Regional Reliability Standard BAL-002-WECC-2 – Contingency Reserve

(issued November 21, 2013)

AGENCY: Federal Energy Regulatory Commission.

ACTION: Final rule.

SUMMARY: Under section 215 of the Federal Power Act, the Federal Energy Regulatory Commission (Commission) approves regional Reliability Standard BAL-002-WECC-2 (Contingency Reserve). The North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) submitted the regional Reliability Standard to the Commission for approval. The regional Reliability Standard applies to balancing authorities and reserve sharing groups in the WECC Region and is meant to specify the quantity and types of contingency reserve required to ensure reliability under normal and abnormal conditions.

EFFECTIVE DATE: This rule will become effective [INSERT DATE 60 days after publication in the FEDERAL REGISTER].
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SUPPLEMENTARY INFORMATION:
Under section 215 of the Federal Power Act (FPA), the Commission approves regional Reliability Standard BAL-002-WECC-2 (Contingency Reserve). The North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) submitted the regional Reliability Standard to the Commission for approval. The WECC regional Reliability Standard applies to balancing authorities and reserve sharing groups in the WECC Region and is meant to specify the quantity and types of contingency reserve required to ensure reliability under normal and abnormal conditions.

2. The Commission approves the associated violation risk factors (VRFs) and violation severity levels (VSLs), implementation plan, and effective date proposed by

\[16 \text{ U.S.C. 824o}.\]
NERC and WECC. The Commission also approves the retirement of WECC regional Reliability Standard BAL-STD-002-0 (Operating Reserves) and the removal of two WECC Regional Definitions, “Non-Spinning Reserve” and “Spinning Reserve,” from the Glossary of Terms Used in NERC Reliability Standards (NERC Glossary). In addition, the Commission directs NERC to submit an informational filing after the first two years of implementation of regional Reliability Standard BAL-002-WECC-2 that addresses the adequacy of contingency reserve in the Western Interconnection.

I. **Background**

A. **Mandatory Reliability Standards**

3. Section 215(c) of the FPA requires a Commission-certified Electric Reliability Organization (ERO) to develop mandatory and enforceable Reliability Standards that are subject to Commission review and approval. Once approved, the Reliability Standards may be enforced by NERC, subject to Commission oversight, or by the Commission independently. In Order No. 672, the Commission stated that:

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3 16 U.S.C. 824o(e).

4 16 U.S.C. 824o(e)(4). A Regional Entity is an entity that has been approved by the Commission to enforce Reliability Standards under delegated authority from the ERO. See 16 U.S.C. 824o(a)(7) and (e)(4).
As a general matter, we will accept the following two types of regional differences, provided they are otherwise just, reasonable, not unduly discriminatory or preferential and in the public interest, as required under the statute: (1) a regional difference that is more stringent than the continent-wide Reliability Standard, including a regional difference that addresses matters that the continent-wide Reliability Standard does not; and (2) a regional Reliability Standard that is necessitated by a physical difference in the Bulk-Power System.\(^5\)

5. On April 19, 2007, the Commission accepted delegation agreements between NERC and each of the eight Regional Entities.\(^6\) In the order, the Commission accepted WECC as a Regional Entity.

B. **NERC Reliability Standard BAL-002-1 (Disturbance Control Performance)**

6. In Order No. 693, the Commission approved NERC Reliability Standard BAL-002-0.\(^7\) On January 10, 2011, the Commission approved a revised version of the NERC Reliability Standard, BAL-002-1 (Disturbance Control Performance), which NERC


\(^6\) North American Electric Reliability Corp., 119 FERC ¶ 61,060, order on reh’g, 120 FERC ¶ 61,260 (2007).

\(^7\) Mandatory Reliability Standards for the Bulk-Power System, Order No. 693, FERC Stats. & Regs. ¶ 31,242, order on reh’g, Order No. 693-A, 120 FERC ¶ 61,053 (2007).
developed and submitted to address directives contained in Order No. 693. The purpose of NERC Reliability Standard BAL-002-1 is to ensure that a balancing authority is able to use its contingency reserve to balance resources and demand and return Interconnection frequency within defined limits following a Reportable Disturbance.

C. WECC Regional Reliability Standard BAL-STD-002-0

7. On June 8, 2007, the Commission approved WECC regional Reliability Standard BAL-STD-002-0, which is currently in effect. The Commission stated that regional Reliability Standard BAL-STD-002-0 was more stringent than the NERC Reliability Standard BAL-002-0 because the WECC regional Reliability Standard required: (1) a more stringent minimum reserve requirement; and (2) restoration of contingency reserves within 60 minutes, as opposed to the 90-minute restoration period required by the NERC Reliability Standard BAL-002-0. The Commission directed WECC to make minor modifications to regional Reliability Standard BAL-STD-002-0. For example, the

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9 The NERC Glossary defines Contingency Reserve as “[t]he provision of capacity deployed by the Balancing Authority to meet the Disturbance Control Standard (DCS) and other NERC and Regional Reliability Organization contingency requirements.” The NERC Glossary defines Reportable Disturbance as “[a]ny event that causes an [Area Control Error (ACE)] change greater than or equal to 80% of a Balancing Authority’s or reserve sharing group’s most severe contingency. The definition of a reportable disturbance is specified by each Regional Reliability Organization. This definition may not be retroactively adjusted in response to observed performance.”


11 Id. P 53.
Commission determined that: (1) regional definitions should conform to definitions set forth in the NERC Glossary unless a specific deviation has been justified; and (2) documents that are referenced in the Reliability Standard should be attached to the Reliability Standards. The Commission also found that it is important that regional Reliability Standards and NERC Reliability Standards achieve a reasonable level of consistency in their structure so that there is a common understanding of the elements. Finally, the Commission directed WECC to address stakeholder concerns regarding ambiguities in the terms “load responsibility” and “firm transaction.”

