AGENCY: Federal Energy Regulatory Commission.

ACTION: Notice of Proposed Rulemaking.

SUMMARY: Pursuant to section 215 of the Federal Power Act, the Commission proposes to remand a revised regional Reliability Standard developed by the Western Electricity Coordinating Council and approved by the North American Electric Reliability Corporation, which the Commission has certified as the Electric Reliability Organization responsible for developing and enforcing mandatory Reliability Standards. The revised regional Reliability Standard, designated by WECC as BAL-002-WECC-1, would set revised Contingency Reserve requirements meant to maintain scheduled frequency and avoid loss of firm load following transmission or generation contingencies.

DATES: Comments are due [insert date that is 60 days after publication in the FEDERAL REGISTER].

ADDRESSES: Comments and reply comments may be filed electronically via the eFiling link on the Commission's web site at www.ferc.gov. Documents created electronically using word processing software should be filed in the native application or print-to-PDF format and not in a scanned format. This will enhance document retrieval.
for both the Commission and the public. The Commission accepts most standard word processing formats and commenters may attach additional files with supporting information in certain other file formats. Attachments that exist only in paper form may be scanned. Commenters filing electronically should not make a paper filing. Service of rulemaking comments is not required. Commenters that are not able to file electronically must send an original and 14 copies of their comments to: Federal Energy Regulatory Commission, Office of the Secretary, 888 First Street, NE, Washington, DC 20426.

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SUPPLEMENTARY INFORMATION:
NOTICE OF PROPOSED RULEMAKING

(March 18, 2010)

1. Pursuant to section 215 of the Federal Power Act (FPA),¹ the Commission proposes to remand a revised regional Reliability Standard developed by the Western Electricity Coordinating Council (WECC) and approved by the North American Electric Reliability Corporation (NERC), which the Commission has certified as the Electric Reliability Organization (ERO) responsible for developing and enforcing mandatory Reliability Standards.² The revised regional Reliability Standard, designated by WECC as BAL-002-WECC-1 (Contingency Reserves),³ is meant to ensure that adequate generating capacity is available at all times to maintain scheduled frequency, and avoid loss of firm load following transmission or generation contingencies. As discussed


³ NERC designates the version number of a Reliability Standard as the last digit of the Reliability Standard number. Therefore, original Reliability Standards end with “-0” and modified version one Reliability Standards end with “-1.”
below, the Commission believes that the proposed regional Reliability Standard does not meet the statutory criteria for approval that it be just, reasonable, not unduly discriminatory or preferential, and in the public interest.\textsuperscript{4}

2. The Commission proposes to remand the proposed regional Reliability Standard based on concerns that it not only fails to support the adoption of less stringent requirements than those in the currently effective WECC regional standard that it would replace, but may also in some respects be less stringent than the corresponding NERC continent-wide Reliability Standard pertaining to contingency reserves. Of particular concern with respect to whether the proposed standard is less stringent than the continent-wide Reliability Standard is the provision of proposed BAL-002-WECC-1 that would permit a balancing authority, when an emergency is declared, to count “Load, other than Interruptible Load” as contingency reserve. This provision allows a balancing authority to activate load shedding when a single contingency occurs instead of procuring and utilizing generating or demand response resources held in reserve for contingencies to balance the Bulk-Power System. We believe that such operation, which is not permitted in either the current regional Reliability Standard or the NERC continent-wide Reliability Standard, is detrimental to reliability.

3. Further, we are concerned that proposed BAL-002-WECC-1, Requirement R1, reformulates the minimum contingency reserve requirement without providing adequate

\textsuperscript{4} 16 U.S.C. 824o(d)(2).
support that the new requirement is sufficiently stringent to meet the requirements of NERC’s continent-wide Disturbance Control Standard, BAL-002-0. While NERC in its transmittal letter provides several justifications for the proposed modification to the minimum contingency reserve requirement, it also states that WECC relied on just eight hours of operating data in its analysis to support its proposal to make a modest reduction in the amount of contingency reserve under the proposed Reliability Standard. We believe that NERC and WECC should provide additional data and analysis to support the proposed reformulation. Accordingly, we propose to remand WECC regional Reliability Standard BAL-002-WECC-1.

