

August 23, 2018

VIA ELECTRONIC FILING

Ms. Katie Mitchell
Chief Clerk
New Brunswick Energy and Utilities Board
P.O. Box 5001
15 Market Square, Suite 1400
Saint John, NB
E2L 4Y9

Re: *North American Electric Reliability Corporation*

Dear Ms. Mitchell:

The North American Electric Reliability Corporation hereby submits Notice of Filing of the North American Electric Reliability Corporation of Proposed Reliability Standard BAL-002-3. NERC requests, to the extent necessary, a waiver of any applicable filing requirements with respect to this filing.

Please contact the undersigned if you have any questions concerning this filing.

Respectfully submitted,

/s/ Shama Elstein

Shama Elstein
*Senior Counsel for the North American Electric
Reliability Corporation*

Enclosure

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**BEFORE THE
MINISTRY OF ENERGY
OF THE PROVINCE OF NEW BRUNSWICK**

**NORTH AMERICAN ELECTRIC)
RELIABILITY CORPORATION)**

**NOTICE OF FILING OF THE
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION OF PROPOSED
RELIABILITY STANDARD
BAL-002-3**

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August 23, 2018

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MINISTRY OF ENERGY
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**NOTICE OF FILING OF THE
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION OF PROPOSED
RELIABILITY STANDARD BAL-002-3**

The North American Electric Reliability Corporation (“NERC”) hereby submits notice of: (i) proposed Reliability Standard BAL-002-3 (Disturbance Control Performance – Contingency Reserve for Recovery from a Balancing Contingency Event) (**Exhibit A**), which is just, reasonable, not unduly discriminatory or preferential, and in the public interest; (ii) the associated Implementation Plan (**Exhibit B**); and (iii) the retirement of currently-effective Reliability Standard BAL-002-2. Proposed Reliability Standard BAL-002-3 will apply the same Violation Risk Factors (“VRFs”) and Violation Severity Levels (“VSLs”) as applicable to currently effective Reliability Standard BAL-002-2. Therefore, this filing does not include a separate justification for the VRFs and VSLs.

This filing presents the technical basis and purpose of the proposed Reliability Standard, a demonstration that the proposed Reliability Standard meets the Reliability Standards criteria (**Exhibit C**), and a summary of the standard development history (**Exhibit D**). The proposed Reliability Standard was adopted by the NERC Board of Trustees on August 16, 2018.

I. EXECUTIVE SUMMARY

Reliable operation of the Bulk Power System depends on the ability of responsible entities to balance resources and demand and to recover from a system contingency through frequency restoration and the deployment of reserves necessary to replace lost capacity and

energy. Reliability Standard BAL-002-3 is designed to ensure that “the Balancing Authority [(“BA”)] or Reserve Sharing Group [(“RSG”)] balances resources and demand and returns the [BA]’s or [RSG]’s Area Control Error [(“ACE”)] to defined values (subject to applicable limits) following a Reportable Balancing Contingency Event.” To support this goal, Requirement R1 mandates certain actions upon a Reportable Balancing Contingency Event to (i) return Reporting ACE to defined values within the Contingency Event Recovery Period; (ii) document Reportable Balancing Contingency Events; and (iii) deploy Contingency Reserves. Within this rubric, Requirement R1 Part 1.3 provides a limited exemption from the BA’s or RSG’s obligation to restore Reporting ACE within the Contingency Event Recovery Period if the entity is recovering from an emergency event under NERC Emergency Preparedness and Operations (“EOP”) Reliability Standards and meets certain other qualifications.

In Order No. 835, the Federal Energy Regulatory Commission (“FERC”) approved Reliability Standard BAL-002-2 while highlighting the “need to address the underlying concern . . . that a balancing authority that is operating out-of-balance for an extended period of time is ‘leaning on the system’”¹ Accordingly, FERC directed NERC to revise the standard to require an entity seeking to avail itself of the exemption in Requirement R1.3 “to obtain an extension of the 15-minute ACE recovery period by informing the reliability coordinator [(“RC”)]of the circumstances and providing it with an ACE recovery plan and target time period.”²

In response to Order No. 835, NERC established Project 2017-06 to develop revisions to Reliability Standard BAL-002-2 to implement FERC’s directive. The standard drafting team’s

¹ *Disturbance Control Standard—Contingency Reserve for Recovery from a Balancing Contingency Event Reliability Standard*, Order No. 835, 158 FERC ¶ 61,030, at P 35 (2017) (“Order No. 835”).

