	British Columbia Hydro and Power Authority	Distribution	Yes	0	Pat Harrington
WECC-0111	British Columbia Hydro and Power Authority	System Coordination	Yes	0	Patricia Robertson
WECC-0111	British Columbia Hydro and Power Authority	Transmission	Yes	0	Patricia Robertson
WECC-0111	British Columbia Hydro and Power Authority	Generation	0	0	Clement Ma

Title	Company	Sector	Vote	Comments	Created By
WECC-0111	California Independent System Operator	System Coordination	Yes	The California ISO supports retirement of TOP-007-WECC-1a	Richard Vine
WECC-0111	California Independent System Operator	Transmission	Yes	The California ISO supports retirement of TOP-007-WECC-1a	Richard Vine
WECC-0111	Calpine Corporation	Generation	Yes	0	Phil Porter
WECC-0111	City of Tacoma, Department of Public Utilities, Light Division	Distribution	Yes	0	Chad Edinger
WECC-0111	City of Tacoma, Department of Public Utilities, Light Division	Generation	Yes	0	Karen Hedlund
WECC-0111	City of Tacoma, Department of Public Utilities, Light Division	Marketers and Brokers	Yes	0	Todd Lloyd
WECC-0111	City of Tacoma, Department of Public Utilities, Light Division	System Coordination	Yes	0	Twila Hofer
WECC-0111	Colorado Springs Utilities	Transmission	Yes	0	Shawna Speer
WECC-0111	Colorado Springs Utilities	System Coordination	Yes	0	Shawna Speer
WECC-0111	Colorado Springs Utilities	Generation	Yes	0	Shawna Speer
WECC-0111	Colorado Springs Utilities	Distribution	Yes	0	Shawna Speer
WECC-0111	Cowlitz County PUD No. 1	Distribution	0	0	Russell Noble
WECC-0111	Cowlitz County PUD No. 1	Transmission	0	0	Russell Noble
WECC-0111	Cowlitz County PUD No. 1	Generation	0	0	Russell Noble

Title	Company	Sector	Vote	Comments	Created By
WECC-0111	Deseret Generation & Transmission Co-operative	Generation	Yes	0	Philip Tice
WECC-0111	Deseret Generation & Transmission Co-operative	Transmission	Yes	0	James Tucker
WECC-0111	Exelon Generation Company, LLC - Constellation	Marketers and Brokers	0	0	Mary Lynch
WECC-0111	Gridforce Energy Management, LLC	System Coordination	0	0	David Blackshear
WECC-0111	Modesto Irrigation District	Transmission	0	0	Renee Knarreborg
WECC-0111	Modesto Irrigation District	Distribution	0	0	Renee Knarreborg
WECC-0111	Modesto Irrigation District	Generation	0	0	Renee Knarreborg
WECC-0111	Modesto Irrigation District	System Coordination	0	0	Renee Knarreborg
WECC-0111	NextEra Energy Resources, LLC	Generation	Yes	0	Mark Mango
WECC-0111	Pacific Gas and Electric Company	Generation	0	0	Alex Chua
WECC-0111	Peak Reliability	System Coordination	Yes	0	Jared Shakespeare
WECC-0111	Platte River Power Authority	Marketers and Brokers	Yes	0	Carol Ballantine
WECC-0111	Platte River Power Authority	System Coordination	Yes	0	John Collins
WECC-0111	Platte River Power Authority	Generation	Yes	0	Tyson Archie
WECC-0111	Portland General Electric Company	Generation	Yes	0	Matt Jastram
WECC-0111	Portland General Electric Company	Transmission	Yes	0	John Walker

Title	Company	Sector	Vote	Comments	Created By
WECC-0111	Portland General Electric Company	Distribution	0	0	Tom Ward
WECC-0111	Public Service Company of Colorado	System Coordination	Yes	0	Robert Staton
WECC-0111	Public Service Company of Colorado	Transmission	Yes	0	Robert Staton
WECC-0111	Public Service Company of Colorado	Generation	Yes	0	Robert Staton
WECC-0111	Public Service Company of New Mexico	System Coordination	Yes	0	Laurie Williams
WECC-0111	Public Service Company of New Mexico	Generation	Yes	0	Laurie Williams
WECC-0111	Public Service Company of New Mexico	Distribution	Yes	0	Laurie Williams
WECC-0111	Public Service Company of New Mexico	Transmission	Yes	0	Laurie Williams
WECC-0111	Public Service Company of New Mexico	Marketers and Brokers	Yes	0	Laurie Williams
WECC-0111	Public Utility District No. 1 of Clark County	Transmission	Yes	0	Jack Stamper
WECC-0111	Public Utility District No. 1 of Snohomish County	Generation	Yes	0	Kenn Backholm
WECC-0111	Public Utility District No. 1 of Snohomish County	Distribution	Yes	0	Kenn Backholm
WECC-0111	Public Utility District No. 1 of Snohomish County	Transmission	Yes	0	Kenn Backholm

Title	Company	Sector	Vote	Comments	Created By
WECC-0111	Puget Sound Energy, Inc.	Generation	0	0	Lynda Kupfer
WECC-0111	Sacramento Municipal Utility District	System Coordination	Yes	0	Joe Tarantino
WECC-0111	Sacramento Municipal Utility District	Generation	Yes	0	Joe Tarantino
WECC-0111	Sacramento Municipal Utility District	Distribution	Yes	0	Joe Tarantino
WECC-0111	Sacramento Municipal Utility District	Transmission	Yes	0	Joe Tarantino
WECC-0111	Sacramento Municipal Utility District	Marketers and Brokers	Yes	0	Joe Tarantino
WECC-0111	Salt River Project Agricultural Improvement and Power District	Marketers and Brokers	Yes	0	William Abraham
WECC-0111	Salt River Project Agricultural Improvement and Power District	System Coordination	Yes	0	Steven Cobb
WECC-0111	Salt River Project Agricultural Improvement and Power District	Transmission	Yes	0	Steven Cobb
WECC-0111	Salt River Project Agricultural Improvement and Power District	Generation	Yes	0	Kevin Nielsen
WECC-0111	Salt River Project Agricultural Improvement and Power District	Distribution	Yes	0	Kevin Nielsen
WECC-0111	Seattle City Light	Generation	Yes	0	Mike Haynes

Title	Company	Sector	Vote	Comments	Created By
WECC-0111	Seattle City Light	Marketers and Brokers	Yes	0	Charles Freeman
WECC-0111	Seattle City Light	Transmission	Yes	0	Hao Li
WECC-0111	Seattle City Light	Distribution	Yes	0	Dana Wheelock
WECC-0111	Seattle City Light	System Coordination	Yes	0	Pawel Krupa
WECC-0111	Smart Wire Grid	Other Non-Registered WECC Members and Participating Stakeholders	Yes	0	Chifong Thomas
WECC-0111	Southern California Edison - Power Supply	Generation	0	0	Earle Saunders
WECC-0111	Southern California Edison - Transmission & Distribution	Transmission	Yes	0	Steven Mavis
WECC-0111	Southern California Edison - Transmission & Distribution	Distribution	Yes	0	Steven Mavis
WECC-0111	Talen Montana, LLC	Generation	0	0	Leland McMillan
WECC-0111	Tri-State Generation and Transmission Association, Inc. - Reliability	System Coordination	Yes	0	Tracy Sliman
WECC-0111	Tri-State Generation and Transmission Association, Inc. - Reliability	Transmission	Yes	0	Tracy Sliman