I. **Background**

A. **Mandatory Reliability Standards**

4. Section 215 of the FPA requires a Commission-certified ERO to develop mandatory and enforceable Reliability Standards, which are subject to Commission review and approval. Once approved, the Reliability Standards may be enforced by the ERO, subject to Commission oversight, or by the Commission independently.\(^5\)

5. Reliability Standards that the ERO proposes to the Commission may include Reliability Standards that are proposed to the ERO by a Regional Entity.\(^6\) A Regional Entity is an entity that has been approved by the Commission to enforce Reliability

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\(^5\) 16 U.S.C. 824o(e)(3).

\(^6\) 16 U.S.C. 824o(e)(4).
Standards under delegated authority from the ERO.\(^7\) When the ERO reviews a regional Reliability Standard that would be applicable on an interconnection-wide basis and that has been proposed by a Regional Entity organized on an interconnection-wide basis, the ERO must rebuttably presume that the regional Reliability Standard is just, reasonable, not unduly discriminatory or preferential, and in the public interest.\(^8\) In turn, the Commission must give “due weight” to the technical expertise of the ERO and of a Regional Entity organized on an interconnection-wide basis.\(^9\)

6. In Order No. 672, the Commission urged uniformity of Reliability Standards, but recognized a potential need for regional differences.\(^{10}\) Accordingly, the Commission stated that:

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

\(^7\) 16 U.S.C. 824o(a)(7) and (e)(4).

\(^8\) 18 CFR § 39.5 (2009).


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.  

B. Western Electricity Coordinating Council

7. On April 19, 2007, the Commission accepted delegation agreements between NERC and each of eight Regional Entities. In its order, the Commission accepted WECC as a Regional Entity organized on an Interconnection-wide basis. As a Regional Entity, WECC oversees transmission system reliability in the Western Interconnection. The WECC region encompasses nearly 1.8 million square miles, including 14 western U.S. states, the Canadian provinces of Alberta and British Columbia, and the northern portion of Baja California in Mexico.

8. In June 2007, the Commission approved eight regional Reliability Standards for WECC including the currently effective regional Reliability Standard for operating reserves, WECC-BAL-STD-002-0. The Commission found that the current regional Reliability Standard was more stringent than the corresponding NERC Reliability Standard, BAL-002-0, since WECC required a more stringent minimum reserve requirement than the continent-wide requirement. Moreover, the Commission found

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11 Id., P 291.


14 Id.
that WECC’s requirement to restore contingency reserves within 60 minutes was more stringent than the 90 minute restoration period as set forth in NERC’s BAL-002-0.¹⁵

9. The Commission directed WECC to develop certain minor modifications to WECC-BAL-STD-002-0, as identified by NERC in its filing letter for the current standard.¹⁶ For example, the Commission determined that: (1) regional definitions should conform to definitions set forth in the NERC Glossary of Terms Used in Reliability Standards (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 Standard. 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. The Commission also directed WECC to address stakeholder concerns regarding ambiguities in the terms “load responsibility” and “firm transaction.”¹⁷

II. WECC Regional Reliability Standard BAL-002-WECC-1

10. On March 25, 2009, NERC submitted a petition (NERC Petition) to the Commission seeking approval of BAL-002-WECC-1¹⁸ and requesting the concurrent

¹⁵ Id.

¹⁶ Id. P 55.

¹⁷ Id. P 56.

¹⁸ See 18 CFR § 39.5(a) (requiring the ERO to submit regional Reliability Standards on behalf of a Regional Entity).
retirement of BAL-STD-002-0. In that March petition, NERC states that the proposed regional Reliability Standard was approved by the NERC Board of Trustees at its October 29, 2008 meeting. NERC also requests an effective date for the proposed regional Reliability Standard of 90 calendar days after receipt of applicable regulatory approval.

11. The proposed regional Reliability Standard contains three main provisions. Requirement R1 provides that each reserve sharing group or balancing authority must maintain a minimum contingency reserve that is the greater of (1) an amount of reserve equal to the loss of the most severe single contingency; or (2) an amount of reserve equal to the sum of three percent of the load and three percent of net generation. Requirement R2 states that each reserve sharing group or balancing authority must maintain at least half of the contingency reserve as spinning reserve. Requirement R3 identifies acceptable types of reserve to satisfy Requirement R1:

R3.1. Spinning Reserve;
R3.2. Interruptible Load;
R3.3. Interchange Transactions designated by the source Balancing Authority as non-spinning contingency reserve;

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19 The proposed regional Reliability Standard is not attached to the NOPR. It is, however, available on the Commission’s eLibrary document retrieval system in Docket No. RM09-15-000 and is on the ERO’s web site, available at: http://www.nerc.com.