D. Remanded WECC Regional Reliability Standard BAL-002-WECC-1

8. On March 25, 2009, NERC submitted to the Commission for approval WECC regional Reliability Standard BAL-002-WECC-1 (Contingency Reserves). In Order No. 740, the Commission remanded regional Reliability Standard BAL-002-WECC-1. In Order No. 740, the Commission identified five issues with remanded regional Reliability Standard BAL-002-WECC-1: (1) the restoration period for contingency reserve; (2) the calculation of minimum contingency reserve; (3) the use of firm load to meet the contingency reserve requirement; (4) the use of demand-side management as a resource; and (5) miscellaneous directives.

12 Id. P 56.


14 Order No. 740, 133 FERC ¶ 61,063 at PP 26, 39, 49, 60, 66.
1. **Restoration Period for Contingency Reserve**

9. The Commission stated that, while the currently-effective WECC regional Reliability Standard BAL-STD-002-0 requires restoration of contingency reserve within 60 minutes, the remanded WECC regional Reliability Standard BAL-002-WECC-1 would have extended the restoration period to 90 minutes. The Commission determined that NERC and WECC did not justify the extension of the reserve restoration period from 60 minutes to 90 minutes or that such an extension created an acceptable level of risk within the Western Interconnection.

2. **Calculation of Minimum Contingency Reserve**

10. The Commission stated that WECC regional Reliability Standard BAL-STD-002-0 currently requires that minimum contingency reserve must equal the greater of: (1) the loss of generating capacity due to forced outages of generation or transmission equipment that would result from the most severe single contingency or (2) the sum of five percent of load responsibility served by hydro generation and seven percent of the load responsibility served by thermal generation. The remanded WECC regional Reliability Standard BAL-002-WECC-1 included a similar requirement, except that instead of basing the calculation of minimum contingency reserve on the sum of five percent of load responsibility served by hydro generation and seven percent of the load responsibility served by thermal generation, the minimum contingency reserve calculation would be based on the sum of three percent of load (generation minus station service minus net actual interchange) plus three percent of net generation (generation minus station service).
11. WECC submitted eight hours of data from each of the four operating seasons (summer, fall, winter, and spring, both on and off-peak), which demonstrated that the proposed methodology for calculating minimum contingency reserve would reduce total contingency reserve required in the Western Interconnection for each of the eight hours assessed when compared with the methodology in the currently-effective WECC regional Reliability Standard BAL-STD-002-0.

12. The Commission accepted WECC’s proposal, finding that “WECC’s proposed calculation of minimum contingency reserves is more stringent than the national requirement and could be part of a future proposal that the Commission could find to be just, reasonable, not unduly discriminatory or preferential, and in the public interest.”\(^{15}\)

The Commission observed, however, that “WECC also states that the proposed regional Reliability Standard does not excuse any non-performance with the continent-wide Disturbance Control Standard, which requires each balancing authority or reserve sharing group to activate sufficient contingency reserve to comply with the Disturbance Control Standard.”\(^{16}\)

13. The Commission also stated that, if WECC resubmitted its proposed methodology for calculating minimum contingency reserve, WECC and NERC could support its proposal with “audits specifically focused on contingency reserves and whether the

\(^{15}\) Id. P 39.

\(^{16}\) Id.
balancing authorities are meeting the adequacy and deliverability requirements … [t]his auditing also could address the concerns raised by some entities in WECC that the original eight hours of data provided in NERC’s petition is insufficient to demonstrate that the proposed minimum contingency reserve requirements are sufficiently stringent to ensure that entities within the Western Interconnection will meet the requirements of NERC’s continent-wide Disturbance Control Standard, BAL-002-0.”

3. **Use of Firm Load to Meet Contingency Reserve Requirement**

14. In the Notice of Proposed Rulemaking preceding Order No. 740, the Commission stated that, unlike the currently-effective regional Reliability Standard BAL-STD-002-0, the remanded regional Reliability Standard BAL-002-WECC-1 was not technically sound because it allowed balancing authorities and reserve sharing groups within WECC to use firm load to meet their minimum contingency reserve requirements once the reliability coordinator declared a capacity or energy emergency. However, in Order No. 740, the Commission accepted WECC’s proposal finding that, although remanded regional Reliability Standard BAL-002-WECC-1 allowed balancing authorities and reserve sharing groups to use “Load, other than Interruptible Load, once the Reliability Coordinator has declared a capacity or energy emergency,” these entities would not be authorized to shed firm load unless the applicable reliability coordinator had issued a 

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17 *Id.* P 40.

18 *Id.* P 43.
level 3 energy emergency alert pursuant to Reliability Standard EOP-002-2.1. The Commission directed WECC to develop revised language to clarify this point.\textsuperscript{19}

4. **Demand-Side Management as a Resource**

15. The Commission determined that remanded regional Reliability Standard BAL-002-WECC-1 did not allow demand-side management that is technically capable of providing this service to be used as a resource for contingency reserve. The Commission directed WECC to develop modifications that would explicitly provide that demand-side management technically capable of providing this service may be used as a resource for both spinning and non-spinning contingency reserve.\textsuperscript{20}

5. **Miscellaneous Directives**

16. The Commission directed WECC to consider comments regarding the meaning of the term “net generation.” The Commission also directed WECC to consider comments stating that the WECC regional Reliability Standard did not assign any responsibility or obligations on generator owners and generator operators, and that balancing authorities may be required to carry a disproportionate share of the contingency reserve obligation within the Western Interconnection.\textsuperscript{21}

\textsuperscript{19} Id. PP 48-49.

\textsuperscript{20} Id. P 61.