Title	Company	Sector	Vote	Comments	Created By
WECC-0111	Tri-State Generation and Transmission Association, Inc. - Reliability	Distribution	Yes	0	Janelle Gill
WECC-0111	Tri-State Generation and Transmission Association, Inc. - Reliability	Generation	Yes	0	Mark Stein
WECC-0111	Tucson Electric Power	Transmission	0	0	John Tolo
WECC-0111	Tucson Electric Power	Generation	0	0	John Tolo
WECC-0111	Tucson Electric Power	Distribution	0	0	John Tolo
WECC-0111	Tucson Electric Power	System Coordination	0	0	John Tolo
WECC-0111	Utility System Efficiencies, Inc.	Other Non-Registered WECC Members and Participating Stakeholders	Yes	0	Catrina Martin
WECC-0111	Western Area Power Administration - Rocky Mountain Region	System Coordination	Yes	0	Orlando Reyes
WECC-0111	Western Area Power Administration - Rocky Mountain Region	Distribution	Yes	0	Steve Johnson
WECC-0111	Western Area Power Administration - Rocky Mountain Region	Marketers and Brokers	Yes	0	Steve Johnson

Title	Company	Sector	Vote	Comments	Created By
WECC-0111	Western Area Power Administration - Rocky Mountain Region	Transmission	Yes	0	James Hirning

Attachment M
Minority Issues
WECC-0111 TOP-007-WECC-1a
System Operating Limits
Request to Retire

Following a ballot period from September 16 through October 8, 2015, the WECC Ballot Pool approved retirement of the standard.

The request to retire the standard was posted for comment at WECC on two occasions. The first posting was for 45 days; the second posting was for 30 days. The standard was also posted at NERC for a single 45-day comment period.

During those postings the drafting team reviewed and considered all comments received. The following minority opinions were expressed by the industry but not accepted by the drafting team.

In WECC Posting 1, Idaho Power raised the concern that:

1) If Requirement R2 is retired the reliability-related tasks are not covered elsewhere;
2) Using misalignment of the NERC Functional Model as the premise for retirement is not a sound argument;
3) Prohibition against over-scheduling a path to avoid exceedance of a System Operating Limit (SOL) should be preserved.

The drafting team considered Idaho's concerns concluding:

1) The reliability needs set by TOP-007-WECC-1a, System Operating Limits, Requirement R2 will continue to be met by other existing and pending standards as described in the Posting 1 narrative and supporting mapping tables;
2) Retiring the Requirement simply because it misaligns with the NERC Functional Model would be inappropriate if that retirement were to result in a negative reliability impact. Although misalignment is argued in the supporting narrative, the primary thrust of that narrative is redundancy – not misalignment. As expressed above the DT believes that even with the Requirement retired, the reliability tasks related to SOL and IROL exceedance prevention and mitigation are preserved elsewhere. (Refer to the Posting 1 supporting narrative and associated mapping table.)
3) Preventing and mitigating SOLs will continue to be the responsibility of the Transmission Operator and the Reliability Coordinator; whereas, managing schedules will continue to be the responsibility of the Transmission Service Providers. The scheduling mandates contained in Requirement R2 only appear in WECC-specific documents and do not appear to be essential to the reliability of BES outside of WECC. With the retirement of Requirement R2, Bulk-Electric System reliability will continue to be upheld through the approved NERC Standards that require operation with SOLs and IROLs. Scheduling practices, business rules, and procedures regarding scheduling relative to Available

Transfer Capability and Available Flow Capability are more appropriately addressed North American Energy Standards Board Business Standards.

The full text of the Comment Response Forms for each posting at WECC and NERC is provided with this filing and located on the WECC-0111 TOP-007-WECC-1a System Performance Request to Retire Project Page on the Submit and Review Comments accordion.

Attachment N
WECC Standards Committee Roster
WECC-0111 TOP-007-WECC-1a
System Operating Limits
Request to Retire

The following individuals are those assigned to the WECC Standards Committee as of September 15, 2015.

Sector	Name	Organization
1 Transmission	Dana Cabbell	Southern California Edison
2 Generation	Angela Small	NAES
3 Marketers and Brokers	Tanner Brier	Bonneville Power Administration
4 Distribution	Warren Rust	Colorado Springs Utilities
5 System Coordination	Joseph Tarantino	Sacramento Municipal Utility District
6 End User Representative	Caitlin Liotiris	Energy Strategies
7 State and Provincial	David Walker	Wyoming Public Service Commission
8 Other Non-Registered Entities	Crystal Musselman	Proven Compliance Solutions
Board of Directors	Joe McArthur	Non-Affiliate Director / WSC Chair

Attachment R1
WECC-0111 TOP-007-WECC-1a
System Operating Limits – Retire or Modify
Response to Comments / Posting 1
March 27 through May 11, 2015

Posting #1

The WECC-0111, TOP-007-WECC-1a, System Operating Limit – Retire or Modify Drafting Team (DT) thanks everyone who submitted comments on the proposed documents.

Posting

This document was last posted for a 45-day public comment period from March 27 through May 11, 2015.

WECC distributed the notice for the posting on March 27, 2015. The DT asked stakeholders to provide feedback on the proposed document through a standardized electronic template. WECC received comments from three companies representing five of the eight Industry Segments, as shown in the table on the following page.

Location of Comments

All comments received on the document can currently be viewed in their original format on the project page under the "Submit and Review Comments" accordion.

Changes in Response to Comment

Of the three entities responding to Posting 1, all three approved of retiring Requirement R1. Only one entity (Idaho Power) raised concerns with retiring Requirement R2. After reviewing, considering, and responding to the comments received in Posting 1, the DT opted to make no further substantive changes to the project. The DT did, however, further buttress its arguments to retire. The DT remains convinced that retirement of the entire standard will have no detrimental impact on the reliability of the Bulk Electric System (BES).

Effective Date

Because retirement of the standard will have no detrimental impact on the reliability of the BES, the DT recommends retirement become effective on the first day of the first quarter following appropriate regulatory approval.

Implementation Plan

After reviewing the associated standards and practices, the DT concluded that there are no pre-cursory steps required to implement retirement of the standard as of the above recommended Effective Date.

Action Plan

On June 4, 2015, the drafting team concluded by a majority vote of those DT members in attendance that the project should be forwarded to the WECC Standards Committee (WSC) with a request for ballot.

SUBSEQUENT ENTRY: After overall review of the project, WECC staff concluded that the required implementation plan needed buttressing. The project was posted again for a 30-day comment period from July 1 through July 31, 2015 with a request for comment on all aspects of the project. A buttressed implementation plan was added to the document. Only the California Independent System Operator commented. That comment was in support of full retirement.

Contacts and Appeals

If you feel your comment has been omitted or overlooked, please contact the Manager, WECC Standards Processes, W. Shannon Black, at sblack@wecc.biz. In addition, there is a WECC Reliability Standards Appeals Process.