² *Id.*

(“SDT’s”) proposed modifications also intend to clarify that communication with the RC should proceed in accordance with Energy Emergency Alert procedures within the EOP Reliability Standards. The proposed modifications would ensure that Reliability Standard BAL-002-3 addresses FERC’s concern in a manner that coordinates with emergency procedures in other Reliability Standards. Proposed Reliability Standard BAL-002-3 and the associated Implementation Plan are just, reasonable, not unduly discriminatory or preferential, and in the public interest.

II. NOTICES AND COMMUNICATIONS

Notices and communications with respect to this filing may be addressed to the following:

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III. BACKGROUND

A. NERC Reliability Standards Development Procedure

The proposed Reliability Standard was developed in an open and fair manner and in accordance with the Reliability Standard development process. NERC develops Reliability

Standards in accordance with Section 300 (Reliability Standards Development) of the NERC Rules of Procedures (“ROP”) and the NERC Standard Processes Manual (“SPM”).³

NERC’s proposed rules provide for reasonable notice and opportunity for public comment, due process, openness, and a balance of interests in developing Reliability Standards, and thus satisfy the criteria for approving Reliability Standards. The ANSI-accredited development process is open to any person or entity with a legitimate interest in the reliability of the Bulk-Power System. Before a Reliability Standard is submitted to the applicable governmental authorities for approval, NERC must consider the comments of all stakeholders, the stakeholders must approve of the Standard, and the Standard must be adopted by the NERC Board of Trustees.

B. Procedural History of Proposed Reliability Standard BAL-002-3

NERC submitted BAL-002-2 to this authority on February 18, 2016. In Order No. 835, FERC approved Reliability Standard BAL-002-2, noting that it “improve[d] upon currently-effective Reliability Standard BAL-002-1 by consolidating the number of requirements to streamline and clarify the obligations for responsible entities to deploy contingency reserves to stabilize system frequency in response to system contingencies.”⁴ In addition, FERC directed NERC to: (i) change proposed VRFs for Requirements R1 and R2 from “medium” to “high”;⁵ (ii) collect and report on certain data pertaining to implementation of the standard within two years from Reliability Standard BAL-002-2 implementation;⁶ and (iii) develop modifications to

³ The NERC Rules of Procedure are available at <https://www.nerc.com/AboutNERC/Pages/Rules-of-Procedure.aspx>. The NERC Standard Processes Manual is available at https://www.nerc.com/comm/SC/Documents/Appendix_3A_StandardsProcessesManual.pdf.

⁴ Order No. 835 at P 21.

⁵ *Id.* at P 68. NERC submitted revisions to the VRFs on August 17, 2017 in response to FERC’s directive.

⁶ Order No. 835 at P 46. NERC is collecting data pursuant to this directive and plans to submit an informational filing by FERC’s deadline January 2, 2020.

the standard to “require an entity to provide certain information to the reliability coordinator when the entity does not timely recover ACE due to an intervening disturbance.”⁷

With regard to modifications to the standard, FERC:

[D]irect[ed] NERC to develop modifications to Reliability Standard BAL-002-2, Requirement R1 to require balancing authorities or reserve sharing groups: (1) to notify the reliability coordinator of the conditions set forth in Requirement R1, Part 1.3.1 preventing it from complying with the 15-minute ACE recovery period; and (2) to provide the reliability coordinator with its ACE recovery plan, including a target recovery time. NERC may also propose an equally efficient and effective alternative.⁸

In response to this directive, NERC established Project 2017-06 and the SDT developed modifications to Reliability Standard BAL-002-2 that would require notification to the RC in accordance with FERC’s directive, while leveraging Energy Emergency Alert procedures in the EOP Reliability Standards. Following two comment and ballot periods, proposed Reliability Standard BAL-002-3 was approved by the ballot pool by July 16, 2018. The NERC Board of Trustees adopted the Standard and Implementation Plan on August 16, 2018.

IV. JUSTIFICATION

As discussed below and in **Exhibit C**, proposed Reliability Standard BAL-002-3 addresses FERC’s directive in Order No. 835, satisfies the Reliability Standards criteria, and is just, reasonable, not unduly discriminatory or preferential, and in the public interest. The following subsections provide: (A) a description of the proposed standard; (B) justification for the modifications in the proposed standard; and (C) discussion of the enforceability of the proposed standard.