\textsuperscript{21} Id. P 66.
E. Proposed Regional Reliability Standard BAL-002-WECC-2

17. On April 12, 2013, NERC and WECC petitioned the Commission to approve regional Reliability Standard BAL-002-WECC-2 and the associated violation risk factors and violation severity levels, effective date, and implementation plan. The petition also requests retirement of the currently-effective WECC regional Reliability Standard BAL-STD-002-0 and removal of two WECC Regional Definitions, “Non-Spinning Reserve” and “Spinning Reserve,” from the NERC Glossary. The petition states that the proposed WECC regional Reliability Standard is just, reasonable, not unduly discriminatory or preferential, and in the public interest because it satisfies the factors set forth in Order No. 672, which the Commission applies when reviewing a proposed Reliability Standard.22

18. NERC states in the petition that the Resource and Demand Balancing (BAL) group of Reliability Standards ensure that resources and demand are balanced to maintain Interconnection frequency within limits. The petition states that the purpose of NERC Reliability Standard BAL-002-1 (Disturbance Control Performance) is to ensure the balancing authority is able to use contingency reserve to balance resources and demand and return Interconnection frequency within defined limits following a Reportable Disturbance. NERC maintains that the purpose of the proposed WECC regional Reliability Standard BAL-002-WECC-2 is to provide a regional Reliability Standard that

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22 Petition, Exhibit A.
specifies the quantity and types of contingency reserve required to ensure reliability under normal and abnormal conditions.\textsuperscript{23}

19. NERC asserts that the proposed regional Reliability Standard addresses the five issues identified in Order No. 740, which remanded the previously proposed WECC regional Reliability Standard BAL-002-WECC-1. First, the petition explains that proposed regional Reliability Standard BAL-002-WECC-2, Requirement R1, includes a 60-minute restoration period for contingency reserve, which is the same as the currently-effective regional WECC Reliability Standard BAL-STD-002-0.\textsuperscript{24}

20. Second, the petition includes two-years of additional data to support the method for calculating minimum contingency reserve proposed in WECC regional Reliability Standard BAL-002-WECC-2, Requirement R1, which is the same as the calculation proposed and accepted by the Commission in the remanded WECC regional Reliability Standard BAL-002-WECC-1.\textsuperscript{25}

21. Third, the petition states that the proposed WECC regional Reliability Standard BAL-002-WECC-2, Requirement R1, was modified to clarify that balancing authorities and reserve sharing groups within WECC are subject to the same restrictions regarding the use of firm load for contingency reserve as balancing authorities elsewhere operating

\textsuperscript{23} Petition at 2.

\textsuperscript{24} Id. at 12.

\textsuperscript{25} Id. at 13-16.
under the NERC Reliability Standards. NERC indicates that it has clarified the connection to the Energy Emergency Level 3 by incorporating language from Reliability Standard EOP-002-2.1, Attachment 1, Section B, into WECC regional Reliability Standard BAL-002-WECC-2, Requirement R1.\(^{26}\)

22. Fourth, according to the petition, WECC regional Reliability Standard BAL-002-WECC-2, Requirement R1 was modified to explicitly provide that demand-side management technically capable of providing the service may be used as a resource for contingency reserve.\(^{27}\)

23. Fifth, the petition states that WECC regional Reliability Standard BAL-002-WECC-2 replaces the term “net generation” with the phrase “generating energy values average over each Clock Hour.” The petition notes that the regional Reliability Standard also includes a reference to Opinion No. 464, which addresses the issue of behind-the-meter generation, in response to comments raised in the Order No. 740 rulemaking.\(^{28}\)

The petition also states that WECC regional Reliability Standard BAL-002-WECC-2 allows for impacted balancing authorities and reserve sharing groups to enter into transactions to provide contingency reserve for another balancing authority or procure contingency reserve from another balancing authority to more equitably allocate

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\(^{26}\) Id. at 18.

\(^{27}\) Id. at 16-18.

generation for purposes of the reserve calculation. The petition further states that the NERC Functional Model, Version 5, more closely aligns the tasks in the WECC regional Reliability Standard BAL-002-WECC-2 with balancing authorities than to generator operators.  

F. Notice of Proposed Rulemaking

24. On July 18, 2013, the Commission issued a Notice of Proposed Rulemaking (NOPR) proposing to approve regional Reliability Standard BAL-002-WECC-2 as just, reasonable, not unduly discriminatory or preferential, and in the public interest. The Commission also proposed to approve the associated violation risk factors, violation severity levels, implementation plan, effective date, and the retirement of WECC regional Reliability Standard BAL-STD-002-0 (Operating Reserves) and the removal of two WECC Regional Definitions, “Non-Spinning Reserve” and “Spinning Reserve,” from the NERC Glossary. The NOPR stated that the WECC regional Reliability Standard is more stringent than the NERC Reliability Standard BAL-002-1 because the regional Reliability Standard requires applicable entities to restore contingency reserve within 60 minutes following the Disturbance Recovery Period while the NERC Reliability Standard only requires restoration of contingency reserve within 90 minutes. The NOPR also stated that the method for calculating minimum contingency reserve in the regional Reliability Standard is more stringent than Requirement R3.1 in NERC Reliability Standard

BAL-002-1 because it requires minimum contingency reserve levels that will be at least equal to the NERC Reliability Standard minimum (i.e., equal to the most severe single contingency) and more often will be greater. The NOPR further stated that NERC and WECC addressed the directives in Order No. 740. In addition, the NOPR proposed to direct NERC to submit an informational filing after the first two years of implementation of regional Reliability Standard BAL-002-WECC-2 that addresses the adequacy of contingency reserve in the Western Interconnection.

25. In response to the NOPR, NERC and WECC, jointly, and Powerex Corp. (Powerex), Portland General Electric Company (Portland), California Independent System Operator Corporation (CAISO), and Tacoma Power (Tacoma) filed comments. We address below the issues raised in the NOPR and comments.

II. Discussion

26. Pursuant to FPA section 215(d)(2), we approve WECC regional Reliability Standard BAL-002-WECC-2 as just, reasonable, not unduly discriminatory or preferential, and in the public interest. For applicable entities in the WECC Region, regional Reliability Standard BAL-002-WECC-2 specifies the quantity and types of contingency reserve required to ensure reliability under normal and abnormal conditions. WECC regional Reliability Standard is more stringent than the NERC Reliability Standard BAL-002-1 because the regional Reliability Standard requires applicable entities to restore contingency reserve within 60 minutes following the Disturbance Recovery Period while the NERC Reliability Standard only requires restoration of contingency reserve within 90 minutes. In addition, the method for calculating minimum
contingency reserve in the regional Reliability Standard is more stringent than Requirement R3.1 in NERC Reliability Standard BAL-002-1 because it requires minimum contingency reserve levels that will be at least equal to the NERC Reliability Standard minimum (i.e., equal to the most severe single contingency) and more often will be greater.\footnote{As stated in Order No. 740, the proposed WECC regional Reliability Standard does not excuse non-performance with NERC Reliability Standard BAL-002-1. Order No. 740, 133 FERC ¶ 61,063 at P 39.} We also conclude that NERC and WECC addressed the Commission’s directives in Order No. 740. In addition to approving regional Reliability Standard BAL-002-WECC-2, the Commission directs NERC to submit an informational filing after the first two years of implementation of the regional Reliability Standard that addresses the adequacy of contingency reserve in the Western Interconnection.

