

Alberta Reliability Standard Operating Personnel Communications Protocols COM-002-AB-4

1. ~~1.~~ Purpose

The purpose of this **reliability standard** is to ~~ensure the ISO and entities subject to this reliability standard have adequate~~ improve communications ~~and that these~~ for the issuance of operating instructions¹, including **directives**, with predefined communications ~~capabilities are staffed and available for addressing a real-time emergency condition, and~~ protocols to reduce the possibility of miscommunication that could lead to ~~ensure communications by operating personnel are effective~~ action or inaction harmful to the **reliability of the interconnected electric system**.

2. ~~2.~~ Applicability

This **reliability standard** applies to:

- (a) ~~(a)~~ — the **operator of a transmission facility**;
the **operator** of a **generating unit** that is:
 - (i) ~~directly connected to the transmission system or to transmission facilities within the City of Medicine Hat; and~~
- (a)(b) ~~(ii)~~ — not part of an **aggregated generating facility** the **bulk electric system**;
- (c) ~~(b)~~ — the **operator** of an **aggregated generating facility** that is part of the bulk electric system;
- (b)(d) ~~(b)~~ — the **operator** of an **electric distribution system** that is directly connected to the **transmission system** or to **transmission facilities** within the City of Medicine Hat; and
- (e) ~~(c)~~ — the **operator** of a **transmission facility**; and
- (e)(e) ~~(d)~~ — the **ISO**.

3. ~~3.~~ Requirements

R1 ~~The ISO must have voice and data communication facilities with:~~

and each operator of a transmission facility; shall develop documented communication protocols for its operating personnel that issue or receive operating instructions, including **directives**. The protocols shall, at a minimum:

- (a) ~~each adjacent interconnected transmission operator~~ directly connected to Alberta; and

¹ For the purposes of COM-002-AB-4, “operating instruction” means a command by operating personnel responsible for the real-time operation of the **interconnected electric system** to change or preserve the state, status, output, or input of a **system element**. A **directive** is a type of an **operating instruction**. (a discussion of general information and of potential options or alternatives to resolve **interconnected electric system** operating concerns is not a command and is not considered an operating instruction.)

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~~(b) each adjacent balancing authority directly connected to Alberta;~~

R2 ~~The operator of a transmission facility must have voice and data communication facilities with:~~

~~(a) each adjacent operator of a transmission facility;~~

~~(b) each adjacent interconnected transmission operator directly connected to Alberta; and~~

~~(c) the ISO.~~

R1.1 require its operating personnel that issues or receives an oral or written operating instruction to use the English language;

R1.2 require its operating personnel that issues an oral two-party, person-to-person operating instruction to take one of the following actions:

(a) confirm the receiver's response if the repeated information is correct;

(b) reissue the operating instruction if the repeated information is incorrect or if requested by the receiver; or

(c) take an alternative action if a response is not received or if the operating instruction was not understood by the receiver.

R1.3 require its operating personnel that receives an oral two-party, person-to-person operating instruction to take one of the following actions:

(a) repeat, not necessarily verbatim, the operating instruction and receive confirmation from the issuer that the response was correct; or

(b) request that the issuer reissue the operating instruction;

R1.4 require its operating personnel that issues a written or oral single-party to multiple-party burst operating instruction to confirm or verify that the operating instruction was received by at least one receiver of the operating instruction;

R1.5 specify the instances that require time identification when issuing an oral or written operating instruction and the format for that time identification; and

R1.6 specify the nomenclature for transmission interface **system elements** and interface **transmission facilities** when issuing an oral or written operating instruction.

R2 The ISO and each operator of a transmission facility shall conduct initial training for each of its operating personnel responsible for the real-time operation of the **interconnected electric system** on the documented communications protocols developed in accordance with requirement R1 prior to that individual operator issuing an operating instruction, including **directives**.

R3 Each operator of an **electric distribution system**, operator of a **generating unit**, and ~~each~~ the operator of an **aggregated generating facility** ~~must have voice and data communication facilities with~~ shall conduct initial training for each of its operating personnel who can receive an oral two-party, person-to-person operating instruction prior to that individual operator receiving an oral two-party, person-to-person operating instruction, including **directives**, to either:

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(a) ~~each~~ repeat, not necessarily verbatim, the operating instruction and receive confirmation from the issuer that the response was correct; or

(b) request that the issuer reissue the operating instruction.

R4 The ISO and each operator of a transmission facility shall at least once every 12 months:

R4.1 assess adherence to the documented communications protocols in requirement R1 by its operating personnel that issue or receive operating instructions, including directives, provide feedback to those operating personnel, and take corrective action, as deemed appropriate by the entity, to address deviations from the documented protocols; and

R4.2 assess the effectiveness of its documented communications protocols in requirement R1 for its operating personnel that issue or receive operating instructions, include directives, and modify its documented communication protocols, as necessary.

