

WECC Standard TOP-007-WECC-1a — System Operating Limits

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:
<http://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

The British Columbia Utilities Commission

1.2 Compliance Monitoring Period

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

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- 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

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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	

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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.

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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 <i>path operators</i> 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:
<p>APS’ Request is governed by the Procedures, Step 3 – Drafting Team Begins Drafting Phase and Submits Draft Standard to WSC, at page 6, stating:</p> <p>“All WECC Standards will follow a standard format that refers to the “<i>Responsible Entities</i>” included in the NERC Functional Model and includes compliance measures according to the WECC standard template.” (Emphasis added.)</p> <p>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.</p> <p>Neither the TOP’s predecessor document, <i>TOP-STD-007-0, Operating Transfer Capability</i>, nor <i>TOP-007-WECC-1, System Operating Limits</i>, 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.</p> <p>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.”</p>