We discuss below the following issues raised in the NOPR and comments:

(A) new methodology for calculating minimum contingency reserve; (B) elimination of interruptible imports requirement; (C) qualifying resources for contingency reserve; (D) use of the term “Load”; (E) use of net generation data to calculate contingency reserve; (F) violation risk factors and violation severity levels; (G) removal of terms from the NERC Glossary; and (H) implementation plan and effective date.
A. New Methodology for Calculating Minimum Contingency Reserve

NERC Petition

28. WECC regional Reliability Standard BAL-002-WECC-2 includes a new methodology for calculating minimum contingency reserve, based on the greater of the most severe single contingency or the sum of three percent of load plus three percent of net generation. The new methodology is different from the methodology in WECC regional Reliability Standard BAL-STD-002-0, which is based on the greater of the most severe single contingency or the sum of five percent of load responsibility served by hydro generation and seven percent of the load responsibility served by thermal generation.

29. WECC provides “two years’ worth of additional data showing the amount of contingency reserves that would be calculated for each Balancing Authority and Reserve Sharing Group under the proposed methodology.”[^31] WECC states that “during the two-year period of 2010-2012, the average increase/decrease in Contingency Reserve required under the existing methodology juxtaposed to the proposed methodology was an average decrease of 137 MW across the Western Interconnection” and that a 137 MW decrease represents “.000932 of WECC’s peak load and .001934 of WECC’s minimum load” within that two-year period.[^32] WECC concludes that “implementation of the

[^31]: Petition at 13.

[^32]: Id.
proposed methodology will, on average, reduce the amount of Contingency Reserve held within the Interconnection; however, the average change is so small in comparison to the load served within the Interconnection that it should have no adverse impact on reliability.”

**NOPR**

30. In the NOPR, the Commission proposed to approve the new methodology and to direct NERC to submit an informational filing following implementation of the regional Reliability Standard that addresses the adequacy of contingency reserve levels in the Western Interconnection.

31. The NOPR stated that, while the data submitted by NERC shows an average decrease of 137 MW, the data also shows that the largest single decrease in contingency reserve equaled 826 MW during the two-year study period when comparing the current and proposed methodologies. The NOPR observed that, at the time of the 826 MW decrease (i.e., 9/15/10 at 14:00), the contingency reserve value using the current methodology for calculating minimum contingency reserve was 8259 MW versus 7434 MW using the new methodology. The NOPR stated that the 826 MW decrease represented a 10 percent decrease in contingency reserve at that time interval. The

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33 *Id.* at 16.

34 Petition, Exhibit G (data point at date/time interval 9/15/10 at 14:00).

35 Petition at 16.
NOPR noted that the data also show a widening gap over time (e.g., a difference of 114 MW at the beginning date but 192 MW at the end date).\textsuperscript{36}

32. The NOPR proposed to direct NERC to submit an informational filing to the Commission assessing contingency reserve levels in the Western Interconnection after the first two years of implementation of the regional Reliability Standard. In the information filing, NERC, in consultation with WECC, would provide an assessment of minimum contingency reserve levels in the Western Interconnection following implementation of the new methodology. The NOPR stated that the informational filing should assess whether the new methodology for calculating minimum contingency reserve levels has had an adverse impact on reliability in the Western Interconnection and should include the data that NERC and WECC use to assess the sufficiency of the minimum contingency reserve levels under the new methodology. The NOPR stated that such data could include, but need not be limited to an increase or decrease in the “Average Percent Non-Recovery Disturbance Control Standards (DCS) Events,”\textsuperscript{37} an increase or decrease in the average Contingency Reserve Restoration Period, an increase

\textsuperscript{36} The 114 MW and 192 MW values are calculated by plotting a trend line on the contingency reserve data submitted by WECC using the existing methodology and plotting a trend line on the contingency reserve data submitted by WECC using the proposed methodology. The initial difference between the two trend lines is 114 MW while the difference at the end of the trend lines is 192 MW.

or decrease in the number of events larger than the minimum contingency reserve levels, and any other information that NERC or WECC deem relevant. The NOPR proposed to direct NERC to submit the informational filing to the Commission 90 days after the end of the two-year period following implementation. The NOPR stated that NERC may choose to submit the informational filing sooner if NERC identifies issues with contingency reserve levels in the Western Interconnection that may require immediate action, and that the Commission would review the informational filing to determine whether any action is necessary.

**Comments**

33. NERC and WECC support the NOPR proposal. NERC commits to submit an informational filing that assesses whether the methodology for calculating minimum contingency reserve levels has had an adverse impact on reliability in the Western Interconnection. NERC states that the informational filing will include the data used to make the assessment and will clarify the effect of WECC regional Reliability Standard BAL-002-WECC-2 on reliability in the Western Interconnection.

34. Tacoma and Portland maintain that the new methodology for calculating contingency reserve is ambiguous because the methodology uses values based on hourly integrated load and hourly integrated generation (i.e., averages over the course of a given hour). Tacoma and Portland assert that this is a change over the use of instantaneous megawatt values under WECC regional Reliability Standard BAL-STD-002-0. Tacoma and Portland state that it is unclear how the new methodology should be applied because it is unclear whether the hour referred to is the previous hour, a forecast for the next hour,
or a value for the hour determined after-the-fact. Tacoma states that if the hour referred to is the previous hour, the value will no longer be pertinent to real-time operational data and real-time application.