The WECC Standards Voting Sectors are:

1 — Transmission Sector

2 — Generation Sector

3 — Marketers and Brokers Sector

4 — Distribution Sector

5 — System Coordination Sector

6 — End Use Representative Sector

7 — State and Provincial Representatives Sector

8 — Other Non-Registered WECC Members and Participating Stakeholders Sector

Commenter		Organization	WECC Standards Voting Sectors							
			1	2	3	4	5	6	7	8
6[1]	William Franklin	Xcel Energy	X	X	X	X	X			
7	Cain Braveheart	Bonneville Power Administration	X	X	X	X	X			
8	Molly Devine[2]	Idaho Power	X	X		X				

[1] Responses 1-5 were the result of WECC testing software.

[2] Idaho's comment was received by WECC staff via email, then cut and pasted into the portal. Idaho was experiencing difficulty with its login.

Index to Questions, Comments, and Responses

Question

1. **If balloted today, would you vote to approve the retirement of all aspects of TOP-007-WECC-1a, System Operating Limits, a WECC Regional Reliability Standard? If you answered "no" to the above question, please explain your answer.**
2. **The WECC-0111 Drafting Team welcomes comments on all aspects of the document.**

Summary Consideration:	See summary in the Changes in Response to Comments section of the preamble to this document.		
Commenter	**Yes**	**No**	**Comment**
Xcel/PSCo	X		PSCo supports retirement of this regional standard.
The drafting team appreciates Xcel's continued support and involvement with the standards development process.			
Bonneville Power Administration	X		BPA supports the retirement of TOP-007-WECC1a with no further comments. Thank you.
The drafting team appreciates BPA'S continued support and involvement with the standards development process.			
Idaho Power		X	Idaho Power does support the retirement of R1. I would like to say I would vote yes at this time but I cannot. For R2 simply saying that this is not a TOP function thus it should be retired is not sufficient. The drafting team has failed to show that this requirement is covered by other NERC Reliability Standards that have the LSE or PSE as the applicable entity. I would vote no at this time. Idaho Power does not believe the reliability impacts achieved from R2 is [sic] covered anywhere else. Idaho Power believes the INT standards are addressing specific requests for interchange review (each e-Tag) and not looking at it as a combined schedules [sic] across paths in aggregate. As a result, there is nothing that prohibits an entity from overscheduling their system and thus knowingly setting up flow on other parties [sic] systems. While we recognize that the standard only applies to specific paths in the WECC, these are important paths and schedules should not be allowed to exceed what a provider knows can flow. It is not just a matter of equity of the use of another party's system but is also a reliability issue if all schedules are implemented. If all paths are scheduled above their limits, it sets the interconnection up for a reliability issue where operators in real time could be continually fighting actual flow issues. Cutting schedules at that point (once

Summary Consideration:	See summary in the Changes in Response to Comments section of the preamble to this document.		
Commenter	Yes	No	Comment
			schedules are ramping and flowing) is not as effective as if the schedule was not allowed to ramp and flow from the beginning.

The DT appreciates Idaho Power's concerns. After considering Idaho's comment, the DT concluded that the reliability needs set by TOP-007-WECC-1a, System Operating Limits, Requirement R2 will continue to be met by other existing and pending standards as described in the Posting 1 narrative and supporting mapping tables. The DT has opted to make no further substantive changes to its recommendation to retire the entire standard.

In conversation with Idaho, the DT confirmed that Idaho's concerns pertain only to retirement of Requirement R2. The DT confirmed with Idaho that Idaho's concerns were as follows:

1) If Requirement R2 is retired the reliability-related tasks are not covered elsewhere;

2) Mere misalignment with the NERC Functional Model is not a sound premise to delete a reliability-related task; and

3) Prohibition against over-scheduling a path to avoid exceedance of a System Operating Limit (SOL) should be preserved.

Covered Elsewhere

The DT would direct Idaho to the narrative document wherein a number of NERC Standards are referenced in support of the argument that the reliability-related tasks assigned via Requirement R2 are covered elsewhere. The DT offers the following additional narrative and references.

- IRO-005-3.1a, Reliability Coordination — Current Day Operations, Requirement R11 states:

  "R11. The Transmission Service Provider shall respect SOLs and IROLs in accordance with filed tariffs and regional Total Transfer Calculation and Available Transfer Calculation processes."

- TOP-002-2.1b, Normal Operating Planning, Requirement R12 states:

  "**R12.** The Transmission Service Provider shall include known SOLs or IROLs within its area and neighboring areas in the determination of transfer capabilities, in accordance with filed tariffs and/or regional Total Transfer Capability and Available Transfer Capability calculation processes."

Preventing and mitigating SOLs will continue to be the responsibility of the Transmission Operator and the Reliability Coordinator; whereas, managing schedules will continue to be the responsibility of the Transmission Service Providers. Should an entity schedule in such a manner as to exceed a SOL on either a

Summary Consideration:	See summary in the Changes in Response to Comments section of the preamble to this document.		
Commenter	Yes	No	Comment

native or a neighboring system; that practice would, at minimum, conflict with the aforementioned standards.

Regardless of specific scheduling practices employed by Transmission Service Providers, if the entire standard is retired, NERC Standards will remain in effect that continue to prevent and mitigate exceedance of an SOL. Those documents include NERC Standards currently subject to enforcement as well as those filed and pending regulatory approval.

Misalignment with the NERC Functional Model

The DT agrees that retiring the Requirement simply because it misaligns with the NERC Functional Model would be inappropriate if that retirement were to result in a negative reliability impact. Although misalignment is argued in the supporting narrative, the primary thrust of that narrative is redundancy – not misalignment. As expressed above the DT believes that even with the Requirement retired, the reliability tasks related to SOL and IROL exceedance prevention and mitigation are preserved elsewhere. (Refer to the Posting 1 supporting narrative and associated mapping table.)

Over-Scheduling

The scheduling mandates contained in Requirement R2 only appear in WECC-specific documents and do not appear to be essential to the reliability of the BES outside of WECC.

With the retirement of Requirement R2, Bulk Electric System reliability will continue to be upheld through the approved NERC Standards that require operation with SOLs and IROLs. Scheduling practices, business rules, and procedures regarding scheduling, relative to Available Transfer Capability and Available Flow Capability, are more appropriately addressed as North American Energy Standards Board Business Standards.

Attachment R2
WECC-0111 TOP-007-WECC-1a
System Operating Limits – Retire or Modify
Response to Comments / Posting 2
July 1 through July 31, 2015

Posting #2

The WECC-0111, TOP-007-WECC-1a, System Operating Limit – Retire or Modify Drafting Team (DT) thanks everyone who submitted comments on the proposed documents.

Posting

This document was last posted for a 30-day public comment period from July 1 through July 31, 2015.

WECC distributed the notice for the posting on June 30, 2015. The DT asked stakeholders to provide feedback on the proposed document through a standardized electronic template. WECC received comments from one company representing two of the eight Industry Segments, as shown in the following table.

Location of Comments

All comments received on the document can currently be viewed in their original format on the project page under the "Submit and Review Comments" accordion.

Changes in Response to Comment

The DT appreciates the continued support and involvement of all entities participating in the development of the WECC-0111 project. After considering all comments received during the most recent posting the DT opted to make no further changes to the project.

Effective Date

Because retirement of the standard will have no detrimental impact on the reliability of the Bulk-Electric System (BES) the DT recommends retirement effective on the first day of the first quarter following appropriate regulatory approval.

