Alberta Reliability Standard
Emergency Operations Planning
EOP-001-AB1-2.1b

1. Purpose

The purpose of this **reliability standard** is to define requirements for the development, maintenance, implementation and coordination of plans to mitigate operating emergencies.

2. Applicability

This **reliability standard** applies to:

(a) the **operator** of a **transmission facility** that is part of the **bulk electric system**; and
(b) the **ISO**.

This **reliability standard** does not apply to the **operator** of a **transmission facility** whose **transmission facility** is a radial connection from a **generating unit** or an **aggregated generating facility** to either the **transmission system** or to **transmission facilities** within the city of Medicine Hat.

3. Requirements

R1 The **ISO** must, as appropriate, have operating agreements with adjacent **balancing authorities** that contain provisions for **emergency assistance**.

R2 The **ISO** must develop, maintain and implement a capacity and energy emergency plan to mitigate insufficient generating capacity.

R3 Each of the **ISO** and the **operator** of a **transmission facility** must develop, maintain and implement plans to mitigate operating emergencies on the **transmission system**.

R4 Each of the **ISO** and the **operator** of a **transmission facility** must develop, maintain and implement plans for load shedding.

R5 Each of the **ISO** and the **operator** of a **transmission facility** must include, at a minimum, when developing emergency plans as identified in requirements R2, R3 and R4, the following:

(a) communication protocols to be used during operating emergencies;

(b) a list of controlling actions to resolve the operating emergency within **NERC** established timelines, including, where appropriate, a controlling action to reduce load;

(c) the tasks to be coordinated with and among any affected **operator** of a **transmission facility**, adjacent **interconnected transmission operator** and adjacent **balancing authority**, as appropriate; and

(d) a procedure for adjusting staffing levels for the emergency, where appropriate.

R6 The **ISO** must consider the elements in Appendix 1 when developing a capacity and energy emergency plan in accordance with requirement R2.

R7 The **ISO** must review its capacity and energy emergency plan, plans to mitigate operating emergencies on the **transmission system** and plans for load shedding once every calendar year and update as required.

R8 Each **operator** of a **transmission facility** must review its plans for load shedding once every calendar year and update as required.

R9 The **ISO** must provide a copy of its updated capacity and energy emergency plan, plans for load shedding and plans to mitigate operating emergencies on the **transmission system** to any affected:

(a) **operator** of a **transmission facility**;

(b) adjacent **interconnected transmission operator**; and

(c) adjacent **balancing authority**.

R10 Each **operator** of a **transmission facility** must provide a copy of its updated plans to mitigate operating emergencies on the **transmission system** and plans for load shedding to any affected adjacent **operator** of a **transmission facility** and the **ISO**.

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 having at least one (1) operating agreement with an adjacent **balancing authority** as required in requirement R1 exists.

MR2 Evidence of developing, maintaining and implementing a capacity and energy emergency plan as required in requirement R2 exists. Evidence may include a dated, current capacity and energy emergency plan and communications or training to the operating personnel.

MR3 Evidence of developing, maintaining and implementing plans to mitigate operating emergencies on the **transmission system** as required in requirement R3 exists. Evidence may include dated, current plans to mitigate operating emergencies on the **transmission system** and communications or training to the operating personnel.

MR4 Evidence of developing, maintaining and implementing load shedding plans as required in requirement R4 exists. Evidence may include dated, current plans for load shedding and communications or training to the operating personnel.

MR5 Evidence of including the items in emergency plans as required in requirement R5 exists. Evidence may include emergency plans that contain items listed in requirement R5.

MR6 Evidence of considering the elements in Appendix 1 as required in requirement R6 exists. Evidence may include documentation indicating which elements from Appendix 1 were not included in the capacity and emergency plan and the rationale why they were not included.

MR7 Evidence of reviewing and updating each plan as required in requirement R7 exists. Evidence may include documentation confirming each plan was reviewed once every calendar year and updated as required.

MR8 Evidence of reviewing and updating plans as required in requirement R8 exists. Evidence may include documentation confirming each plan was reviewed once every calendar year and updated as required.

MR9 Evidence of providing each updated plan as required in requirement R9 exists. Evidence may include email or mail to appropriate recipients that identifies contents submitted.

MR10 Evidence of providing updated plans as required in requirement R10 exists. Evidence may include email or mail to appropriate recipients that identifies contents submitted.

5. Appendix 1

Elements for Consideration in Development of Capacity and Energy Emergency Plan

1. **Bulk electric system** energy use — The reduction of the **bulk electric system**'s own energy use to a minimum.
2. Public appeals — Appeals to the public through all media for voluntary load reductions and energy conservation including educational messages on how to accomplish such load reduction and conservation.
3. Load management — Implementation of load management and voltage reductions, if appropriate.
4. Interruptible and curtailable loads — Use of interruptible and curtailable load to reduce capacity requirements or to conserve the fuel in short supply.
5. Maximizing **generating unit** output and availability — The operation of all generating sources to maximize output and availability. This should include plans to winterize **generating units** and **aggregated generating facilities** during extreme cold weather.
6. Notifying independent power producers (IPP) — Notification of cogeneration and independent power producers to maximize output and availability.
7. Requests of government — Requests to appropriate government agencies to implement programs to achieve necessary energy reductions.

8. Load curtailment — A mandatory load curtailment plan to use as a last resort. This plan should address the needs of critical loads essential to the health, safety and welfare of the community. Address firm load curtailment.
9. Notification of government agencies — Notification of appropriate government agencies as the various steps of the operating emergency plan are implemented.
10. Notifications to operating entities — Notifications to other operating entities as steps in the operating emergency plan are implemented.

Revision History

Effective	Description
2015-05-01	Revised for ISO assumption of RC functionality for the Alberta footprint
2014-01-01	Initial Release