1. Purpose

The purpose of this **reliability standard** is to ensure that responsible entities conduct a **reliability** assessment of each **arranged interchange** before it is implemented.

2. Applicability

This **reliability standard** applies to:

(a) the **ISO**.

3. Requirements

R1 The **ISO** must approve or deny each on-time **arranged interchange** or emergency **arranged interchange** that it receives and must do so prior to the expiration of the time period defined in Appendix 1, column B.

  R1.1 The **ISO** must, when it is either the source **balancing authority** or sink **balancing authority** deny the **arranged interchange** or curtail **confirmed interchange** if it does not expect to be capable of supporting the magnitude of the **interchange**, including ramping, throughout the duration of the **arranged interchange**.

  R1.2 The **ISO** must deny the **arranged interchange** or curtail **confirmed interchange** if the **scheduling path** (proper connectivity of **adjacent balancing authorities**) between it and its **adjacent balancing authorities** is invalid.

R2 The **ISO** must approve or deny each on-time **arranged interchange** or emergency **arranged interchange** that it receives and must do so prior to the expiration of the time period defined in Appendix 1, column B.

  R2.1 The **ISO** must deny the **arranged interchange** or curtail **confirmed interchange** if the transmission path (proper connectivity of adjacent transmission service providers) between it and its adjacent transmission service providers is invalid.

R3 The **ISO** must, when it receives a **reliability** adjustment **arranged interchange**, approve or deny it prior to the expiration of the time period defined in Appendix 1, column B.

R4 The **ISO** must when it is a sink **balancing authority** confirm that none of the following conditions exist prior to transitioning an **arranged interchange** to **confirmed interchange**:

(a) it is a **reliability** adjustment **arranged interchange**, the time period specified in Appendix 1, column B has elapsed, and the **ISO** or the source **balancing authority** associated with the **arranged interchange** has not communicated its approval of the transition;

(b) it is not a **reliability** adjustment **arranged interchange**, the time period specified in Appendix 1, column B, has elapsed, and not all **balancing authorities** and transmission service providers associated with the **arranged interchange** have communicated their approval of the transition; or

(c) it is not a **reliability** adjustment **arranged interchange**, the time period specified in Appendix 1, column B, has elapsed, and any entity associated with the **arranged interchange** has communicated its denial of the transition.

R5 For each **arranged interchange** that is transitioned to **confirmed interchange**, the **ISO** must, when it is the sink **balancing authority**, notify the following entities of the on-time **confirmed interchange** such that the notification is delivered in time to be incorporated into scheduling systems prior to ramp start as specified in Appendix 1, column D:

R5.1 the source **balancing authority**;

R5.2 each intermediate **balancing authority**;

R5.3 each **reliability coordinator** associated with each **balancing authority** included in the **arranged interchange**;

R5.4 each transmission service provider included in the **arranged interchange**; and

R5.5 each purchasing selling entity included in the **arranged interchange**.

4. Measures

The following measures correspond to the requirements identified in section 3 of this **reliability standard**. For example, MR1 is the measure for requirement R1.

MR1 Evidence of either approving or denying **arranged interchange** as required in requirement R1 exists. Evidence may include, but is not limited to, dated and time stamped electronic logs or other equivalent evidence.

MR2 Evidence of either approving or denying **arranged interchange** as required in requirement R2 exists. Evidence may include, but is not limited to, dated and time stamped electronic logs or other equivalent evidence.

MR3 Evidence of either approving or denying **reliability** adjustment **arranged interchange** as required in requirement R3 exists. Evidence may include, but is not limited to, dated and time stamped electronic logs, studies or other equivalent evidence.

MR4 Evidence of confirming none of the conditions exist prior to transitioning an **arranged interchange** to **confirmed interchange** as required in requirement R4 exists. Evidence may include, but is not limited to, an interchange transaction without an implemented e-tag, or other equivalent evidence.

MR5 Evidence of notifying entities of the on-time **confirmed interchange** as required in requirement R5 exists. Evidence may include, but is not limited to, dated and time stamped electronic logs, voice recordings or other equivalent evidence.

5. Appendices

Appendix 1 – Timing Tables

Revision History

Date	Description
2018-10-01	Initial release.

Alberta Reliability Standard
Evaluation of Interchange Transactions
INT-006-AB-4

aeso
ALBERTA
ELECTRIC
SYSTEM
OPERATOR

Appendix 1 – Timing Tables
Timing Requirements for WECC

If **arranged interchange**[1] is submitted	Time Classification	A Sink BA makes initial distribution of **arranged interchange**[2]	B BA and TSP conduct reliability assessments	C Compilation and distribution status[2]	D BA prepares **confirmed interchange** for implementation
>1 hour after the start time	ATF		Entities have up to 2 hours to respond.		N/A
<10 minutes prior to ramp start and ≤1 hour after transaction start time where transaction start time is at the top of the hour	Late		Entities have up to 10 minutes to respond.		≤ 3 minutes after receipt of **confirmed interchange**
<15 minutes prior to ramp start and ≤1 hour after transaction start time where transaction start time is not at the top of the hour	Late		Entities have up to 10 minutes to respond.		≤ 3 minutes after receipt of **confirmed interchange**
10 minutes prior to ramp start where transaction start time is at the top of the hour	On-time		≤ 5 minutes from **arranged interchange** receipt		≥ 3 minutes prior to ramp start
11 minutes prior to ramp start where transaction start time is at the top of the hour	On-time		≤ 6 minutes from **arranged interchange** receipt		≥ 3 minutes prior to ramp start
12 minutes prior to ramp start where transaction start time is at the top of the hour	On-time		≤ 7 minutes from **arranged interchange** receipt		≥ 3 minutes prior to ramp start

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[1] Time classifications and deadlines apply to both initial **arranged interchange** submittal and any subsequent modifications to the **arranged interchange**.

[2] See NAESB WEQ004. The times are being retained in the NAESB tables but are removed here since they are not being referenced in requirements.

		A	B	C	D
If **arranged interchange**[1] is submitted	Time Classification	Sink BA makes initial distribution of **arranged interchange**[2]	BA and TSP conduct reliability assessments	Compilation and distribution status[2]	BA prepares **confirmed interchange** for implementation
13 minutes prior to ramp start where transaction start time is at the top of the hour	On-time		≤ 8 minutes from **arranged interchange** receipt		≥ 3 minutes prior to ramp start
14 minutes prior to ramp start where transaction start time is at the top of the hour	On-time		≤ 9 minutes from **arranged interchange** receipt		≥ 3 minutes prior to ramp start
< 1 hour and ≥ 15 minutes prior to ramp start	On-time		≤ 10 minutes from **arranged interchange** receipt		≥ 3 minutes prior to ramp start
≥ 1 hour and < 4 hours prior to ramp start	On-time		< 20 minutes from **arranged interchange** receipt		≥ 39 minutes prior to ramp start
≥ 4 hours prior to ramp start	On-time		≤ 2 hours from **arranged interchange** receipt		≥ 1 hour 58 minutes prior to ramp start
Submitted before 10:00 PPT with start time ≥ 00:00 PPT of following day	On-time		By 12:00 PPT of day the **arranged interchange** was recieved		≥ 1 hour 58 minutes prior to ramp start