

**AESO Assessment and Conversion of NERC INT-009-1 to Alberta INT-009-AB-1 Implementation of Interchange**

Section	NERC INT-009-1	Alberta INT-009-AB-1	Reason for Difference
<b>Purpose</b>	To ensure that the implementation of Interchange between Source and Sink Balancing Authorities is coordinated by an Interchange Authority such that the Balancing Authorities implement the Interchange exactly as agreed upon in the Interchange confirmation process.	<del>The purpose of this standard is to require</del> that the implementation of <del>interchange</del> between <del>source</del> and <del>sink</del> <del>balancing</del> <del>authorities</del> is coordinated by an <del>interchange</del> <del>authority</del> such that the <del>balancing</del> <del>authorities</del> implement the <del>interchange</del> <del>as</del> agreed upon in the <del>interchange</del> confirmation process.	Writing style for Alberta Reliability Standards.
<b>Applicability</b>	4.1. Balancing Authority.	4.1. <del>ISO</del> .	To identify the responsible entity in Alberta.
<b>Effective Date</b>	January 1, 2007.	<del>Ten calendar days after the date of approval by the Commission</del> .	To identify the effective date in Alberta.
<b>Definitions</b>		Italicized terms used in this reliability standard have the same meanings as set out in the Alberta Reliability Standards Glossary of Terms and Part 1 of the ISO Rules. <sup>1</sup>	Added definitions section to the Alberta reliability standard.
<b>Requirement</b>	R1. The Balancing Authority shall implement Confirmed Interchange as received from the Interchange Authority.	R1. The <del>ISO</del> <del>must</del> implement <del>in the</del> <del>interchange</del> <del>schedule</del> <del>the</del> <del>confirmed</del> <del>interchange</del> as received from the <del>interchange</del> <del>authority</del> .	To clarify the meaning of “implementation”, i.e. implement in the interchange schedule.
<b>Measure</b>	M1. The Balancing Authority shall provide evidence that Implemented Interchange matches Confirmed Interchange as submitted by the Interchange Authority.	<del>MR1. Evidence exists and confirms the amounts match as per R1.</del>	
<b>Requirement</b>			

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<sup>1</sup> Defined terms are not italicized in this document, but will appear in the Alberta Reliability Standards document.

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<b>Measure</b>	M2. Evidence shall demonstrate that the Interchange was implemented in the Balancing Authority's Area Control Error (ACE) equation, or the system that calculates the ACE equation. Evidence may be on a net basis or an individual Interchange basis.	MR2. Evidence <del>exists and confirms</del> that the <u>interchange value is included in the ACE calculation in a net or individual basis.</u>	
<b>Requirement</b>			
<b>Measure</b>	M3. Balancing Authorities that are interconnected with a direct current tie shall demonstrate that the Interchange was implemented in the ACE equation or modeled as an equivalent generator/load within its area.	MR3. <del>Evidence exists and confirms that the</del> <u>interchange value is included in the ACE calculation,</u> or modeled as an equivalent generator/load within its area <u>where the interchange is via a DC tie.</u>	
<b>Procedures</b>			
<b>Compliance</b>	<p>1. Compliance Monitoring Process</p> <p>1.1. Compliance Monitoring Responsibility Regional Reliability Organization.</p> <p>1.2. Compliance Monitoring Period and Reset Time Frame The Performance-Reset Period shall be twelve months from the last noncompliance to Requirement 1.</p> <p>1.3. Data Retention The Balancing Authority and Interchange Authority shall each keep 90 days of historical data. The Compliance Monitor shall keep audit records for a minimum of three calendar years.</p> <p>1.4. Additional Compliance Information Each Balancing Authority shall demonstrate</p>		<p>There is no compliance section currently proposed in the Alberta Reliability Standards.</p> <p>A compliance program will be developed at a later date for Alberta Reliability Standards that recognizes the compliance monitoring and enforcement structure in Alberta.</p> <p>This approach is deemed consistent with the existing ISO Rules.</p>

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	<p>compliance to the Compliance Monitor within the first year that this standard becomes effective or the first year the entity commences operation by self-certification to the Compliance Monitor. Subsequent to the initial compliance review, compliance may be:</p> <p>▲ 1.4.1 Verified by audit at least once every three years.</p> <p>▲ 1.4.2 Verified by spot checks in years between audits.</p> <p>▲ 1.4.3 Verified by annual audits of non-compliant Balancing Authorities, until compliance is demonstrated.</p> <p>▲ 1.4.4 Verified at any time as the result of a complaint. Complaints must be lodged within 60 days of the incident. The Compliance Monitor will evaluate complaints. The Balancing Authorities shall make the following available for inspection by the Compliance Monitor upon request:</p> <p>▲ 1.4.5 For compliance audits and spot checks, relevant data and system log records for the audit period which indicate a Balancing Authority implemented all instances of the Interchange Authority's communication under R1 concerning the implementation of a Confirmed Interchange. The Compliance Monitor may request up to a three month period of historical data ending with the date the request is received by the Balancing Authority</p> <p>▲ 1.4.6 For specific complaints, only those data and system log records associated with the specific</p>		

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	<p>Interchange event contained in the complaint which indicates a Balancing Authority implemented the Interchange Authority's communication under R1 concerning the implementation of the Confirmed Interchange for that specific Interchange.</p> <p>2. Levels of Non-Compliance</p> <p>2.1. Level 1: One occurrence<sup>1</sup> of not implementing a Confirmed Interchange as described in R1.</p> <p>2.2. Level 2: Two occurrences<sup>1</sup> of not implementing a Confirmed Interchange as described in R1.</p> <p>2.3. Level 3: Three occurrences<sup>1</sup> of not implementing a Confirmed Interchange as described in R1.</p> <p>2.4. Level 4: Four or more occurrences<sup>1</sup> of not implementing a Confirmed Interchange as described in R1 or no evidence provided.</p>		
Regional Differences	None identified.	None identified.	

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**Proposed Terms for the Alberta Reliability Standards Glossary:**

Arranged Interchange – The state where the Interchange Authority has received the Interchange information (initial or revised).

Interchange Authority – The responsible entity that authorizes implementation of valid and balanced Interchange Schedules between

Confirmed Interchange – The state where the Interchange Authority has verified the Arranged Interchange.

Area Control Error (ACE) - The instantaneous difference between a Balancing Authority's net actual and scheduled interchange, taking into account the effect of Frequency Bias and correction for meter error.

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**Defined Terms used in this standard currently in ISO Rules Definitions or Alberta Reliability Standards Glossary:**

Pool participant, ISO, Commission, interchange transaction, e-tag, interchange schedule

**Standard Owner:**

Anita Lee

**AESO Requirement Owner(s):**

R1 – Neil Curtis, Director Grid and Market Operations.

**AESO Subject Matter Experts:**

Al Gultzan, Jason Murray, Saeed Shah

**Work Group Comments:**

**Work Group Response:**

**Acceptance Recommendation:**

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**Developed by:**

<b>Name</b>	<b>Organization</b>	<b>Name</b>	<b>Organization</b>
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Jason Murray	AESO	Saeed Shah	AESO
Peter Wong	AESO		

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Interchange was implemented in the Balancing Authority's Area Control Error (ACE) equation, or the system that calculates the ACE equation. Evidence may be on a net basis or an individual Interchange basis.

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interconnected with a direct current tie shall demonstrate that the Interchange was implemented in the ACE equation