20 A “reserve sharing group” is a group whose members consist of two or more balancing authorities that collectively maintain, allocate, and supply operating reserves required for each balancing authority’s use in recovering from contingencies within the group. See NERC Glossary, available at: http://www.nerc.com/docs/standards/rs/Glossary_2009April20.pdf.
R3.4. Reserve held by the other entities by agreement that is deliverable on Firm Transmission Service;

R3.5. An amount of off-line generation which can be synchronized and generating; or

R.3.6. Load, other than Interruptible Load, once the Reliability Coordinator has declared a capacity or energy emergency.

In addition, Measure M1 provides that a reserve sharing group or balancing authority must have documentation that it maintained 100 percent of required contingency reserve levels “except within the first 105 minutes (15 minute Disturbance Recovery Period, plus 90 minute Contingency Reserve Restoration Period) following an event requiring the activation of Contingency Reserves.”

III. Discussion

12. As discussed below, proposed regional Reliability Standard BAL-002-WECC-1 does not appear to satisfy the statutory criteria for approval. The Commission therefore proposes to remand BAL-002-WECC-1 to the Regional Entity with instructions for development of suitable modifications. The Commission also discusses additional concerns with the proposed regional Reliability Standard, and proposes that the Regional Entity address these concerns on remand.

A. Calculation of Minimum Contingency Reserves

13. NERC’s Disturbance Control Standard, continent-wide Reliability Standard BAL-002-0, requires each balancing authority or reserve sharing group, at a minimum, to maintain at least enough contingency reserve to cover the most severe single contingency. Similarly, requirement WR1(a)(ii) of WECC’s current WECC-BAL-STD-002-0 requires balancing authorities to maintain a contingency reserve of spinning and
nonspinning reserves (at least half of which must be spinning), sufficient to meet the NERC Disturbance Control Standard, BAL-002-0, equal to 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. In approving the regional BAL-STD-002-0 Reliability Standard, the Commission noted that the regional Reliability Standard is more stringent than the NERC Reliability Standard, BAL-002-0, because WECC requires a more stringent minimum reserve requirement than the continent-wide requirement.

**WECC and NERC Proposal**

14. As proposed, Requirement R1 of BAL-002-WECC-1 would require each reserve sharing group or balancing authority that is not a member of a reserve sharing group to maintain a minimum contingency reserve. NERC contends that the proposed minimum contingency reserve amount is more stringent than that required by the continent-wide Reliability Standard.²¹ NERC explains that, whereas Requirement R3.1 of BAL-002-0 requires that each balancing authority or reserve sharing group carry, at a minimum, at least enough contingency reserve to cover the most severe single contingency, proposed Requirement R1.1 of BAL-002-WECC-1 requires that each balancing authority or reserve sharing group maintain, as a minimum, contingency reserves equal to the loss of

²¹ NERC Petition at 9.
the most severe single contingency or an amount of reserve equal to the sum of three percent of the load (generation minus station service minus net actual interchange) and three percent of net generation (generation minus station service).  

15. NERC states that the proposed requirements for minimum contingency reserves provide a comparable level of contingency reserves to those contained in the currently approved regional Reliability Standard. NERC explains that, based on operational experience, the requirements have been revised to remove what it considers to be ambiguous terms, such as “load responsibility,” and separate market transactions from the determination of required reserves that exist using the methodology in the current Reliability Standard. In support of the revised minimum contingency reserve calculations, NERC states that, based on technical studies covering a total eight hours from the four operating seasons (summer, fall, winter and spring, both on and off-peak), the drafting team determined that the sum of 3 percent of load and 3 percent of net generation level was appropriate to approximate the same level of contingency reserves as the existing approved standard provides throughout the year.

16. NERC contends, however, that, due to ambiguities that exist using the current methodology, historical information necessary to calculate the required contingency reserve levels under the proposed methodology is not readily available from collected

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22 Id. at 14.

