

EOP-002-AB-2 Capacity and Energy Emergencies

1. Purpose

The purpose of this *reliability standard* is to ensure the ISO is prepared for a supply shortfall event.

2. Applicability

This *reliability standard* applies to:

- ISO

3. Definitions

Italicized terms used in this *reliability standard* have the meanings as set out in the Alberta [Reliability Standards Glossary of Terms](#) and Part 1 of the [ISO Rules](#).

4. Requirements

- R1** The ISO must exercise its authority to alleviate a supply shortfall event in the AIES.
- R2** The ISO must implement its capacity and energy emergency plan by following ISO rules.
- R3** The ISO must communicate its current and its forecast of future system conditions to the VRC and *adjacent balancing authorities* during a supply shortfall event.
- R4** The ISO must follow plans in ISO rules when it anticipates a supply shortfall event may occur. The ISO plans must include any one of or combination of the following:
- Issuing directives as necessary, including bringing on all available generation;
 - Postponing equipment maintenance;
 - Posting interconnection TTC to maximum *reliability* based capacity and being prepared to reduce firm *load*.
- R5** The ISO must, during a supply shortfall event:
- Only use the assistance provided by the *Interconnection's frequency bias* for the time needed to manage the event.
 - Not direct generating units in an attempt to return the *Interconnection* frequency to normal beyond that supplied through *frequency bias* action and *interchange schedule* changes.
- R6** The ISO must comply with the control performance and disturbance control standards during a supply shortfall event. If necessary to do so, the ISO must implement remedies including without limitation, any one of or combination of the following:
- Loading all available generating capacity.
 - Deploying all available operating reserves.

- Interrupting interruptible *load* and exports.
 - Requesting emergency assistance from other *balancing authorities*.
 - Requesting, in accordance with *ISO* rules, the *VRC* to declare an Energy Emergency Alert(s); and
 - Reducing *load*, through procedures such as public appeals, voltage reductions, and curtailing interruptible *loads*.
- R7** The *ISO* must comply with the control performance and disturbance control *reliability* standards during a supply shortfall event. The *ISO* must perform the following if all the remedies listed in requirement R6 have been implemented and the control performance and disturbance control standards are not being met:
- R7.1** Issue directives for the manual shedding of firm *load* without delay to return its *ACE* to zero; and
- R7.2** Request, in accordance with the *ISO* rules, the *VRC* to declare an Energy Emergency Alert.
- R8** The *ISO* must notify the *VRC* and each *adjacent balancing authority* in the *WECC* that a supply shortfall event exists before revising *system operating limits*.
- R9** The *ISO* must complete an “Energy Emergency Alert 3 Report” (refer to template in Appendix 1) and submit it to the *VRC* for review within two business *days* of downgrading or termination of an Energy Emergency Alert 3.

5. Processes and Procedures

No procedures have been defined for this *reliability standard*.

6. Measures

The following measures correspond to the requirements identified in Section 4 of this *reliability standard*. For example, MR1 is the measure for R1.

MR1 The following must exist:

- An authorization letter signed by an officer of the *ISO* stating that the persons in the position of *system controller* have the authority to carry out actions and exercise the authority in the requirement.
- Job descriptions for *system controllers* identify the responsibilities of the *system controller* to operate to *ISO* rules and *reliability standards*.

MR2 Procedures to manage a supply shortfall event exist in *ISO rules*.

Disturbance reports, operator logs, voice recordings and/or other data exist that demonstrate the *ISO* managed a supply shortfall event in accordance with its procedures.

MR3 *ISO* rules must include the required communications as identified in R3. Operator logs, voice recordings, electronic communications and/or other data exist to show that communications occurred in accordance with *ISO* rules.

MR4 *ISO* rules must include the planning as identified in R3. Operator logs, voice recordings, electronic communications exist to show that procedures in planning for such an event were met.

- MR5** Operator logs, voice recordings, electronic communications and/or other data exist to show that the requirement was met.
- MR6** ISO rules include the remedies identified in the requirement. Operator logs, voice recordings, electronic communications and/or other data exist to show that the requirement was met.
- MR7** Operator logs, voice recordings, electronic communications exist to show that requirement was met.
- MR8** Operator logs, voice recordings, electronic communications, electronic data or other equivalent evidence exists to show that the ISO notified the VRC and each *adjacent balancing authority* that a supply shortfall event exists.
- MR9** An “Energy Emergency Alert 3 Report” exists for each event where an Energy Emergency Alert 3 was declared.

7. Appendices

Appendix 1 - Energy Emergency Alert 3 Report (see below)

8. Guidelines

No guidelines have been defined for this *reliability standard*.

Revision History

Effective	Description
2009-10-03	New Issue

Appendix 1 - Energy Emergency Alert 3 Report

A deficient balancing authority or load serving entity declaring an Energy Emergency Alert 3 must complete the following report. Upon completion of this report, it is to be sent to the reliability coordinator for review within two business days of the incident.

Requesting balancing authority:

Entity experiencing energy deficiency (if different from balancing authority):

Date/Time Implemented:

Date/Time Released:

Declared Deficiency Amount (MW):

Total energy supplied by other balancing authority during the Alert 3 period:

Conditions that precipitated call for "Energy Deficiency Alert 3":

If "Energy Deficiency Alert 3" had not been called, would firm load be cut? If no, explain:

Explain what action was taken in each step to avoid calling for "Energy Deficiency Alert 3":

1. All generation capable of being on line in the time frame of the energy deficiency was on line (including quick start and peaking units) without regard to cost.

2. All firm and nonfirm purchases were made regardless of cost.

3. All nonfirm sales were recalled within provisions of the sale agreement.

4. Interruptible load was curtailed where either advance notice restrictions were met or the interruptible load was considered part of spinning reserve.

5. Available load reduction programs were exercised (public appeals, voltage reductions, etc.).

6. Operating Reserves being utilized.

Comments:

Reported By: _____

Organization: _____

Title: _____