Implementation Plan

After reviewing the associated standards and practices, the DT concluded that there are no pre-cursory steps required to implement retirement of the standard as of the above recommended Effective Date.

Action Plan

On August 6, 2015, the drafting team concluded by a majority vote of those DT members in attendance that the project should be forwarded to the WECC Standards Committee (WSC) with a request for ballot. The WSC will meet on August 12, 2015.

Contacts and Appeals

If you feel your comment has been omitted or overlooked, please contact the Manager, WECC Standards Processes, W. Shannon Black, at sblack@wecc.biz. In addition, there is a WECC Reliability Standards Appeals Process.

The WECC Standards Voting Sectors are:

1 — Transmission Sector

2 — Generation Sector

3 — Marketers and Brokers Sector

4 — Distribution Sector

5 — System Coordination Sector

6 — End Use Representative Sector

7 — State and Provincial Representatives Sector

8 — Other Non-Registered WECC Members and Participating Stakeholders Sector

Commenter		Organization	WECC Standards Voting Sectors							
			1	2	3	4	5	6	7	8
1	Richard Vine	California Independent System Operator	X				X			

Index to Questions, Comments, and Responses

Question

1. **The Drafting Team welcomes comments on all aspects of the document.**

Summary Consideration:	See summary in the Changes in Response to Comments section of the preamble to this document.		
Commenter	**Yes**	**No**	**Comment**
CAISO			The ISO supports retirement of TOP-007-WECC-1 in its entirety.
The drafting team appreciates the CAISO's continued support and involvement with the standards development process.			

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Attachment R3
Comment Report
Regional Reliability Standard TOP-007-WECC-1a

Western Electricity Coordinating Council (WECC) thanks all commenters who submitted comments on the proposed retirements of Requirements R1, R2, and R2.1 of the Regional Reliability Standard **TOP-007-WECC-1a (System Operating Limits).** The proposal was posted for a 45-day public comment period August 13 – September 28, 2015. There were 5 responses, including feedback from approximately 6 different people from approximately 5 companies representing 4 of the 10 Industry Segments as shown in the table on the following pages.

All comments submitted can be reviewed in their original format on the Regional Reliability Standards Under Development page.

If you feel that your comment has been overlooked, please let us know immediately. Our goal is to give every comment serious consideration in this process. If you feel there has been an error or omission, you can contact the Director of Standards, Howard Gugel (via email) or at (404) 446-9693.

As all comments were in the affirmative, after considering all comments received the WECC-0111 WECC Drafting Team concluded that no further responses were required.

If you have questions regarding the WECC Reliability Standards Development Procedures or this project, please contact W. Shannon Black, sblack@wecc.biz, (503) 307-5782.

Index to Questions, Comments, and Responses

The Industry Segments are:

1 — Transmission Owners
2 — RTOs, ISOs
3 — Load-serving Entities
4 — Transmission-dependent Utilities
5 — Electric Generators
6 — Electricity Brokers, Aggregators, and Marketers
7 — Large Electricity End Users
8 — Small Electricity End Users
9 — Federal, State, Provincial Regulatory or other Government Entities
10 — Regional Reliability Organizations, Regional Entities

Group/Individual		Commenter	Organization	Registered Ballot Body Segment									
				1	2	3	4	5	6	7	8	9	10
1.	Group	Cain Braveheart	Bonneville Power Administration	X		X		X	X				
	Additional Member	**Additional Organization**	**Region**	**Segment Selection**									
	1. Salah Kitali	Technical Operations	WECC	1									
2.	Individual	Dean W Spratt	Avista	X									
3.	Individual	Amy Casuscelli	Xcel Energy	X		X		X	X				
4.	Individual	Catrina Martin	Utility System Efficiencies, Inc.					X					
5.	Individual	Arizona Public Service Company	Arizona Public Service Company	X		X		X	X				

1. **Do you agree the development of TOP-007-WECC-1a met the "Open" criteria as outlined above? If "No", please explain in the comment area below.**

Summary Consideration:

Organization	Yes or No	Question 1 Comment
Avista	Yes	
Xcel Energy	Yes	
Utility System Efficiencies, Inc.	Yes	
Arizona Public Service Company	Yes	
Bonneville Power Administration	Yes	

2. **Do you agree the development of TOP-007-WECC-1a met the "Inclusive" criteria as outlined above? If "No", please explain in the comment area below.**

Summary Consideration:

Organization	Yes or No	Question 2 Comment
Avista	Yes	
Xcel Energy	Yes	
Utility System Efficiencies, Inc.	Yes	
Arizona Public Service Company	Yes	
Bonneville Power Administration	Yes	

3. **Do you agree the development of TOP-007-WECC-1a met the "Balanced" criteria as outlined above? If "No", please explain in the comment area below.**

Summary Consideration:

Organization	Yes or No	Question 3 Comment
Avista	Yes	
Xcel Energy	Yes	
Utility System Efficiencies, Inc.	Yes	
Arizona Public Service Company	Yes	
Bonneville Power Administration	Yes	

4. **Do you agree the development of TOP-007-WECC-1a met the "Due Process" criteria as outlined above? If "No", please explain in the comment area below.**

Summary Consideration:

Organization	Yes or No	Question 4 Comment
Avista	Yes	
Xcel Energy	Yes	
Utility System Efficiencies, Inc.	Yes	
Arizona Public Service Company	Yes	
Bonneville Power Administration	Yes	

5. **Do you agree the development of TOP-007-WECC-1a met the "Transparent" criteria as outlined above? If "No", please explain in the comment area below.**

Summary Consideration:

Organization	Yes or No	Question 5 Comment
Avista	Yes	
Xcel Energy	Yes	
Utility System Efficiencies, Inc.	Yes	
Arizona Public Service Company	Yes	
Bonneville Power Administration	Yes	

End of Report

Regional Reliability Standards Under Development

Regional Reliability Standards - Under Development				
Standard No.	**Title**	**Regional Status**	**Dates**	**NERC Status**
TOP-007-WECC-1a	System Operating Limits	Standard Under Development	08/13/15 - 09/28/15	Standard w/ Proposed Requirement Retirements **(1)** Info **(2)** Unofficial Comment Form (Word) **(3)** Submit Comments Comments Received **(4)**
To download a file click on the file using your right mouse button, then save it to your computer in a directory of your choice.				

WECC-0111 TOP-007-WECC-1a
System Operating Limits – Retire or Modify
Supporting Narrative and Crosswalk to Retire

MEMO

Date: August 6, 2015

Subject: Retirement of TOP-007-WECC-1a (TOP)
System Operating Limits
Posting 2

The WECC-0111, TOP-007-WECC-1a, System Operating Limits (TOP) – Retire or Modify – Drafting Team (DT) has reviewed NERC Standards, both in effect and those standards that are approved pending regulatory filing, and concluded that the substance of WECC Regional Reliability Standard (RRS) [1] should be retired immediately and in its entirety because the reliability-related substance is addressed in peripheral NERC Standards. The DT does not believe any further actions are necessary to implement the proposed changes.