35. Portland states that the new methodology could result in significant reductions in contingency reserve at specific times, which could have an impact on frequency response capabilities. Portland also questions the data WECC submitted to support the new methodology. Portland states that three of the six entities surveyed by WECC did not use the previous methodology (i.e., the sum of five percent of load responsibility served by hydro generation and seven percent of the load responsibility served by thermal generation) and instead based contingency reserve values on the most severe single contingency. In addition, Portland states that “two years of data is not enough to show the variability in water years for a region structured around hydropower.”\(^{38}\) Portland recommends requiring 10 years’ worth of data. Portland also states that the new methodology unfairly shifts the burden on providing reserves to the sink balancing authorities and load-serving entities, which may not be able to acquire the reserves. Portland further states that, if the Commission approves the regional Reliability Standard, NERC should be required to file annual reports for five years instead of a single report after two years. Portland maintains that balancing authorities may be conservative and carry additional reserves in the first year and less so in later years, and thus requiring

\(^{38}\) Portland Comments at 4.
reporting for five years will provide a more accurate picture of the regional Reliability Standard’s impact. Portland also states that NERC should provide a comparative analysis of the new methodology and the old methodology.

**Commission Determination**

36. The Commission adopts the NOPR proposal directing NERC, in consultation with WECC, to submit an informational filing two years after implementation of WECC regional Reliability Standard BAL-002-WECC-2 that assesses whether the new methodology for calculating minimum contingency reserve levels has had an adverse impact on reliability in the Western Interconnection. Consistent with NERC’s comments, the informational filing should include the data that NERC and WECC use to assess the sufficiency of the minimum contingency reserve levels under the new methodology. NERC is directed to submit the informational filing 90 days after the end of the two-year period following implementation. The Commission will review the informational filing to determine whether any action is warranted. NERC may submit the informational filing sooner if NERC or WECC identifies issues with contingency reserve levels in the Western Interconnection that require more immediate action.

37. We reject the comments submitted by Tacoma and Portland concerning the new methodology and informational filing. We determine that the use of “hourly integrated Load” and “hourly integrated generation” is not ambiguous or substantively different from the current practice of calculating contingency reserve. Regional Reliability Standard BAL-002-WECC-2, Requirement R1.3, explains that these terms are based on “real-time hourly load and generating energy values averaged over each Clock Hour.”
Moreover, the term “Clock Hour” is defined in the NERC Glossary and refers to the current hour.\(^{39}\) In addition, using average values over the course of an hour is not different from what is required by regional Reliability Standard BAL-STD-002-0, which states in the Measures section that “a Responsible Entity identified in Section A.4 must maintain 100% of required Operating Reserve levels based upon data averaged over each clock hour.” Ultimately, regional Reliability Standard BAL-002-WECC-2, Requirement R1, now requires minimum contingency reserve to be calculated from load and generation amounts, but it does not change the time frame for calculating minimum contingency reserve.

38. We also reject Portland’s comment that the new methodology shifts the burden of providing reserves to sink balancing authorities and load serving entities, which may be unable to acquire the necessary reserves. As we stated in Order No. 740, we agree with NERC and WECC that the “equal split between load and generation [in the new methodology] represents a reasonable balance to moderate shifts in Contingency Reserve responsibility and costs among the applicable entities.”\(^{40}\) Moreover, Portland does not

\(^{39}\)“Clock Hour: The 60-minute period ending at :00. All surveys, measurements, and reports are based on Clock Hour periods unless specifically noted.” NERC Glossary at 19.

\(^{40}\)Petition at 16; see also Order No. 740, 133 FERC ¶ 61,063 at P 41.
provide any evidence that sink balancing authorities or load-serving entities will be unable to acquire the necessary reserves.\footnote{In developing the implementation plan, NERC recognized that the new methodology would require responsible entities to enter into contractual agreements and negotiations and allowed sufficient time for responsible entities to enter into such arrangements. Petition, Exhibit A at 5.}

39. With respect to Portland’s concerns regarding WECC’s data and the informational filing, the informational filing is intended to identify any issues regarding the adequacy of contingency reserve levels in the Western Interconnection and the impact on other reliability areas such as frequency response. We are satisfied that WECC provided enough representative data to conclude that the new methodology will likely not result in significantly less average contingency reserve in the Western Interconnection. However, for the reasons discussed above, the Commission believes that it is necessary to monitor and assess contingency reserve levels in the Western Interconnection following implementation of the regional Reliability Standard. We are not inclined at this time to require more than two years of data as Portland suggests. The Commission intends to analyze the two-year informational filing and determine whether it adequately addresses the sufficiency of the proposed required reserve levels in the Western Interconnection. Portland or other entities may also examine the filing and, if there is sufficient technical analysis that suggests contingency reserve levels may be inadequate, the Commission may direct NERC and/or WECC to submit additional informational filings in the future.
The Commission adopts the NOPR proposal to direct NERC to file an informational filing two years after implementation of the regional Reliability Standard.

B. **Removal of Interruptible Imports Requirement**

**NERC Petition**

40. Regional Reliability Standard BAL-002-WECC-2, Requirement R3, states that:

Each Sink Balancing Authority and each sink Reserve Sharing Group shall maintain an amount of Operating Reserve, in addition to the minimum Contingency Reserve in Requirement R1, equal to the amount of Operating Reserve–Supplemental for any Interchange Transaction designated as part of the Source Balancing Authority’s Operating Reserve–Supplemental or source Reserve Sharing Group’s Operating Reserve–Supplemental, except within the first sixty minutes following an event requiring the activation of Contingency Reserve.

41. NERC maintains that Requirement R3 is a clarification of an existing requirement in WECC regional Reliability Standard BAL-STD-002-0, which requires additional reserves for interruptible imports. NERC explains that the standard drafting team removed the term “interruptible imports” because it is not a defined term in the NERC Glossary and is subject to misinterpretation. NERC states that the standard drafting team replaced the term with clarifying language describing which types of transactions must be covered by additional reserves. NERC observes that the continent-wide Reliability Standard BAL-002-1 does not require reserves for Interchange Transactions designated as part of the source balancing authority or source reserve sharing group Operating Reserve-Supplemental and thus the requirement in the regional Reliability Standard is more stringent than the continent-wide Reliability Standard.


