

1. Purpose

The purpose of this **reliability standard** is to ensure the **ISO** and each **operator** of a **transmission facility** have adequate and reliable voice and message telecommunication facilities internally and with others for the exchange of **interconnection** and operating information necessary to maintain reliability.

2. Applicability

This reliability standard applies to the following:

- (a) the operator of a transmission facility that is:
 - (i) part of the bulk electric system; or
 - (ii) not part of the bulk electric system but which the ISO:
 - (A) determines is necessary for the reliable operation of either the **interconnected electric system** or the City of Medicine Hat electric system; and
 - (B) publishes on the AESO website and may amend from time to time in accordance with the process set out in Appendix 1; and
- (b) the ISO.

3. Requirements

- **R1** The **ISO** must, as necessary to maintain reliability, provide adequate, reliable, and, where applicable, diverse and redundant voice and message telecommunication facilities for the exchange of **interconnection** and internal Alberta operating information with the following:
 - (a) each operator of a transmission facility;
 - (b) each adjacent interconnected transmission operator directly connected to Alberta;
 - (c) each adjacent balancing authority directly connected to Alberta; and
 - (d) the adjacent reliability coordinators.
- **R2** Each **operator** of a **transmission facility** must, as necessary to maintain reliability, provide adequate, reliable, and, where applicable, diversely routed and redundant voice and message telecommunication facilities for the exchange of **interconnection** and Alberta operating information with the following:
 - (a) each adjacent operator of a transmission facility;
 - (b) each adjacent **interconnected transmission operator** that is directly connected to Alberta; and
 - (c) the ISO.
- **R3** The **ISO** and each **operator** of a **transmission facility** must manage and test its alternate voice and message telecommunication facilities.
- R4 The ISO must provide a means to coordinate voice and message telecommunications with each operator of a transmission facility, adjacent interconnected transmission operator, adjacent

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balancing authority and adjacent reliability coordinators, which coordination must include the ability to investigate and recommend solutions to voice and message telecommunications problems within Alberta.

- **R5** Each **operator** of a **transmission facility** must provide a means to coordinate voice and message telecommunications with the **ISO** and adjacent **interconnected transmission operators**, which coordination must include the ability to investigate and recommend solutions to voice and message telecommunications problems within Alberta.
- **R6** The **ISO** and each **operator** of a **transmission facility** must use the English language for all communications between their respective operating personnel responsible for the real-time generation control and operation of the **interconnected electric system**.
- R7 The ISO and each operator of a transmission facility must have written operating instructions and procedures to enable continued operation of the interconnected electric system during the loss of voice and message telecommunications facilities.

4. Measures

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

MR1 Evidence of providing voice and message telecommunication facilities as required in requirement R1 exists. Evidence may include:

- (a) a list identifying each telecommunication facility for the exchange of **interconnection** and Alberta operating information; and
- (b) documentation demonstrating the implementation of diverse routing and redundancy capability.

MR2 Evidence of providing voice and message telecommunication facilities as required in requirement R2 exists. Evidence may include:

- (a) a list identifying each telecommunication facility for the exchange of **interconnection** and Alberta operating information; and
- (b) documentation demonstrating the implementation of diverse routing and redundancy capability, if applicable.

MR3 Evidence of managing and testing its alternate voice and message telecommunication facilities as required in requirement R3 exists. Evidence may include:

- (a) a list identifying each telecommunication facility as determined to be alternate;
- (b) documented procedures describing how to manage and test its alternate telecommunication facilities; and
- (c) records of testing.

MR4 Evidence of providing a means to coordinate voice and message telecommunications as required in requirement R4 exists. Evidence may include a documented procedure in place which identifies a process for coordinating telecommunications and a process for investigating and recommending solutions to telecommunications problems.

MR5 Evidence of providing a means to coordinate voice and message telecommunications as required in requirement R5 exists. Evidence may include a documented procedure in place which identifies a

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process for coordinating telecommunications and a process for investigating and recommending solutions to telecommunications problems.

MR6 Evidence of using the English language as required in requirement R6 exists. Evidence may include **operator** logs, voice recordings, electronic communications or **e-tag** records.

MR7 Evidence of having written operating instructions and procedures as required in requirement R7 exists. Evidence may include electronic or hard copy of the operating instructions and procedures.

5. Appendices

Appendix 1 – Amending Process for List of Facilities

Revision History

Effective	Description
2013-10-01	Initial Release
2015-05-01	Revised for ISO assumption of RC functionality for the Alberta footprint

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Appendix 1 Amending Process for List of Facilities

In order to amend the list referenced in subsections (a)(ii)(B) of section 2, Applicability, the ISO must:

- (a) upon determining that a **transmission facility** is to be added, notify the **operator** in writing and determine an effective date, which must be no less than thirty (30) **days** after the date of notice, for the **operator** to meet the applicable requirements;
- (b) upon determining that a **transmission facility** is to be deleted, notify the **operator** in writing and determine an effective date for the **operator** to no longer be required to meet the applicable requirements; and
- (c) publish the amended list with effective dates on the AESO website.

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