Alberta Reliability Standard
Balancing Authority Control
BAL-005-AB-1

1. Purpose

The purpose of this **reliability standard** is to establish requirements for acquiring data necessary to calculate **reporting area control error** and specify a minimum periodicity, accuracy, and availability requirement for acquisition of the data.

2. Applicability

This **reliability standard** applies to:

(a) the **ISO**.

3. Requirements

R1 The **ISO** must use a design scan rate of no more than 9 seconds in acquiring data necessary to calculate **reporting area control error**.

R2 Intentionally left blank.

R3 The **ISO** must use frequency metering equipment for the calculation of **reporting area control error**:

R3.1 that is available a minimum of 99.95% for each calendar year; and

R3.2 with a minimum accuracy of 0.001 Hz.

R4 The **ISO** must make available to its operating personnel information associated with **reporting area control error** including quality flags indicating missing or invalid data.

R5 The **ISO** must ensure the system it uses to calculate **reporting area control error** is available a minimum of 99.5% of each calendar year.

R6 The **ISO** must implement an operating process to identify and mitigate errors affecting the accuracy of scan rate data used in the calculation of **reporting area control error** for its **balancing authority area**.

R7 The **ISO** must ensure that each **interconnection**, pseudo-tie, and dynamic schedule with an **adjacent balancing authority** is equipped with:

R7.1 a common source to provide information to both the **ISO** and the **adjacent balancing authority** for the scan rate values used in the calculation of **reporting area control error**; and,

R7.2 a time synchronized common source to determine hourly MWh values agreed-upon to aid in the identification and mitigation of errors.

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 using a design scan rate as required in requirement R1 exists. Evidence may include data files, database, spreadsheets, system logs, display information, other data, or other equivalent evidence.

MR2 Intentionally left blank.

MR3 Evidence of using frequency metering equipment for the calculation of **reporting area control error** as required in requirement R3 exists. Evidence may include dated documents, data files, database, system logs, other data, or other equivalent evidence.

MR4 Evidence of making available information associated with **reporting area control error** as required in requirement R4 exists. Evidence may include graphical display or dated alarm log that provides indication of data validity for the real-time **reporting area control error** based on both the calculated result and all of the associated inputs, or other equivalent evidence.

MR5 Evidence of ensuring the system used to calculate **reporting area control error** was available as required in requirement R5 exists. Evidence may include data files, database, system logs, other data, or other equivalent evidence.

MR6 Evidence of implementing an operating process as required in requirement R6 exists. Evidence may include evidence that shows the operating process was implemented, such as dated communications, incorporation in operator task verification, or other equivalent evidence.

MR7 Evidence of ensuring that each **interconnection**, pseudo-tie and dynamic schedule with an adjacent **balancing authority** is equipped with a common source as required in requirement R7 exists. Evidence may include technical documentation, electronic communications, or other equivalent evidence.

Revision History

Date	Description
xxxx-xx-xx	Initial release.