**Comments**

42. Powerex maintains that, while the term “interruptible imports” has not been clearly defined by WECC or NERC, the solution is not to remove the term from the regional Reliability Standard. Powerex states that removal of interruptible imports results in an inferior regional Reliability Standard because it effectively eliminates any Reliability Standard specifying a reserve requirement for interruptible imports. Powerex maintains that balancing authorities will no longer be required to set aside any capacity to cover interruptible imports into their balancing authority areas. Powerex states that the interruptible imports requirement has served to “differentiate an import of interruptible energy—a product that may be curtailed for ANY reason ... from a ‘firm’ energy import that is supported by sufficient generating resources within the source [balancing authority] to assure the energy will not be curtailed during the delivery period.”

**Commission Determination**

43. The Commission rejects Powerex’s comments concerning removal of the term “interruptible imports.” The Commission agrees with NERC and WECC that Requirement R3 identifies the types of transactions, including Interchange Transactions, that must be covered by additional reserves. Accordingly, we disagree with Powerex that the concept of interruptible imports has been removed from the regional Reliability Standard. Replacing the term “interruptible imports” with the NERC-defined term

42 Powerex Comments at 8.
“Interchange Transaction” eliminates ambiguity from the regional Reliability Standard by including all types of Interchange Transactions (e.g., firm or interruptible) as it pertains to calculating Operating Reserve. Moreover, in response to comments during the standards development process, the standard drafting team reinforced this view in stating that “[Requirement] R3 of the proposed standard directly addresses the concept of interruptible schedules and [Requirement] R4 addresses the concept of on-demand energy.”

43 Powerex states that “in WECC there exists an unacceptable lack of clarity with respect to reserve requirements associated with energy interchange scheduling.” Powerex also “acknowledges that the proposed BAL-002-WECC-2 standard alone cannot address all of these concerns, but believes it is premature, unwarranted, and problematic to eliminate the requirement that interruptible imports carry 100% reserves until these broader concerns are addressed by some other regulatory requirement.” We disagree with Powerex that it is appropriate to condition approval of regional Reliability Standard BAL-002-WECC-2, and the removal of the term “interruptible imports,” on first addressing existing problems concerning reserve requirements associated with energy interchange scheduling. Instead, we agree with NERC and WECC that the regional Reliability Standard, in requiring additional reserves for Interchange Transactions, is

43 Petition, Exhibit C at 11.
more stringent than the continent-wide Reliability Standard BAL-002, and we approve the requirement on that basis.

C. **Qualifying Resources for Contingency Reserve**

**NERC Petition**

45. WECC regional Reliability Standard BAL-002-WECC-2, Requirement R.1.1.2 states that contingency reserve may be comprised of any combination of the reserve types specified below:

- Operating Reserve – Spinning
- Operating Reserve – Supplemental
- Interchange Transactions designated by the Source Balancing.
- Authority as Operating Reserve – Supplemental
- Reserve held by other entities by agreement that is deliverable on Firm Transmission Service.
- A resource, other than generation or load, that can provide energy or reduce energy consumption.
- Load, including demand response resources, Demand-Side Management resources, Direct Control Load Management, Interruptible Load or Interruptible Demand, or any other Load made available for curtailment by the Balancing Authority or the Reserve Sharing Group via contract or agreement.
- All other load, not identified above, once the Reliability Coordinator has declared an energy emergency alert signifying that firm load interruption is imminent or in progress.

46. “Operating Reserve – Spinning” is defined in the NERC Glossary to mean “generation (synchronized or capable of being synchronized to the system) that is fully available to serve load within the Disturbance Recovery Period following the contingency event; or load fully removable from the system within the Disturbance Recovery Period following the contingency event.”
Comments

47. CAISO seeks clarification that non-traditional resources, including electric storage facilities, may qualify as “Operating Reserve – Spinning” so long as they meet the technical and performance requirements in Requirement R2 (i.e., that the resources must be immediately and automatically responsive to frequency deviations through the action of a control system and capable of fully responding within ten minutes).

Commission Determination

48. The Commission determines that non-traditional resources, including electric storage facilities, may qualify as “Operating Reserve – Spinning” provided those resources satisfy the technical and performance requirements in Requirement R2. Our determination is supported by the standard drafting team’s response to a comment during the standard drafting process where the standard drafting team stated that “technologies, such as batteries, both contemplated and not yet contemplated are included in the standard as potential resources – so long as the undefined resource can meet the response characteristics described in the standard …The language does not preclude any specific technology; rather, the language delineates how that technology must [] respond.” We also note that non-traditional resources could contribute to contingency reserve under the regional Reliability Standard if they are resources, “other than generation or load, that can provide energy or reduce energy consumption.”

44 Petition, Exhibit C at 20.
D. **Use of the Term Load in Requirement R.1.1**

**NERC Petition**

49. WECC regional Reliability Standard BAL-002-WECC-2, Requirement R.1.1, states that minimum contingency reserve must equal the “amount of Contingency Reserve equal to the loss of the most severe single contingency” or the “amount of Contingency Reserve equal to the sum of three percent of hourly integrated Load plus three percent of hourly integrated generation.”

**Comments**

50. Tacoma states that the term “Load” is defined in the NERC Glossary as “[a]n end-use device or customer that receives power from the electric system.” Tacoma maintains that the term “Load” in Requirement R.1.1 cannot be interpreted to be a device or customer that receives power from the electric system because “the requirement directs the taking of a percentage of the ‘Load’ and treating it as a measurement of power, like megawatts.” Tacoma recommends that the defined term “Load” should be replaced with the undefined term “load.”

**Commission Determination**

51. Based on the context of Requirement R.1.1, the Commission understands that the use of the term “Load” does not refer to an end-use device or customer. Instead, it refers to the power consumption associated with the end-use device or customer (i.e., Load), which is then applied in calculating minimum contingency reserve levels. With that understanding, the Commission will not direct NERC to change “Load” to “load” in
Requirement R.1.1 as requested by Tacoma. NERC and WECC may modify this language in the next version of the regional Reliability Standard.

