

# Implementation Plan

## Project 2010-14.1 Balancing Authority Reliability-based Controls - Reserves

### Implementation Plan for BAL-002-2 – Contingency Reserve for Recovery from a Balancing Contingency Event

#### *Approvals Required*

BAL-002-2 – Contingency Reserve for Recovery from a Balancing Contingency Event

#### *Prerequisite Approvals*

None

#### *Revisions to Glossary Terms*

The following definitions shall become effective when BAL-002-2 becomes effective:

**Balancing Contingency Event:** Any single event described in Subsections (A), (B), or (C) below, or any series of such otherwise single events, with each separated from the next by less than one minute.

A. Sudden Loss of ~~g~~Generation:

a. Due to

i. ~~U~~nit tripping,

ii. ~~L~~oss of generator Interconnection Facility~~ies~~ resulting in isolation of the generator from the Bulk Electric System or from the responsible entity's electric system, or

iii. ~~S~~udden unplanned outage of transmission Facilities;

b. And, that causes an unexpected change to the responsible entity's ACE;

~~c. Provided, however, that normal, recurring operating characteristics of a unit do not constitute sudden or unanticipated losses and may not be subject to this definition.~~

B. Sudden ~~l~~oss of ~~an~~Non-Interruptible Import due to forced outage of transmission equipment that causes an unexpected change to the responsible entity's ACE.:

~~a. A sudden loss of a non-interruptible import, due to forced outage of transmission equipment, that causes an unexpected change to the responsible entity's ACE.~~

~~C. Sudden loss of a known load used as a resource that causes an unexpected change to the responsible entity's ACE. Unexpected Failure of Generation to Maintain or Increase:~~

~~a. Due to~~

- ~~i. Inability to start a unit the responsible entity planned to bring online at that time (for reasons other than lack of fuel), or~~
- ~~ii. Internal plant equipment problems that force the generator to be ramped down or taken offline;~~

~~b.C. And that, even if not an immediate cause of an unexpected change to the responsible entity's ACE, will, in the responsible entity's judgment, leave the responsible entity unable to maintain its ACE following the failure unless it deploys Contingency Reserve.~~

**Most Severe Single Contingency (MSSC):** The Balancing Contingency Event, due to a single contingency, that would result in the greatest loss (measured in MW) of resource generation output used by the Reserve Sharing Group (RSG) or a Balancing Authority that is not participating as a member of a RSG at the time of the event, or the greatest loss of activated Direct Control Load Management used by the Balancing Authority to meet firm System Load and non-interruptible export obligation (excluding export obligation for which Contingency Reserve obligations are being met by the sink Balancing Authority).

**Reportable Balancing Contingency Event:** Any Balancing Contingency Event resulting in a loss of MW output greater than or equal to the lesser amount of 80 percent of the Balancing Authority's Most Severe Single Contingency, or 500 MW and occurring within a rolling one-minute interval based on EMS scan rate data.

**Contingency Event Recovery Period:** A period beginning at the time that the resource output begins to decline within the first one-minute interval that defines a Balancing Contingency Event, and extends for fifteen minutes thereafter not exceeding 15 minutes following the start of the Balancing Contingency Event. The start of the Balancing Contingency Event is the point in time where the first change in MW is observed due to the event.

**Contingency Reserve Restoration Period:** A period not exceeding 90 minutes following the end of the Contingency Event Recovery Period, during which the amount of Contingency Reserve deployed to recover from a Balancing Contingency Event is to be restored.

**Pre-Reportable Contingency Event ACE Value:** The average value of ACE in the 16 second interval immediately prior to the start of the a Reportable Contingency Event Recovery Period based on EMS scan rate data when there are no previous Reportable Contingency Events for which the Contingency Event Recovery Period is not yet completed,

or

The value of ACE that the Balancing Authority or Reserve Sharing Group must attain to fully meet its ACE recovery requirement with respect to the immediately previous Reportable Contingency Event for which the Contingency Event Recovery Period is not yet completed.

**Reserve Sharing Group Reporting ACE:** At any given time of measurement for the applicable Reserve Sharing Group, the algebraic sum of the ACEs (as calculated at such time of measurement) of all of the Balancing Authorities that make up the Reserve Sharing Group.

**Contingency Reserve:** The provision of capacity that may be deployed by the Balancing Authority to respond to a Balancing Contingency Event~~meet the Disturbance Control Standard (DCS)~~ and other NERC ~~and Regional Reliability Organization~~ contingency requirements (such as Energy Emergency Alerts Level 2 or Level 3). The capacity may be provided by resources such as Demand Side Management (DSM), Interruptible Load and unloaded generation..

### ***Applicable Entities***

Balancing Authority  
Reserve Sharing Group

### ***Applicable Facilities***

N/A

### ***Conforming Changes to Other Standards***

None

### ***Effective Dates***

BAL-002-2 shall become effective as follows:

First day of the first calendar quarter that is six months beyond the date that this standard is approved by applicable regulatory authorities, or in those jurisdictions where regulatory approval is not required, the standard becomes effective the first day of the first calendar quarter that is six months beyond the date this standard is approved by the NERC Board of Trustees', or as otherwise made pursuant to the laws applicable to such ERO governmental authorities.

### ***Justification***

The six-month period for implementation of BAL-002-2 will provide ample time for Balancing Authorities to make necessary modifications to existing software programs to ensure compliance.

### ***Retirements***

BAL-002-0, Disturbance Control Performance, and BAL-002-1, Disturbance Control Performance should be retired at midnight of the day immediately prior to the Effective Date of BAL-002-2 in the particular jurisdiction in which the new standard is becoming effective.