Request to Retire

On March 27, 2015 and again on June 30, 2015, WECC distributed notice of posting for comment asking stakeholders to provide feedback on the proposed retirement of the TOP consisting of the following two Requirements:

B. Requirements

> **R1.** When the actual power flow exceeds an SOL for a Transmission path, the Transmission Operators shall take immediate action to reduce the actual power flow across the path such that at no time shall the power flow for the Transmission path exceed the SOL for more than 30 minutes. *[Violation Risk Factor: High] [Time Horizon: Real-time Operations]*
>
> **R2.** The Transmission Operator shall not have the Net Scheduled Interchange for power flow over an interconnection or Transmission path above the path's SOL when the Transmission Operator implements its real-time schedules for the next hour. For paths internal to a Transmission Operator Area that are not scheduled, this requirement does not apply. *[Violation Risk Factor: Medium] [Time Horizon: Real-time Operations]*
>
> > **R2.1.** If the path SOL decreases within 20 minutes before the start of the hour, the Transmission Operator shall adjust the Net Scheduled Interchange within 30 minutes to the new SOL value. Net Scheduled Interchange exceeding the new SOL during this 30-minute period will not be a violation of R2.

In each posting, comments were received through a standardized electronic template.

[1] Unless otherwise specified, capitalized terms are those defined in the NERC Glossary of Terms Used in Reliability Standards, the NERC Functional Model, and the NERC Rules of Procedures.

Posting 1 was posted for comment from March 27 through May 11, 2015. Posting 2 was posted for comment from July 1 through July 31, 2015.

In Posting 1, comments were received from three entities representing five of the eight WECC Standards Voting Sectors. Of the three comments received, all three agreed Requirement R1 should be retired and would not result in any negative impacts to the Bulk-Electric System (BES). One entity (Idaho Power) commented that Requirement R2 should not be retired as to do so would leave reliability-related tasks uncovered. After reviewing Idaho's concerns, the DT disagreed with Idaho's positions. Although the DT made no further substantive changes to the project it did further buttress its previous arguments in response to Idaho's concerns.

In Posting 2, comments were received from one entity representing two of the eight WECC Standards Voting Sectors. That entity, the California Independent System Operator was in support of complete retirement of the document.

On June 4, 2015, the DT agreed by consensus to forward the WECC-0111 project to the WECC Standards Committee (WSC) with a request for ballot; however, a review of the project indicated that posting of an implementation plan with greater granularity would be in order. Posting 2 met that requirement.

Structure and Overview

The following narrative and crosswalk are offered in support of the retiring Requirements R1 and R2. The narrative is presented in four parts: 1) presentation of analysis in tabular form (crosswalk) illustrating current and future requirements under NERC Standards, 2) a supportive narrative, 3) a proposed project roadmap, and 4) a proposed Implementation Plan.

If you have questions on the narrative, the DT encourages you to contact the DT chair, Mr. Vic Howell, vhowell@peakrc.com at 970-776-5573, or WECC Staff support, Mr. W. Shannon Black, sblack@wecc.biz, at (503) 307-5782.

WECC-0111 TOP-007-WECC-1a
System Operating Limits – Retire or Modify
Supporting Narrative and Crosswalk to Retire

Section 1: Tabular Crosswalk

Requirement R1

When a System Operating Limit (SOL) is exceeded, TOP Requirement R1 requires a Transmission Operator (TOp) to: 1) take immediate action, 2) to reduce power flow, and 3) do so within 30 minutes.

In approved NERC Standards currently in effect, the TOp is required to: 1) plan not to exceed an SOL[2], 2) implement that plan[3], 3) operate to prevent violating an SOL[4], 4) operate within the SOL[5], and to 5) take immediate action if an SOL is exceeded[6] [7]. Thus, the TOP R1 is redundant to the existing NERC Standards in effect and should be retired.

Analysis Table: Requirement R1		
TOP-007-WECC-1 Requirements	**NERC Standards, Approved and in Effect**	**NERC Standards, Approved Pending Regulatory Filing**
R1. When the actual power flow exceeds an SOL for a Transmission path, the Transmission Operators shall take immediate action to reduce the actual power flow across the path such that at no time shall the power flow for the Transmission path exceed the SOL for more than 30 minutes. [Violation Risk Factor: High] [Time Horizon: Real-time Operations]	TOP-004-2 R6. Transmission Operators, individually and jointly with other Transmission Operators, shall develop, maintain, and implement formal policies and procedures to provide for transmission reliability. These policies and procedures shall address the execution and coordination of activities that impact inter- and intra-Regional reliability, including: R6.1. Monitoring and controlling voltage levels and real and reactive	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). [Violation Risk Factor: Medium] [Time Horizon: Operations Planning] TOP-002-4 R2. Each Transmission Operator shall have an Operating Plan(s)[8] for next-day operations to

[2] TOP-002-2.1b, R10
[3] TOP-004-2, R6
[4] TOP-008-4, R2
[5] TOP-004-2, R1 and R2
[6] TOP-008-1, R1
[7] Arguably, the TOP's plans are then coordinated with the Reliability Coordinator. IRO-001-1.1, Reliability Coordination of Responsibilities and Authorities, R7
[8] Unless otherwise specified all capitalized terms carry the definition supported in the NERC Glossary of Terms and the NERC Functional Model.

	power flows. R6.2. Switching transmission elements. R6.3. Planned outages of transmission elements. R6.4. Responding to IROL and SOL violations. TOP-002-2.1b R10. Each Balancing Authority and Transmission Operator shall plan to meet all System Operating Limits (SOLs) and Interconnection Reliability Operating Limits (IROLs). TOP-008-1 R2. Each Transmission Operator shall operate to prevent the likelihood that a disturbance, action, or inaction will result in an IROL or SOL violation in its area or another area of the Interconnection. In instances where there is a difference in derived operating limits, the Transmission Operator shall always operate the Bulk Electric System to the most limiting parameter.	address potential System Operating Limit (SOL) exceedances identified as a result of its Operational Planning Analysis as required in Requirement R1. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning] TOP-002-4 R3. Each Transmission Operator shall notify entities identified in the Operating Plan(s) cited in Requirement R2 as to their role in those plan(s). [Violation Risk Factor: Medium] [Time Horizon: Operations Planning] TOP-001-3 R1. Each Transmission Operator shall act to maintain the reliability of its Transmission Operator Area via its own actions or by issuing Operating Instructions. [Violation Risk Factor: High][Time Horizon: Same-Day Operations, Real-time Operations] TOP-001-3 R2. Each Balancing Authority shall act to maintain the reliability of its Balancing Authority Area via its own actions

Per the NERC System Operating Limit (SOL) Whitepaper, timing requirements are expected to be address in Operating Plans. Page 8 of the NERC SOL Whitepaper states:

Operating Plans contain details to include appropriate timelines to escalate the level of mitigating plans/strategies to ensure BES performance is maintained as per approved FAC-011-2, Requirement R2, preventing SOL exceedances from becoming an IROL. Operating Plan(s) must include the appropriate time element to return the system to within acceptable Normal and Emergency (short-term) Ratings and/or operating limits identified above.