E. **Use of Net Generation Data to Calculate Contingency Reserve**

**NERC Petition**

52. NERC states that the “calculation of minimum Contingency Reserves is based on three percent of net generation and three percent of net load and this fairly balances the responsibilities of Contingency Reserve providers with the financial obligations of those who would benefit most from those services.” Requirement R1.1.3 states that the minimum contingency reserve calculation should be based on “real-time hourly load and generating energy values averaged over each Clock Hour (excluding Qualifying Facilities covered in 18 C.F.R. § 292.101, as addressed in FERC Opinion 464).” In Requirement R1.1.3, NERC states that the standard drafting team replaced the term “net generation” with “generating energy values averaged over each Clock Hour.” NERC maintains that the substitution was in response to comments in the Order No. 740 rulemaking regarding the definition of the term “net generation.”

**Comments**

53. Tacoma states that changing metered data to net generation for real-time operations would result in undue burden and cause a delay in implementation because many balancing authorities do not use net generation in their minimum contingency

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45 Petition at 16.
reserve calculation. Tacoma states that it uses gross generation for real-time operations and includes station service within its entity load. Tacoma explains that it prepares annual reports that include net generation, but Tacoma asserts that using net generation in real-time operations will require “significant changes in the data and telemetry that must be available in real-time operations.”

**Commission Determination**

54. The Commission notes that NERC’s petition states that the “calculation of minimum Contingency Reserves is based on three percent of net generation.” Based on NERC’s description, the NOPR also used the term “net generation” at various points. However, Requirement R1 of WECC regional Reliability Standard BAL-002-WECC-2, by design, does not use the term “net generation.” Instead, Requirement R1.1.3 states that the minimum contingency reserve calculation should be based on “real-time hourly load and generating energy values averaged over each Clock Hour (excluding Qualifying Facilities covered in 18 C.F.R. § 292.101, as addressed in FERC Opinion 464).” Accordingly, Tacoma’s concern about the use of “net generation” to calculate minimum contingency reserve is moot.

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46 Tacoma Comments at 3.

47 Petition at 16.
F. **Violation Risk Factors and Violation Severity Levels**

55. The petition states that each Requirement of the proposed WECC regional Reliability Standard BAL-002-WECC-2 includes one violation risk factor and one violation severity level and that the ranges of penalties for violations will be based on the sanctions table and supporting penalty determination process described in the Commission-approved NERC Sanctions Guideline. The NOPR proposed to approve the violation risk factors and violation severity levels for the Requirements of WECC regional Reliability Standard BAL-002-WECC-2 as consistent with the Commission’s established guidelines.\(^{48}\) The Commission did not receive comments regarding the proposed violation risk factors and violation severity levels. Accordingly, the Commission approves the violation risk factors and violation severity levels for the requirements of WECC regional Reliability Standard BAL-002-WECC-2.

G. **Removal of Terms from NERC Glossary**

56. The petition states that proposed WECC regional Reliability Standard BAL-002-WECC-2 replaces the terms “Spinning Reserve” with “Operating Reserve-Spinning” and “Non-Spinning Reserve” with “Operating Reserve-Supplemental” to ensure comparable treatment of demand-side management with conventional generation, or any other technology, and to allow demand-side management to be considered as a resource for contingency reserve. The petition states that Operating Reserve-Spinning and Operating

Reserve-Supplemental have glossary definitions that are inclusive of demand-side management, including controllable load. Accordingly, the petition seeks revision of the NERC Glossary to remove the two WECC Regional Definitions, Non-Spinning Reserve and Spinning Reserve. With the removal of Non-Spinning Reserve and Spinning Reserve from the proposed WECC regional Reliability Standard BAL-002-WECC-2, the NOPR proposed to approve removal of those WECC Regional Definitions from the NERC Glossary. The Commission did not receive comments regarding the proposed revisions to the NERC Glossary. Accordingly, the Commission approves the proposed revisions to the NERC Glossary.

H. Implementation Plan and Effective Date

57. The petition proposes that WECC regional Reliability Standard BAL-002-WECC-2 become effective on the first day of the third quarter following applicable regulatory approval. The petition states that the proposed WECC regional Reliability Standard may require execution of contracts by some applicable entities before implementation can occur, and the proposed effective date allows time for applicable entities to finalize needed contracts. The petition also proposes to retire the currently-effective WECC regional Reliability Standard BAL-STD-002-0 on the proposed effective date.

58. The NOPR proposed to approve the petition’s implementation plan and effective date for the WECC regional Reliability Standard BAL-002-WECC-2. The Commission did not receive comments regarding the proposed implementation plan and effective date.
Accordingly, the Commission approves the implementation plan and effective date for WECC regional Reliability Standard BAL-002-WECC-2.

III. Information Collection Statement

59. The following collection of information contained in this Final Rule is subject to review by the Office of Management and Budget (OMB) under section 3507(d) of the Paperwork Reduction Act of 1995 (PRA). OMB’s regulations require approval of certain information collection requirements imposed by agency rules. Upon approval of a collection(s) of information, OMB will assign an OMB control number and an expiration date. Respondents subject to the filing requirements of a rule will not be penalized for failing to respond to these collections of information unless the collections of information display a valid OMB control number. The Commission solicited comments on the need for and the purpose of the information contained in regional Reliability Standard BAL-002-WECC-2 and the corresponding burden to implement the regional Reliability Standard. The Commission received comments on specific requirements in the regional Reliability Standard, which we address in this Final Rule. However, the Commission did not receive any comments on our reporting burden estimates.

60. Public Reporting Burden: The burden and cost estimates below are based on the need for applicable entities to revise documentation, already required by the current

\[49\] 44 U.S.C. 3507(d).

\[50\] 5 CFR 1320.11.
WECC regional Reliability Standard BAL-STD-002-0, to reflect certain changes made in WECC regional Reliability Standard BAL-002-WECC-2. Our estimates are based on the NERC Compliance Registry as of May 30, 2013, which indicates that 36 balancing authorities and reserve sharing groups are registered within WECC.

