

# Implementation Plan

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

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

#### *Approvals Required*

BAL-002-2 – Disturbance Control Performance - 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 or less.

- A. Sudden loss of generation:
  - a. Due to
    - i. ~~unit~~Unit tripping, or
    - ii. ~~loss~~Loss of generator Facility resulting in isolation of the generator from the Bulk Electric System or from the responsible entity's ~~System~~electric system,  
or
    - iii. ~~sudden~~Sudden unplanned outage of transmission Facility;
  - b. And, that causes an unexpected change to the responsible entity's ACE;
- B. Sudden loss of an Import, due to forced outage of transmission equipment that causes an unexpected imbalance between generation and ~~Demand~~load on the Interconnection.
- C. Sudden restoration of a ~~Demand~~load that was used as a resource that causes an unexpected change to the responsible entity's ACE.

**Most Severe Single Contingency (MSSC):** The Balancing Contingency Event, due to a single contingency as identified and maintained in the system models within the Reserve Sharing Group (RSG) or a Balancing Authority's area that is not part of a Res area that is not part of a Reserve Sharing Group, that would result in the greatest loss (measured in MW) of resource output used by the ~~RSG Reserve Sharing Group (RSG)~~ or a Balancing Authority that is not participating as a member of a RSG at the time of the event to meet Firm Demand~~firm system load~~ and 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 occurring within a one-minute interval of an initial sudden decline in ACE based on EMS scan rate data that results~~resulting~~ in a loss of MW output less than or equal to the Most Severe Single Contingency, and greater than or equal to the lesser amount of: (i) 80% of the Most Severe Single Contingency, or (ii) the amount listed below for the applicable Interconnection, ~~and occurring within a one-minute interval of the initial sudden decline in ACE based on EMS scan rate data~~. Prior to any given calendar quarter, the 80% threshold may be reduced by the responsible entity upon written notification to the Regional Entity.

- Eastern Interconnection – 900 MW
- Western Interconnection – 500 MW
- ERCOT – 800 MW
- Quebec – 500 MW

**Contingency Event Recovery Period:** A period that begins~~beginning~~ at the time that the resource output begins to decline within the first one-minute interval ~~of that defines~~ a Reportable Balancing Contingency Event, and extends for fifteen minutes thereafter.

**Contingency Reserve Restoration Period:** A period not exceeding 90 minutes following the end of the Contingency Event Recovery Period.

**Pre-Reporting Contingency Event ACE Value:** The average value of Reporting ACE, or Reserve Sharing Group Reporting ACE when applicable, in the 16-second interval immediately prior to the start of the Contingency Event Recovery Period based on EMS scan rate data.

**Reserve Sharing Group Reporting ACE:** At any given time of measurement for the applicable Reserve Sharing Group (RSG), ~~the algebraic sum of the ACEs (or equivalent as calculated at such time of measurement) of the Balancing Authorities participating in the~~ RSG Reserve Sharing Group at the time of measurement.

**Contingency Reserve:** The provision of capacity that may be deployed by the Balancing Authority to respond to a Balancing Contingency Event and other contingency requirements (such as Energy

Emergency Alerts as specified in the associated EOP standard). A Balancing Authority may include in its restoration of Contingency Reserve readiness to reduce Firm Demand and include it if, and only if, the Balancing Authority: The capacity may be provided by resources such as Demand Side Management (DSM), Interruptible Load and unloaded generation.

- is experiencing a Reliability Coordinator declared Energy Emergency Alert level, and
- is utilizing its Contingency Reserve to mitigate an operating emergency in accordance with its emergency Operating Plan.

The existing definition of Contingency Reserve should be retired at midnight of the day immediately prior to the effective date of BAL-002-2, in the jurisdiction in which the new standard is becoming effective.

### ***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:

The first day of the first calendar quarter that is six months after the date that this standard is approved by applicable regulatory authorities or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a standard to go into effect. Where approval by an applicable governmental authority is not required, the standard shall become effective on the first day of the first calendar quarter that is six months after the date the standard is adopted by the NERC Board of Trustees', or as otherwise provided for in that jurisdiction.

### ***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.