	TOP-004-2 R1. Each Transmission Operator shall operate within the Interconnection Reliability Operating Limits (IROLs) and System Operating Limits (SOLs). TOP-004-2 R2. Each Transmission Operator shall operate so that instability, uncontrolled separation, or cascading outages will not occur as a result of the most severe single contingency TOP-008-1 R1. The Transmission Operator experiencing or contributing to an IROL or SOL violation shall take immediate steps to relieve the condition, which may include shedding firm load.	or by issuing Operating Instructions. [Violation Risk Factor: High][Time Horizon: Same-Day Operations, Real-time Operations] 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: [Violation Risk Factor: High] [Time Horizon: Real-Time Operations] 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 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. [Violation Risk Factor: High] [Time Horizon: Real-time Operations] Rationale for Requirement R14: The original Requirement R8 was

		deleted and original Requirements R9 and R11 were revised in order to respond to NOPR paragraph 42 which raised the issue of handling all SOLs and not just a sub-set of SOLs. The SDT has developed a white paper on SOL exceedances that explains its intent on what needs to be contained in such an Operating Plan. TOP-001-3 R18. Each Transmission Operator shall operate to the most limiting parameter in instances where there is a difference in SOLs. [Violation Risk Factor: High] [Time Horizon: Operations Planning, Same-Day Operations, Real-time Operations] Rationale for Requirement R18: Derived limits replaced by SOLs for clarity and specificity. SOLs include voltage, Stability, and thermal limits and are thus the most limiting factor.

Requirement R2

The TOp is required to: 1) prevent Net Scheduled Interchange (NSI), 2) from exceeding an SOL, 3) when the TOp implements its Real-time schedules for the next hour. If the SOL decreases within 20 minutes before the start of the hour, the TOp is required to adjust the NSI within 30 minutes to the new SOL value.

In approved NERC Standards, NSI is addressed by the Balancing Authority[9] – not the TOp, and the prevention and mitigation of SOL exceedances are addressed by the TOp requirements listed in the Analysis Table for Requirement R1. With the retirement of Requirement R2, BES reliability will continue to be upheld through the approved NERC Standards that require operation within SOLs and IROLs. Scheduling practices and business rules and procedures regarding scheduling relative to Available Transfer Capability and Available Flow Capability are more appropriately addressed in the North American Energy Standards Board standards.

Analysis Table: Requirement R2		
R2. The Transmission Operator shall not have the Net Scheduled Interchange for power flow over an interconnection or Transmission path above the path's SOL when the Transmission Operator implements its real-time schedules for the next hour. For paths internal to a Transmission Operator Area that are not scheduled, this requirement does not apply. [Violation Risk Factor: Medium] [Time Horizon: Real-time Operations]	Planning and operating requirement references are contained in the Requirement R1 section and are not repeated here. NSI is addressed by BA - not the TOp. A supporting narrative for the premise is contained in the analysis segment of this filing and is supported by the Glossary of Terms Used in NERC Reliability Standards as well as the NERC Functional Model.[10] TOP-002-2.1b R5. Each Balancing Authority and Transmission Operator shall plan to meet scheduled system configuration, generation dispatch, interchange scheduling and demand patterns.	Planning and operating requirement references are contained in the Requirement R1 section and are not repeated here. TOP-002-4 R4. Each Balancing Authority shall have an Operating Plan(s) for the next-day that addresses: [Violation Risk Factor: Medium] [Time Horizon: Operations Planning] 4.1 Expected generation resource commitment and dispatch 4.2 Interchange scheduling 4.3 Demand patterns 4.4 Capacity and energy reserve requirements, including deliverability capability
R2.1. If the path SOL decreases within 20	TOP-002-2.1b R6. Each Balancing Authority and Transmission Operator	TOP-002-4 R5. Each Balancing

[9] INT-006-4, R1

[10] Additional supporting evidence can be found in the North American Energy Standards Board conventions; however, those conventions are not addressed in this filing.

minutes before the start of the hour, the Transmission Operator shall adjust the Net Scheduled Interchange within 30 minutes to the new SOL value. Net Scheduled Interchange exceeding the new SOL during this 30-minute period will not be a violation of R2.	shall plan to meet unscheduled changes in system configuration and generation dispatch (at a minimum N-1 Contingency planning) in accordance with NERC, Regional Reliability Organization, sub-regional, and local requirements. IRO-005-3.1a R11. The Transmission Service Provider shall respect SOLs and IROLs in accordance with filed tariffs and regional Total Transfer Calculation and Available Transfer Calculation processes. TOP-002-2.1b R12. The Transmission Service Provider shall include known SOLs or IROLs within its area and neighboring areas in the determination of transfer capabilities, in accordance with filed tariffs and/or regional Total Transfer Capability and Available Transfer Capability calculation processes.	Authority shall notify entities identified in the Operating Plan(s) cited in Requirement R4 as to their role in those plan(s). [Violation Risk Factor: Medium] [Time Horizon: Operations Planning] TOP-001-3 R2. Each Balancing Authority shall act to maintain the reliability of its Balancing Authority Area via its own actions or by issuing Operating Instructions. [Violation Risk Factor: High][Time Horizon: Same-Day Operations, Real-time Operations]

Section 2: Supporting Narrative

Requirement R1

The essentials of the TOP, Requirement R1, call for the TOp to complete the following tasks:

1) Reduce the actual flow when a System Operating Limit (SOL) is exceeded.
2) Reduce the flow in less than 30 minutes.

A review of NERC Standards currently in effect and those standards approved, but pending regulatory filing, shows the above two mandates are amply covered in numerous other NERC Standards; therefore, Requirement R1 should be retired. The premise is well represented in the referenced documents footnoted in the above table.

In addition to those NERC Standards referenced in the above table, the DT also notes that in TOP-004-2, Transmission Operations, the TOp is required to protect against instability, uncontrolled separation, or cascading outages (R3), making every effort to stay connected to the system (R5), and to work with other TOps to achieve the goal (R6) while specifically focusing on monitoring and control of voltage levels, real power flows, and response to SOL violations (R6). Specifically, the TOp must explicitly operate with SOLs (R1) thereby negating the additional requirement of the TOP.

There is also a level of coordination between entities that will ensure continued reliability of the Interconnection in the event the TOP Requirement R1 is retired. This coordination extends to Balancing Authorities (BA) and Reliability Coordinators (RC) in TOP-002-2-2.1b, Normal Operations, in that TOps are required to work with Balancing Authorities (BA) to maintain plans to ensure reliable operation (R1, R4, and R11) and the ability to meet scheduled system configuration (R5). In short, if the TOP Requirement R1 is retired there are ample peripheral NERC requirements to ensure the task is addressed.

Review of NERC Standards Approved but Pending Regulatory Filing

Although the DT is confident that existing NERC Standards amply cover Requirement R1, the DT also reviewed NERC Standards approved, but pending regulatory filing, to ensure that no future conflicts were anticipated. That review supported the DT's position, found no potential conflicts, and revealed additional Standards in support of the DT's position.

For example, TOP-002-4, Operations Planning, requires the TOp to have an Operational Planning Analysis (OPA) to determine whether planned operations for the next day will exceed SOLs and IROLs[11], to develop Operating Plans (OP) that address potential SOL exceedances identified in OPAs[12], and to notify entities identified in the OP as to their role in those plans.[13] Further, each TOp is required to initiate its OP to mitigate a SOL exceedance identified as part of its Real-time monitoring or Real-time

[11] TOP-002-4, R1
[12] TOP-002-4, R2
[13] TOP-002-4, R3

Assessment.[14] These OPs are expected to include, among other things, company-specific system restoration plans that include an Operating Procedure for black-starting units, and Operating Processes for communicating restoration progress with other entities.