⁷ *Id.* at P 2; *see also id.* at P 35.
⁸ Order No. 835 at P 37.

A. Proposed Reliability Standard BAL-002-3

Proposed Reliability Standard BAL-002-3 is designed to ensure that a BA or RSG balances resources and demand and returns the ACE to defined values following a Reportable Balancing Contingency Event.⁹ It applies to BAs and RSGs (noting that a BA that is a member of an RSG is the responsible entity only in periods during which the BA is not in active status under the RSG). The primary objective of the proposed standard is to ensure that the responsible entity is prepared to balance resources and demand by requiring the maintenance of adequate reserves and the deployment of those reserves to return its ACE to defined values following a Reportable Balancing Contingency Event.

In support of this objective, Requirement R1 obligates responsible entities to: (i) return Reporting ACE to certain values within the Contingency Event Recovery Period (Requirement R1 Part 1.1); (ii) document Reportable Balancing Contingency Events (Requirement R1 Part 1.3); and (iii) deploy Contingency Reserve, within system constraints, to respond to all Reportable Balancing Contingency Events (Requirement R1 Part 1.3). Within this framework, Requirement R1 Part 1.3.1 also permits an exemption from a responsible entity's obligation to demonstrate recovery of Reporting ACE within the Contingency Event Recovery Period under certain limited circumstances associated with an emergency on the system. In accordance with FERC's directive in Order No. 835, the SDT has proposed the following modifications to further limit Requirement R1 Part 1.3.1:

⁹ See Exhibit E, Rationales for BAL-002-3 (Feb. 2018).

R1. The Responsible Entity experiencing a Reportable Balancing Contingency Event shall:
[Violation Risk Factor: High] [Time Horizon: Real-time Operations]

....

- 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 the Responsible Entity:
- 1.3.1** is (i) a Balancing Authority or (ii) a Reserve Sharing Group with at least one member that:
- 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, and
 - has depleted its Contingency Reserve to a level below its Most Severe Single Contingency, and
 - has, during communications with its Reliability Coordinator in accordance with the Energy Emergency Alert procedures, (i) notified the Reliability Coordinator of the conditions described in the preceding two bullet points preventing the Responsible Entity from complying with Requirement R1 part 1.1, and (ii) provided the Reliability Coordinator with an ACE recovery plan, including target recovery time

B. Justification for Proposed Reliability Standard BAL-002-3

As discussed above, in Order No. 835, FERC expressed concern that “a balancing authority that is operating out-of-balance for an extended period of time is ‘leaning on the system’”¹⁰ and directed NERC to:

[R]equire balancing authorities or reserve sharing groups: (1) to notify the reliability coordinator of the conditions set forth in Requirement R1, Part 1.3.1 preventing it from complying with the 15-minute ACE recovery period; and (2) to provide the reliability coordinator with its ACE recovery plan, including a target recovery time¹¹

¹⁰ Order No. 835 at P 35.

¹¹ *Id.* at P 37.

In response, the drafting team modified Requirement R1 Part 11.3.1 of Reliability Standard BAL-002-2 to clarify and narrow conditions when a BA or RSG may qualify for an exemption from the time period for recovery of Reporting ACE otherwise applicable under Requirement R1 Part 1.1 due to emergency conditions. Consistent with FERC’s directive, with the modifications in the proposed Reliability Standard, a BA or RSG may only be exempt from Requirement R1 Part 1.1 if it provides the RC (1) notice of the conditions warranting an exemption, and (2) an ACE recovery plan. Proposed Reliability Standard BAL-002-3 thereby improves upon BAL-002-2 by ensuring coordination with the Reliability Coordinator before a responsible entity may avail itself of the exemption in Requirement R1.3.1 and addressing concerns that a responsible entity taking advantage of the exemption is “leaning on the system.”

C. Enforceability of Proposed Reliability Standard BAL-002-3

The proposed Reliability Standard BAL-002-3 includes measures that support each Requirement to provide guidance to the industry about compliance expectations and to ensure that the Requirements are enforced in a clear, consistent, non-preferential manner, and without prejudice to any part. The proposed Reliability Standard VRFs and VSLs associated with each Requirement are amongst several elements used to determine an appropriate sanction when the associated Requirement is violated. The VRFs assess the impact to reliability caused by violations of a specific Requirement. The VSLs guide the method by which NERC will enforce the Requirements of the proposed Reliability Standards. In this filing, NERC proposes to utilize the same VRFs and VSLs in effect for BAL-002-2.