<table>
<thead>
<tr>
<th>Improved Requirement</th>
<th>Year</th>
<th>Number of Respondents(^51) (1)</th>
<th>Number of Annual Responses Per Respondent (2)</th>
<th>Average Burden Hours per Response (3)</th>
<th>Estimated Total Annual Burden Hours (1)<em>(2)</em>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update Existing Documentation to Conform with Proposed Regional Reliability Standard</td>
<td>1</td>
<td>36</td>
<td>1 response</td>
<td>1(^52)</td>
<td>36 hours</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>36 hours</td>
</tr>
</tbody>
</table>

Estimated Total Annual Burden Hours for Collection: (Compliance/Documentation) = 36 hours

Costs to Comply with PRA:

- Year 1: **$2,160**.
- Year 2 and ongoing: **$0**.

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\(^{51}\) NERC balancing authorities and reserve sharing groups are responsible for the improved requirement. Further, if a single entity is registered as both a balancing authority and reserve sharing group, that entity is counted as one unique entity.

\(^{52}\) The Commission bases the hourly reporting burden on the time for an engineer to implement the requirements of the final rule.
61. Year 1 costs include updating existing documentation, already required by the current WECC regional Reliability Standard BAL-STD-002-0, to reflect changes in WECC regional Reliability Standard BAL-002-WECC-2. For the burden category above, the cost is $60/hour (salary plus benefits) for an engineer. The estimated breakdown of annual cost is as follows:

- **Year 1**
  - **Update Existing Documentation to Conform with Proposed Regional Reliability Standard**: 36 entities * (1 hours/response * $60/hour) = $2,160.

Title: FERC-725E, Mandatory Reliability Standards-WECC (Western Electric Coordinating Council)

Action: Proposed Collection of Information

OMB Control No: 1902-0246

Respondents: Business or other for-profit, and not-for-profit institutions.

Frequency of Responses: One-time.

Necessity of the Information: Regional Reliability Standard BAL-002-WECC-2 implements the Congressional mandate of the Energy Policy Act of 2005 to develop mandatory and enforceable Reliability Standards to better ensure the reliability of the nation’s Bulk-Power System. Specifically, the regional Reliability Standard ensures that

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53 Labor rates from Bureau of Labor Statistics (BLS) (http://bls.gov/oes/current/naics2_22.htm). Loaded costs are BLS rates divided by 0.703 and rounded to the nearest dollar (http://www.bls.gov/news.release/ecec.nr0.htm).
balancing authorities and reserve sharing groups in the WECC Region have the quantity and types of contingency reserve required to ensure reliability under normal and abnormal conditions.

**Internal review:** The Commission has reviewed regional Reliability Standard BAL-002-WECC-2 and made a determination that its action is necessary to implement section 215 of the FPA. The Commission has assured itself, by means of its internal review, that there is specific, objective support for the burden estimates associated with the information requirements.

62. Interested persons may obtain information on the reporting requirements by contacting the Federal Energy Regulatory Commission, Office of the Executive Director, 888 First Street, NE, Washington, DC 20426 [Attention: Ellen Brown, e-mail: DataClearance@ferc.gov, phone: (202) 502-8663, fax: (202) 273-0873].

**IV. Environmental Analysis**

63. The Commission is required to prepare an Environmental Assessment or an Environmental Impact Statement for any action that may have a significant adverse effect on the human environment. The Commission has categorically excluded certain actions from this requirement as not having a significant effect on the human environment.

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Included in the exclusion are rules that are clarifying, corrective, or procedural or that do not substantially change the effect of the regulations being amended. The actions directed herein fall within this categorical exclusion in the Commission’s regulations.

V. **Regulatory Flexibility Act**

64. The Regulatory Flexibility Act of 1980 (RFA) generally requires a description and analysis of proposed rules that will have significant economic impact on a substantial number of small entities. As discussed above, regional Reliability Standard BAL-002-WECC-2 applies to 36 registered balancing authorities and reserve sharing groups in the NERC Compliance Registry. Comparison of the NERC Compliance Registry with data submitted to the Energy Information Administration on Form EIA-861 indicates that, of the 36 registered balancing authorities and reserve sharing groups, two may qualify as small entities.

65. The Commission estimates that, on average, each of the two affected small entities will have an estimated cost of $60 in Year 1 and no further ongoing costs. These figures

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57 The RFA definition of “small entity” refers to the definition provided in the Small Business Act (SBA), which defines a “small business concern” as a business that is independently owned and operated and that is not dominant in its field of operation. See 15 U.S.C. 632. According to the Small Business Administration, an electric utility is defined as “small” if, including its affiliates, it is primarily engaged in the generation, transmission, and/or distribution of electric energy for sale and its total electric output for the preceding fiscal year did not exceed 4 million megawatt hours.
are based on information collection costs plus additional costs for compliance. The Commission does not consider this to be a significant economic impact for small entities because it should not represent a significant percentage of the small entities’ operating budgets. The Commission solicited comments concerning is proposed Regulatory Flexibility Act certification and did not receive any comments. Accordingly, the Commission certifies that this Final Rule will not have a significant economic impact on a substantial number of small entities.

VI. Document Availability

66. In addition to publishing the full text of this document in the Federal Register, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through the Commission's Home Page (http://www.ferc.gov) and in the Commission's Public Reference Room during normal business hours (8:30 a.m. to 5:00 p.m. Eastern time) at 888 First Street, NE, Room 2A, Washington, DC 20426.

67. From the Commission's Home Page on the Internet, this information is available on eLibrary. The full text of this document is available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.

68. User assistance is available for eLibrary and the Commission’s website during normal business hours from the Commission’s Online Support at (202) 502-6652 (toll free at 1-866-208-3676) or email at ferconlinesupport@ferc.gov, or the Public Reference
VII. **Effective Date and Congressional Notification**

69. These regulations are effective [60 days after publication in the FEDERAL REGISTER]. The Commission has determined, with the concurrence of the Administrator of the Office of Information and Regulatory Affairs of OMB, that this rule is not a “major rule” as defined in section 351 of the Small Business Regulatory Enforcement Fairness Act of 1996.

By the Commission.

( SEAL )

Nathaniel J. Davis, Sr.,
Deputy Secretary.