[14] TOP-001-3, R14

Requirement R2

The essentials of the TOP, Requirement R2, call for the TOp to complete the following tasks:

1) Ensure the Net Scheduled Interchange (NSI) for power flow over an interconnection or Transmission path does not exceed the SOL;
2) When the TOp implements its real-time schedules for the next hour; (and),
3) Downward adjusts its schedules if the SOL decrease within 20 minutes before the start of the hour.

Requirement R2 should be retired as it is fundamentally flawed in requiring the TOp to address NSI.

The TOP was originally approved on April 16, 2008[15]; the NERC Functional Model (FM) Version 5 was last published in May 12, 2010. The tasks assigned to the TOp in the TOP do not align with the roles and responsibilities described in the current version of the FM. The DT notes that the assignment of the TOp as the Applicable Entity for TOP, Requirement R2 is fundamentally flawed because the TOp does not control NSI.[16] As such those entities assigned to address NSI under the FM should retain that task. The DT has determined that retirement of Requirement R2 will not result in reliability gap as control and responsibility for NSI will remain covered by the appropriate functional entities in other NERC Standards. NSI, by definition, is the "algebraic sum of all Interchange Schedules across a given path or between Balancing Authorities for a given period or instant in time." Restated, the TOp is required in the TOP, Requirement R2 to be responsible for NSI that is the sum of all agreed upon Interchange Transactions to include:

1) Megawatt size,
2) Start and end time,
3) Beginning and ending ramp times and rates, and
4) Type required for delivery and receipt of power and energy between the Source and the Sink Balancing Authorities – AKA: the Interchange Schedule.[17]

An Interchange Schedule cannot take place without an Interchange Transaction, the details of which are requested via a Request-for-Interchange (RFI)[18], submitted for approval as an Arranged Interchange, implemented via an Interchange Transaction Tag or e-Tag, and communicated by the Interchange Authority. As the TOp is not part of the aforementioned chain, and whereas the Request-for-Interchange is generally submitted by the Purchasing-Selling Entity and/or the Load Serving Entity[19], and

[15] The earlier designation was TOP-STD-007-0.
[16] Of the 22 "relationships with Other Functional Entities" assigned to the TOp in the NERC Functional Model, none address NSI or scheduling.
[17] See defining for Interchange Schedule.
[18] A collection of data as defined in the NAESB Business Practice Standards submitted for the purpose of implementing bilateral Interchange between Balancing Authorities or an energy transfer within a single Balancing Authority.
[19] See NAESB WEQ-004-1 and 004-2.

approved or denied by the Balancing Authority[20] and Transmission Service Provider[21], it is not in the purview of the TOp to ensure the NSI does not exceed an SOL, nor is that a reliability issue since several Reliability Standards exist which require the TOp to operate within SOLs and to prevent and mitigate SOL exceedances, thus preserving the reliability aspect of the BES. Thus, Requirement R2 in the TOP is incorrectly assigned and should be retired.

In INT-006-4, Evaluation of Interchange Transactions, Requirement R1, the BA is required to approve or deny Arranged Interchange (AI) if it does not expect to be capable of supporting the magnitude of the interchange or ramping throughout the duration of the AI. To further clarify the intent of the Requirement, the standard's Background section makes it clear that Requirement R1 describes those circumstances when a BA "must" deny an AI (see below). Because the BA has access to all of the information required to perform the assigned task, the BA is an appropriate Applicable Entity to carry out the assigned task. By contrast, the TOp does not have access to each of these informational elements and is therefore not the best choice to perform the associated tasks. This distinction is noted by the obvious absence of reference to the TOp in any of the existing standards of the NERC INT suite.

Furthermore INT-006-4 contains a requirement that specifically addresses changes to AI for reliability purposes. Requirement R3 states,

> R3. The Source Balancing Authority and the Sink Balancing Authority receiving a Reliability Adjustment Arranged Interchange shall approve or deny it prior to the expiration of the time period defined in Attachment 1, Column B. [Violation Risk Factor: Lower] [Time Horizon: Operations Planning, Same-day Operations, Real-time Operations]
>
> 3.1. If a Balancing Authority denies a Reliability Adjustment Arranged Interchange, the Balancing Authority must communicate that fact to its Reliability Coordinator no more than 10 minutes after the denial.

Requirement R2 should be retired because coordination of Real-time schedules for the next-hour is covered in other NERC Standards.

The TOP Requirement R2 requires that the TOp ensure that power flows over an interconnection or path do not exceed assigned SOL's when the TOp implements its real-time schedules for the next hour. Under TOP-002-2.1b, Normal Operations Planning, Requirement R4, the TOp is required to coordinate its current-day plans with the RC. Current day plans would include Real-Time operations (present time as opposed to future time), "so that normal Interconnection operation will proceed in an orderly and consistent manner." The same standard at Requirement R10 states:

> **R10.** Each Balancing Authority and Transmission Operator shall plan to meet all System Operating Limits (SOLs) and Interconnection Reliability Operating Limits (IROLs). (See also…)

[20] INT-006-4, Evaluation of Interchange Transactions, Requirement R1.
[21] INT-006-4, Evaluation of Interchange Transactions, Requirement R2.

R1. Each Transmission Operator shall operate within the Interconnection Reliability Operating Limits (IROLs) and System Operating Limits (SOLs). (TOP-004-2, Transmission Operations.)[22]

The TOp is required to plan to meet all SOLs and also to operate within SOLs when operating in Real-time, irrespective of scheduling practices.

Finally, as to covering any situational awareness contained in TOP, Requirement R2, this is addressed in TOP-002-2.1b, Requirement R.11 that requires the TOp to perform cyclical studies to determine potential changing SOLs. Again, if the intent of the TOP Requirement R2 is to enhance situational awareness, the TOp's cyclical SOL review should meet that need.

TOP-007-WECC-1a, System Operating Limits, Requirement R2 should be retired because it is redundant to other NERC Standards. Those standards require: 1) BAs to implement NSI, not the TOp, 2) oversight of SOLs to be shared between TOps and the RC, and 3) TOps to maintain SOL awareness which are covered in the NERC TOP suite of standards as addressed above. The DT has concluded that there is no need to retain the Requirement R2 as its function is redundant and unnecessary for reliability.

[22] A majority of this TOP addresses treatment of SOLs.

Section 3: Roadmap

Actions	Proposed Date
1. SAR Filed	12-17-2014
2. WSC approved the SAR	1-8-2015
3. DT solicitation notice dispatched	1-9-2015
4. Notice of DT Assignment	1-9-2015
5. Posting 1 Comments Open	3-27-2015
6. Posting 1 Comments Closed (45-day)	5-11-2015
7. DT Meets to answer Comments	5-14-2015
8. DT Meets to approve Implementation Plan	6-30-2015
9. Posting 2 Comments Open	7-1-2015
10. Posting 2 Comments Close	7-31-2015
11. DT Meets to answer Comments	8-6-2015
12. WSC approves for ballot	8-12-2015
To Be determined	
13. Notice of Standards Briefing	8-18-2015
14. Notice of Ballot Pool Forming	8-18-2015
15. Standards Briefing	9-3-2015
16. Ballot Pool – Open	9-8-2015
17. NERC Posting for 45 days – Open	9-11-2015
18. Ballot Pool – Closed	9-24-2015
19. Ballot Opens	9-29-2015

20. Ballot Closes	10-16-2015
21. NERC Posting for 45 days – Closed	10-26-2015
22. DT meets to address NERC Comments	10-27-2015
23. WSC approves forwarding document to the WECC Board of Directors / Standards Documents to Admin	10-29-2015
24. Notice to WECC Board of Directors (NLT)	10-30-2015
25. WECC Board of Directors	12-1-2015
26. 26. File with NERC	TBD
27. 27. NERC BOT	TBD
28. 28. NERC Files with NERC	TBD
29. 29. FERC action	TBD

Section 4: Implementation Plan

No-precursory steps are required to immediately retire the TOP in its entirety because the reliability—related substance is covered in peripheral NERC Standards. As such no additional action is required to implement retirement of the entire document, subject to all required regulatory approvals.

