

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

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

Darrel Richardson – Senior Standards Developer
April 17, 2017

RELIABILITY | ACCOUNTABILITY



- Project developed from directives in FERC Order 693
 - To include a requirement that explicitly provides that demand side management may be used as a resource for contingency reserves
 - To develop a continent-wide contingency reserve policy
 - To refer to the ERO rather than the NERC Operating Committee
- BAL-002-2 approved by FERC January 19, 2017
- BAL-002-2 becomes effective January 1, 2018

- Resolves conflict with compliance information not in requirements
 - All necessary compliance information brought into requirements
 - Establishes ceiling of MSSC for compliance
 - Addresses multiple contingencies
- Addresses outstanding Request for Interpretation
 - Establishes ceiling of MSSC for compliance (filed with FERC – NOPR issued proposing to remand)
- Contingency Reserve definition
 - Resolves conflict with EOP-002/EOP-011
 - Allows for Firm Demand to be used for Contingency Reserve during an EEA
 - Allows for Contingency Reserve to be used for any event

- R1. The Responsible Entity experiencing a Reportable Balancing Contingency Event shall:
 - 1.1. within the Contingency Event Recovery Period, demonstrate recovery by returning its Reporting ACE to at least the recovery value of:
 - zero (if its Pre-Reporting Contingency Event ACE Value was positive or equal to zero); however, any Balancing Contingency Event that occurs during the Contingency Event Recovery Period shall reduce the required recovery: (i) beginning at the time of, and (ii) by the magnitude of, such individual Balancing Contingency Event,
 - or,
 - its Pre-Reporting Contingency Event ACE Value (if its Pre-Reporting Contingency Event ACE Value was negative); however, any Balancing Contingency Event that occurs during the Contingency Event Recovery Period shall reduce the required recovery: (i) beginning at the time of, and (ii) by the magnitude of, such individual Balancing Contingency Event.

1.2. document all Reportable Balancing Contingency Events using CR Form 1.

1.3. deploy Contingency Reserve, within system constraints, to respond to all Reportable Balancing Contingency Events, however, it is not subject to compliance with Requirement R1 part 1.1 if:

1.3.1 the Responsible Entity:

- is a Balancing Authority experiencing a Reliability Coordinator declared Energy Emergency Alert Level or is a Reserve Sharing Group whose member, or members, are 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, and
- has depleted its Contingency Reserve to a level below its Most Severe Single Contingency

or,

1.3.2 the Responsible Entity experiences:

- multiple Contingencies where the combined MW loss exceeds its Most Severe Single Contingency and that are defined as a single Balancing Contingency Event, or
- multiple Balancing Contingency Events within the sum of the time periods defined by the Contingency Event Recovery Period and Contingency Reserve Restoration Period whose combined magnitude exceeds the Responsible Entity's Most Severe Single Contingency.

- Requirement R1
 - Requires recovery from reportable event within pre-defined limits
 - Allows for exemption from compliance when:
 - in an EEA where Contingency Reserve is being deployed
 - Resolves conflict with EOP-002/EOP-011
 - MSSC exceeded
 - Addressing multiple contingencies

- R2. Each Responsible Entity shall develop, review and maintain annually, and implement an Operating Process as part of its Operating Plan to determine its Most Severe Single Contingency and make preparations to have Contingency Reserve equal to, or greater than the Responsible Entity's Most Severe Single Contingency available for maintaining system reliability.

- Requirement R2
 - Requires a process within an Entity's Operating Plan
 - Plan must define MSSC
 - Must reflect how Contingency Reserve is established
 - Results of Operating Plan must show planned Contingency Reserves Greater than MSSC

- R3. Each Responsible Entity, following a Reportable Balancing Contingency Event, shall restore its Contingency Reserve to at least its Most Severe Single Contingency, before the end of the Contingency Reserve Restoration Period, but any Balancing Contingency Event that occurs before the end of a Contingency Reserve Restoration Period resets the beginning of the Contingency Event Recovery Period.

- Requirement R3
 - Requires restoration of Contingency Reserve
 - Contingency Reserve definition allows for Firm Demand to be used for Contingency Reserve during an EEA
 - Addresses multiple contingencies

- Definitions

- Modified Contingency Reserve definition

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:

- 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.

Contributors

NERC BAL-002-2 Standard Drafting Team

- Glenn Stephens, Chair
- Tom Siegrist, Vice-chair
- Gerry Beckerle
- Howard Illian
- David Lemmons
- Clyde Loutan
- Steve Myers
- Mike Potishnak
- Mark Prospero-Porta
- Tom Pruitt
- Jerry Rust
- Steve Swan
- Santee Cooper
- Brickfield, Burchette, Ritts and Stone
- Ameren
- Energy Mark
- Xcel Energy
- CA ISO
- ERCOT
- Consultant
- BC Hydro
- Duke
- NWPP
- MISO

Darrel Richardson
Senior Standards Developer
darrel.richardson@nerc.net
609.613.1848



Questions and Answers