V. EFFECTIVE DATE

Where approval by an applicable governmental authority is required, Reliability Standard BAL-002-3 shall become effective the first day of the first calendar quarter that is six (6) calendar months after the effective date of the applicable governmental authority’s order

approving the standards and terms, or as otherwise provided for by the applicable governmental authority. Where approval by an applicable governmental authority is not required, Reliability Standard BAL- 002-3 shall become effective on the first day of the first calendar quarter that is six (6) calendar months after the date the standards and terms are adopted by the NERC Board of Trustees, or as otherwise provided for in that jurisdiction. This will provide for deliberative implementation of the revised Requirement. In addition, the existing Reliability Standard BAL-002-2 shall be retired immediately prior to the effective date of the proposed BAL-002-3 standard

VI. CONCLUSION

NERC has developed these modifications to Reliability Standard BAL-002-3 to address FERC's directive in Order No. 835 and provide RCs with important information necessary for coordinated operations of the grid, while maintaining an appropriate level of flexibility for responsible entities faced with an emergency on the system.

Respectfully submitted,

/s/ Candice Castaneda

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Date: August 23, 2018

EXHIBITS A-B AND D-F

Exhibit C

Reliability Standards Criteria

The discussion below explains how the proposed Reliability Standard has met or exceeded the Reliability Standards criteria:

1. Proposed Reliability Standards must be designed to achieve a specific reliability goal and must contain a technically sound means to achieve that goal.

Proposed Reliability Standard BAL-002-3 achieves the specific reliability goal of ensuring that the Balancing Authority or Reserve Sharing Group balances resources and demand and returns the Balancing Authority's or Reserve Sharing Group's Area Control Error to defined values (subject to applicable limits) following a reportable Balancing Contingency Event.

Proposed Reliability Standard BAL-002-3 tightens an exception to BAL-002 Requirement R1 (as expressed in Requirement R1 Part 1.3.1) in which a Responsible Entity (Balancing Authority or Reserve Sharing Group) receives relief from compliance to Requirement R1 during a Reportable Balance Contingency Event in which that Responsible Entity is (1) experiencing a Reliability Coordinator declared Energy Emergency Alert Level, (2) is utilizing its contingency Reserve to mitigate an operating emergency in accordance with its emergency Operating Plan, or (3) has depleted its Contingency Reserve to a level below its Most Severe Single Contingency, by requiring that the Responsible Entity notify the Reliability Coordinator that the Responsible Entity is experiencing the aforementioned conditions, and to provide the Reliability Coordinator with an ACE recovery plan, including a target recovery time.

2. Proposed Reliability Standards must be applicable only to users, owners and operators of the bulk power system, and must be clear and unambiguous as to what is required and who is required to comply.

The proposed Reliability Standard applies to Reserve Sharing Groups and a Balancing Authorities, but a Balancing Authority that is a member of a Reserve Sharing Group is the

Responsible Entity only in periods during which the Balancing Authority is not in active status under the applicable agreement or governing rules for the Reserve Sharing Group. The proposed Reliability Standard clearly articulates the actions that such entities must take to comply with the standard, each of which are triggered by articulable actions.

3. A proposed Reliability Standard must include clear and understandable consequences and a range of penalties (monetary and/or non-monetary) for a violation.

The Violation Risk Factors (“VRFs”) and Violation Severity Levels (“VSLs”) for the proposed Reliability Standard comport with NERC and FERC guidelines related to their assignment. The assignment of the severity level for each VSL is consistent with the corresponding Requirement and will ensure uniformity and consistency in the determination of penalties. The VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. For these reasons, the proposed Reliability Standard includes clear and understandable consequences.

4. A proposed Reliability Standard must identify clear and objective criterion or measure for compliance, so that it can be enforced in a consistent and non-preferential manner.

The proposed Reliability Standard contains Measures that support each Requirement by clearly identifying what is required to demonstrate compliance and how the Requirement will be enforced. The Measures are as follows:

M1. Each Responsible Entity shall have, and provide upon request, as evidence, a CR Form 1 with date and time of occurrence to show compliance with Requirement R1. If Requirement R1 part 1.3 applies, then dated documentation that demonstrates compliance with Requirement R1 part 1.3 must also be provided.