In accordance with the Reliability Standards Development Procedures (Procedures), Step 5- Post for Comment, "[a]n implementation plan shall be included in at least one iterative posting during the development of the [Regional Reliability Standard] and shall be a part of the final record for consideration prior to ballot."

On December 17, 2014, WECC accepted a Standards Authorization Request (SAR) requesting, "To the extent the TOP's Requirements are no longer needed for reliability they should be retired."

On March 27, 2015, WECC distributed on behalf of the WECC-0111, TOP-007-WECC-1a, System Operating Limits (TOP) – Retire or Modify – Drafting Team (DT) notice of posting for comment (Posting 1). Posting 1 noticed the project's intent "that the substance of [the TOP] should be retired in its entirety because the reliability-related substance is addressed in peripheral NERC Standards"[23]; thus, immediate retirement would have no detrimental impact on the BES. In Section 3 of Posting 1, the DT indicated its intent to file a request for retirement with NERC during the last quarter of 2015 with the final retirement date to be set by the appropriate regulatory entity.

On June 9, 2015, the DT posted Responses to Comments for Posting 1 indicating: 1) because retirement of the standard will have no detrimental impact on the reliability of the BES, the DT recommends retirement become effective on the first day of the first quarter following appropriate regulatory approval, and 2) that [a]fter reviewing the associated standards and practices, the DT concluded that there are no pre-cursory steps required to implement retirement of the standard as of the above recommended Effective Date.

[23] Posting 1 Preamble

NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Regional Reliability Standards Announcement

TOP-007-WECC-1a

Comment Period Open through September 28, 2015

Now Available

The Western Electricity Coordinating Council (WECC) has requested NERC to post **TOP-007-WECC-1a (System Operating Limits)** for a 45-day comment period on the proposed retirements of Requirements R1, R2, and R2.1.

Commenting

Use the electronic form to submit comments. If you experience any difficulties in using the electronic form, contact Wendy Muller. The form must be submitted by **8 p.m. Eastern, Monday, September 28, 2015.** An unofficial Word version of the comment form is posted on the Regional Reliability Standards Under Development page**.**

Regional Reliability Standards Development Process

Section 300 of NERC's Rules of Procedures of the Electric Reliability Organization governs the regional reliability standards development process.

For more information or assistance, contact Reliability Standards Analyst, Mat Bunch (via email) or at (404) 357-8540.

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NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Unofficial Comment Form

Regional Reliability Standard TOP-007-WECC-1a

DO NOT use this form for submitting comments. Use the electronic form to submit comments on the proposed retirements of Requirements R1, R2, and R2.1 of the Regional Reliability Standard **TOP-007-WECC-1a (System Operating Limits)**. The electronic form must be submitted by **8 p.m. Eastern, Monday, September 28, 2015.**

Documents and information about this project are available on the Regional Reliability Standards Under Development page. If you have questions, contact Mat Bunch or Barb Nutter.

Background Information

A regional reliability standard shall be: (1) a regional reliability standard that is more stringent than the continent-wide reliability standard, including a regional standard that addresses matters that the continent-wide reliability standard does not; or (2) a regional reliability standard that is necessitated by a physical difference in the bulk power system. Regional reliability standards shall provide for as much uniformity as possible with reliability standards across the interconnected bulk power system of the North American continent. Regional reliability standards, when approved by FERC and applicable authorities in Mexico and Canada, shall be made part of the body of NERC reliability standards and shall be enforced upon all applicable bulk power system owners, operators, and users within the applicable area, regardless of membership in the region.

The approval process for a regional reliability standard requires NERC to publicly notice and request comment on the proposed standard. Comments shall be permitted only on the following criteria (technical aspects of the standard are vetted through the regional standards development process):

> **Open** — Regional reliability standards shall provide that any person or entity that is directly and materially affected by the reliability of the bulk power system within the regional entity shall be able to participate in the development and approval of reliability standards. There shall be no undue financial barriers to participation. Participation shall not be conditional upon membership in the regional entity, a regional entity or any organization, and shall not be unreasonably restricted on the basis of technical qualifications or other such requirements.
>
> **Inclusive** — Regional reliability standards shall provide that any person with a direct and material interest has a right to participate by expressing an opinion and its basis, having that position considered, and appealing through an established appeals process, if adversely affected.
>
> **Balanced** — Regional reliability standards shall have a balance of interests and shall not be dominated by any two-interest categories and no single-interest category shall be able to defeat a matter.

Due Process — Regional reliability standards shall provide for reasonable notice and opportunity for public comment. At a minimum, the standard shall include public notice of the intent to develop a standard, a public comment period on the proposed standard, due consideration of those public comments, and a ballot of interested stakeholders.

Transparent — All actions material to the development of regional reliability standards shall be transparent. All standards development meetings shall be open and publicly noticed on the regional entity's Web site.

Review the revised TOP-007-WECC-1a regional standard and answer the following questions.

1. Do you agree the development of TOP-007-WECC-1a met the "Open" criteria as outlined above? If "No", please explain in the comment area below.

☐ Yes
☐ No
Comments:

2. Do you agree the development of TOP-007-WECC-1a met the "Inclusive" criteria as outlined above? If "No", please explain in the comment area below.

☐ Yes
☐ No
Comments:

3. Do you agree the development of TOP-007-WECC-1a met the "Balanced" criteria as outlined above? If "No", please explain in the comment area below.

☐ Yes
☐ No
Comments:

4. Do you agree the development of TOP-007-WECC-1a met the "Due Process" criteria as outlined above? If "No", please explain in the comment area below.

☐ Yes
☐ No
Comments:

5. Do you agree the development of TOP-007-WECC-1a met the "Transparent" criteria as outlined above? If "No", please explain in the comment area below.

☐ Yes
☐ No
Comments:

Individual or group. (5 Responses)
Name (4 Responses)
Organization (4 Responses)
Group Name (1 Responses)
Lead Contact (1 Responses)
Question 1 (5 Responses)
Question 1 Comments (5 Responses)
Question 2 (5 Responses)
Question 2 Comments (5 Responses)
Question 3 (5 Responses)
Question 3 Comments (5 Responses)
Question 4 (5 Responses)
Question 4 Comments (5 Responses)
Question 5 (5 Responses)
Question 5 Comments (5 Responses)

Individual
Dean W Spratt
Avsita
Yes
Yes
Yes
Yes
Yes
Individual
Amy Casuscelli
Xcel Energy
Yes
Yes
Yes