R5 The ISO and operator of a transmission facility ~~to which it is directly connected; and~~ that issues an oral two-party, person-to-person operating instructions during an emergency, excluding written or oral single-party to multiple-party burst operating instruction, shall either:

(a) the ISO.

~~**R4**—The ISO, each operator of a transmission facility, each operator of an aggregated generating facility and each operator of a generating unit must have personnel available for all hours of the day, seven (7) days a week, to receive and respond to any voice or data communication regarding a real-time system emergency condition via the communication facilities as identified in requirements R1 through R3.~~

~~**R5**—The ISO must notify all potentially affected adjacent interconnected transmission operators and adjacent balancing authorities through predetermined communication paths:~~

~~(a) of any threat to the reliability of the interconnected electric system; or~~

~~(b) if the ISO anticipates shedding firm load.~~

~~**R6**—The ISO must, when issuing a verbal directive, do so in a clear, concise and definitive manner, identify the instruction as a directive, and:~~

~~(a) if the recipient of the directive does not respond by repeating the information in the directive, then the ISO must request the recipient to repeat the information in the directive;~~

~~(b) if the information in the response is not correct, the ISO must repeat the directive to resolve any misunderstandings; and~~

~~(c) if the information is repeated correctly, the ISO must acknowledge this to the recipient.~~

(a) 4.confirm the receiver's response if the repeated information is correct (in accordance with requirement R6);

(b) reissue the operating instruction if the repeated information is incorrect or if requested by the receiver; or

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(c) take an alternative action, if a response is not received or if the operating instruction was not understood by the receiver.

R6 The ISO and each operator of an electric distribution system, operator of a generating unit, operator of an aggregated generating facility, and operator of transmission facility that receives an oral two-party, person-to-person operating instructions during an emergency, excluding written or oral single-party to multiple-party burst operating instruction, shall either:

(a) repeat, not necessarily verbatim, the operating instruction and receive confirmation from the issuer that the response was correct, or

(b) request that the issuer reissue the operating instruction.

R7 The ISO and each operator of a transmission facility that issues a written or oral single-party to multiple-party burst operating instruction during an emergency shall confirm or verify that the operating instruction was received by at least one receiver of the operating instruction.

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 having ~~voice and data~~ developed documented communication facilities protocols for operating personnel that issue or receive operating instructions, including directives, as required in requirement R1 exists. -Evidence may include a list of documented communication facilities protocols or other equivalent evidence ~~that confirms that the communications have been provided~~.

MR2 Evidence of ~~having voice and data communications~~ conducting initial training for each of its operating personnel for the real-time operation of the interconnected electric system as required in requirement R2 exists. -Evidence may include a list of communication facilities initial training records, such as dated class rosters, training certificates, lesson plans, course materials, or other equivalent evidence ~~that confirms that the communications have been provided~~.

MR3 Evidence of ~~having voice and data communications~~ conducting initial training for operating personnel who can receive an oral two-party, person-to-person operating instruction, including directives, as required in requirement R3 exists. -Evidence may include a list of communication facilities initial training records, such as dated class rosters, training certificates, lesson plans, course materials, or other equivalent evidence ~~that confirms that the communications have been provided~~.

MR4 Evidence of ~~having personnel available~~ assessing the adherence to and effectiveness of the documented communication protocols in requirement R1 as required in requirement R4 exists. Evidence may include operator logs, timesheets, on-call lists or shift schedules documented assessments, dated operator logs or other evidence of feedback, corrective actions taken, modified documented communication protocols, or other equivalent evidence.

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- ~~MR5 Evidence of notifying entities~~**MR5** Evidence of confirming receiver’s response, reissuing the operating instruction during an emergency, or taking an alternative action as required in requirement R5 exists. -Evidence may include ~~operator logs or dated and time-stamped voice recordings, dated and time-stamped transcripts of voice recordings, dated operator logs, or other equivalent evidence.~~
- MR6** Evidence of ~~issuing verbal directives~~repeating the operating instruction during an emergency or requesting that the issuer reissue the operating instruction as required in requirement R6 exists. Evidence may include ~~dated and time-stamped voice recordings, dated and time-stamped transcripts of voice recordings, dated operator logs, or other equivalent evidence.~~
- MR7** Evidence of confirming or verifying that a written or oral operating instruction during an emergency was received by at least one receiver as required in requirement R7 exists. Evidence may include ~~dated and time-stamped voice recordings or operator logs, dated and time-stamped transcripts of voice recordings, dated operator logs, or other equivalent evidence.~~

Revision History

<u>EffectiveDate</u>	<u>Description</u>
2013-10-01xxxx-xx-xx	Initial release.
2014-01-01	Administrative update to standardize formatting, definitions and drafting style. Removed references to the WECC Reliability Coordinator.