

1. Purpose

The purpose of this **reliability standard** is to ensure plans are established and personnel are prepared to enable effective coordination of the system restoration process to ensure **reliability** is maintained during restoration of the **interconnected electric system** in the event of a complete or partial **blackout**.

2. Applicability

This **reliability standard** applies to:

- (a) the **ISO**.

3. Requirements

R1 The **ISO** must develop a restoration plan for its area and implement it following a **disturbance** in which:

- (a) one or more areas of the **interconnected electric system** shuts down; and
- (b) the use of **blackstart resources** is required to restore the shut down area.

The restoration plan must include:

- R1.1** a strategy to be employed during restoration events for restoring the **interconnected electric system** including minimum criteria for meeting the objectives of the **ISO's** restoration plan;
- R1.2** criteria and conditions for re-establishing connections between each **operator** of a **transmission facility** within its area, with **transmission operators** in other **reliability coordinator areas**, and with other **reliability coordinators**;
- R1.3** reporting requirements for the entities within the **ISO's** area during a restoration event;
- R1.4** criteria for sharing information regarding restoration with neighbouring **reliability coordinators** and with **operators** of **transmission facilities** within the **ISO's** area; and
- R1.5** identification of the **ISO** as the primary contact for disseminating information regarding restoration to neighbouring **reliability coordinators**, and to **operators** of **transmission facilities** within its area.
- R1.6** Intentionally left blank.

R2 The **ISO** must distribute its most recent restoration plan to each **operator** of a **transmission facility**, as referenced in the **ISO's** restoration plan, and to neighbouring **reliability coordinators** within thirty (30) **days** of creation or revision.

R3 The **ISO** must review its restoration plan within thirteen (13) **months** of the last review.

R4 The **ISO** must review its neighbouring **reliability coordinator's** restoration plans and provide written notification of any conflicts identified during that review to the applicable **reliability coordinator** within sixty (60) **days** of receipt.

R4.1 If the **ISO** identifies any conflicts between its restoration plan and any of its neighbouring **reliability coordinator's plans**, the conflicts must be resolved within thirty (30) **days** of receipt of the **ISO's** written notification.

R5 The **ISO** must review the restoration plans of **operators** of **transmission facilities** within its area that are required to be submitted to the **ISO** in accordance with EOP-005-AB.

R5.1 The **ISO** must determine whether each of the restoration plans referenced in requirement R5 is coordinated and compatible with the **ISO's** restoration plan and each of the other

restoration plans referenced in requirement R5. The **ISO** must provide the **operator** of a **transmission facility** with written notification of approval or disapproval of its restoration plan, with stated reasons, within thirty (30) **days** after the **ISO**'s receipt of the restoration plan.

- R6** The **ISO** must have within its primary and backup control rooms, so that it is available to all of its real-time operating personnel, a copy of its latest approved restoration plan prior to its effective date.
- R7** The **ISO** must include within its operations training program, annual **interconnected electric system** restoration training for its real-time operating personnel. This training program must address the following:
- R7.1** the coordination role of the **ISO**; and
 - R7.2** re-establishing **WECC** Paths 1 and 83.
- R8** The **ISO** must conduct two (2) scheduled instances of a system restoration drill, exercise, or simulation per calendar year, which must provide an opportunity for each **operator** of a **transmission facility**, **operator** of a **generating unit** and **operator** of an **aggregated generating facility** to attend as dictated by the particular scope of the drill, exercise, or simulation that is being conducted.
- R8.1** The **ISO** must request each **operator** of a **transmission facility**, **operator** of a **generating unit** and **operator** of an **aggregated generating facility**, as identified in the **ISO**'s restoration plan, to participate in a drill, exercise, or simulation at least once every two calendar years.

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 developing and implementing a restoration plan as required in requirement R1 exists. Evidence of developing a restoration plan may include a dated copy of the restoration plan, or other equivalent evidence. Evidence of implementing a restoration plan may include operator logs, operating documentation, voice recordings, communication documentation, or other equivalent evidence.
- MR2** Evidence of distributing the restoration plan as required in requirement R2 exists. Evidence may include dated e-mails with receipts, a dated posting to a secure website with notification to affected entities, dated registered mail receipts, or other equivalent evidence.
- MR3** Evidence of reviewing the restoration plan as required in requirement R3 exists. Evidence may include a dated review signature sheet, revision histories, or other equivalent evidence.
- MR4** Evidence of reviewing each neighbouring **reliability coordinator**'s restoration plans and providing notification of any conflicts, where applicable, within the timelines as required in requirement R4 exists. Evidence may include dated emails, dated electronic receipts, or other equivalent evidence.
- MR4.1** Evidence of resolving any conflicts within the timelines as required in requirement R4.1 exists. Evidence may include dated emails, dated electronic receipts, a dated updated plan, or other equivalent evidence.
- MR5** Evidence of reviewing restoration plans of each **operator** of a **transmission facility** as required in requirement R5 exists. Evidence may include a dated review signature sheet, dated electronic receipts, dated emails, or other equivalent evidence.
- MR5.1** Evidence of approving or disapproving, and providing notification of any conflicts and



resolving any conflicts within the timelines as required in requirement R5.1 exists. Evidence may include dated emails, dated electronic receipts, a dated updated plan, or other equivalent evidence.

MR6 Evidence of having copies of restoration plans as required in requirement R6 exists. Evidence may include dated emails, dated electronic receipts, restoration plan documentation, or other equivalent evidence.

MR7 Evidence of including the **interconnected electric system** restoration training as required in requirement R7 exists. Evidence may include an electronic or a hard copy training program, or other equivalent evidence.

MR8 Evidence of conducting two scheduled instances of a system restoration drill, exercise, or simulation per calendar year and providing an opportunity for entities to attend, as required in requirement R8 exists. Evidence of conducting the required drills, exercises or simulations may include dated training records, or other equivalent evidence. Evidence of providing an opportunity for each **operator** of a **transmission facility**, **operator** of a **generating unit** and **operator** of an **aggregated generating facility** to attend, as required in requirement R8, may include dated records of the **ISO's** invitation, or other equivalent evidence.

MR8.1 Evidence of requesting that each **operator** of a **transmission facility**, **operator** of a **generating unit** and **operator** of an **aggregated generating facility**, as identified in the **ISO's** restoration plan, participate in a drill, exercise, or simulation, as required in requirement R8.1 exists. Evidence may include dated records of the **ISO's** request, or other equivalent evidence.

Revision History

Date	Description
YYYY-MM-DD	Initial release.