

EOP-002-AB1-2 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 *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*.
 - Declaring , in accordance with *ISO* rules,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** In accordance with the *ISO* rules, declare an Energy Emergency Alert.
- R8** The *ISO* must notify each affected *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”, using the template in Appendix 1, 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 Evidence of communicating current and forecast system conditions as described in requirement R3 exists. Evidence may include operator logs, voice recordings, electronic communications and/or other data.

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.

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- MR6** /SO 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** Evidence of notifying affected *adjacent balancing authorities* as described in requirement R8 exists. Evidence may include operator logs, voice recordings, electronic communications, electronic data or other equivalent evidence.
- 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
2014-01-01	Removed references to the VRC.
2009-10-03	New Issue

Appendix 1 - Energy Emergency Alert 3 Report

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.

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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: _____