M2. Each Responsible Entity will have the following documentation to show compliance with Requirement R2:

- a dated Operating Process;
- evidence to indicate that the Operating Process has been reviewed and maintained annually; and,

- evidence such as Operating Plans or other operator documentation that demonstrate that the entity determines its Most Severe Single Contingency and that Contingency Reserves equal to or greater than its Most Severe Single Contingency are included in this process.

M3. Each Responsible Entity will have documentation demonstrating its Contingency Reserve was restored within the Contingency Reserve Restoration Period, such as historical data, computer logs or operator logs.

The Above Measures work in coordination with the respective Requirements to ensure that the Requirements will each be enforced in a clear, consistent, and non-preferential manner without prejudice to any party.

5. Proposed Reliability Standards should achieve a reliability goal effectively and efficiently – but do not necessarily have to reflect “best practices” without regard to implementation cost or historical regional infrastructure design.

The proposed Reliability Standard achieves the reliability goal effectively and efficiently. The proposed Reliability Standard clearly enumerates the responsibilities of applicable entities with respect to balancing resources and demands, including deployment and subsequent recovery of adequate levels of Contingency Reserves, to return the Area Control Error to defined values. The proposed Reliability Standard provides entities with the flexibility to tailor their processes and plans to take into account system dynamics and characteristics while still maintaining reliability of the Bulk Power System.

6. Proposed Reliability Standards cannot be “lowest common denominator,” i.e., cannot reflect a compromise that does not adequately protect Bulk-Power system reliability. Proposed Reliability Standards can consider costs to implement for smaller entities but not at consequences of less than excellence in operating system reliability.

The proposed Reliability Standard does not reflect a “lowest common denominator” approach. To the contrary, the proposed standard represents significant benefits for the reliability of the Bulk Power System because it requires entities to protect system stability by recovering an entity’s Reporting Area Control Error and requisite levels of Contingency Reserves. The

proposed Reliability Standard does not sacrifice excellence in operating system reliability for costs associated with implementation of the Reliability Standard.

- 7. Reliability Standards must be designed to apply throughout North America to the maximum extent achievable with a single Reliability Standard while not favoring one geographic area or regional model. It should take into account regional variations in the organization and corporate structures of transmission owners and operators, variations in generation fuel type and ownership patterns, and regional variations in market design if these affect the proposed Reliability Standard.**

The proposed Reliability Standard applies throughout North America and does not favor one geographic area or regional model.

- 8. Proposed Reliability Standards should cause no undue negative effect on competition or restriction of the grid beyond any restriction necessary for reliability.**

The proposed Reliability Standard has no undue negative impact on competition. The proposed Reliability Standard requires the same performance by each applicable entity. The standard does not unreasonably restrict the available transmission capability or limit use of the Bulk-Power System in a preferential manner.

- 9. The implementation time for the proposed Reliability Standard is reasonable.**

The proposed effective date for the standard is just and reasonable and appropriately balances the urgency in the need to implement the standard against the reasonableness of the time allowed for those who must comply to develop necessary procedures, software, facilities, staffing or other relevant capability. The proposed Implementation Plan, attached as **Exhibit B**, will allow applicable entities adequate time to ensure compliance with the requirements. The proposed effective date is explained in the attached Implementation Plan for BAL-002-3.

10. The Reliability Standard was developed in an open and fair manner and in accordance with the Reliability Standard development process.

The proposed Reliability Standard was developed in accordance with NERC's ANSI-accredited processes for developing and approving Reliability Standards.¹ **Exhibit D** includes a summary of the Reliability Standard development proceedings and details the processes followed to develop the Reliability Standard. These processes included, among other things, multiple comment periods, pre-ballot review periods, and balloting periods. Additionally, all meetings of the standard drafting team were properly noticed and open to the public.

11. NERC must explain any balancing of vital public interests in the development of proposed Reliability Standards.

NERC has identified no competing public interests regarding the proposed Reliability Standard BAL-002-3. No comments were received that indicated the proposed Reliability Standard BAL-002-3 conflicts with other vital public interests.

12. Proposed Reliability Standards must consider any other appropriate factors.

NERC has identified no other factors relevant to whether the proposed Reliability Standard BAL-002-3 is just and reasonable.

¹ See NERC Rules of Procedure, Section 300 (Reliability Standards Development) and Appendix 3A (Standard Processes Manual).