23 Id. at 16.
data. NERC explains that this situation exists because the calculations are based on the term “load responsibility” as it is used in the current regional Reliability Standard and not on load itself. Thus, NERC comments, WECC does not have additional data available in order to compare the contingency reserve levels required under the existing methodology with the prospective reserve levels under the proposed methodology. NERC states that requiring an additional survey of the applicable entities would place an undue burden on those entities to compile and submit the data, and on the drafting team to evaluate and verify the data, considering the amount of time that has passed since the proposed regional Reliability Standard was approved by the WECC Board of Directors.

17. NERC acknowledges that even the data collected illustrates that the proposed methodology for calculating minimum contingency reserves results in a slight reduction in required total reserves in the interconnection for each of the eight hours assessed as compared to the total reserves required under the current methodology.\textsuperscript{24} In fact, the eight hours of data shows an overall decrease in required reserves under the proposed methodology of approximately 350 MWs (from approximately 10,850 MWs to 10,500 MWs) on high load days. NERC argues, however, that, under the currently effective regional Reliability Standard, the potential exists for the total reserves required in the Western Interconnection to be reduced if firm transactions are purchased from balancing

\textsuperscript{24} Id. at 15.
authorities or from reserve sharing groups whose reserve requirements are determined by
the most severe single contingency.\textsuperscript{25}

18. NERC also contends that industry will benefit from the improved clarity in the
proposed regional Reliability Standard.\textsuperscript{26} NERC states that the ambiguity associated
with the term “load responsibility,” as it is used in the current regional Reliability
Standard, results in confusion regarding the location and amount of the reserves being
carried in the interconnection. NERC explains that:

\begin{quote}
[t]he identification of the entities responsible for providing reserves may be
lost as purchases are bundled and remarketed. With regard to the ability to
audit applicable entities for compliance to the existing BAL-STD-002-0
relative to the proposed BAL-002-WECC-1 standard, WECC has been able
to audit the current standard with a reasonable level of consistency;
however, the industry would benefit from greater clarity. The interpretation
of the term “load responsibility,” which is used to determine the amount of
reserves required has been problematic for WECC, particularly because
FERC Order No. 888 expanded the types of commercial products traded in
the electric power industry. The influence of routine commercial
transactions and terms in the existing regional Reliability Standard has
introduced the possibility of varying interpretations for the term “load
responsibility” and a degree of uncertainty as to the responsibility for
reserves, resulting in challenges when evaluating compliance.\textsuperscript{27}
\end{quote}

\textsuperscript{25} Id.

\textsuperscript{26} Id. at 15-16. In its order approving the current regional Reliability Standard, the
Commission directed WECC, in preparing a revised regional Reliability Standard, to
resolve concerns raised by stakeholders that certain terms, including “load
responsibility,” were ambiguous. North American Electric Reliability Corp., 119 FERC
¶ 61,260 at P 56.

\textsuperscript{27} NERC Petition at 16.
19. In addition, NERC states that the existing regional Reliability Standard considers load served by hydro and thermal generation but does not explicitly require contingency reserves for other types of generation such as wind, solar or other renewable resources. NERC concludes that the proposed regional Reliability Standard adds clarity by explicitly requiring reserves for renewable resources.\textsuperscript{28} NERC argues further that even though the use of the proposed method for calculating minimum contingency reserves results in a reduction in total reserves required in the interconnection, such impact is negligible when compared to the uncertainty in the actual amount of reserves being carried in the interconnection under the existing regional Reliability Standard and the potential shortfall in reserves existing as a result of new technologies not currently addressed in the existing regional Reliability Standard.

**NOPR Proposal**

20. The Commission proposes to find that the eight hours of data provided by WECC 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. In the regional Reliability Standard development process, several commenters raised similar concerns about the lack of technical justification for

\textsuperscript{28}NERC Petition at 16.
the proposed method for calculating minimum contingency reserve levels.\textsuperscript{29} The Commission believes that NERC did not adequately respond to these concerns.

21. In its March 2007 petition proposing the currently effective regional Reliability Standard, NERC explained that WECC-BAL-STD-002-0 and the other seven regional Reliability Standards were WECC’s translation of existing WECC criteria that the WECC Operating Committee and Western Interconnection Regional Advisory Body both concluded to be critical to maintaining reliability within the Western Interconnection.\textsuperscript{30} NERC stated that all of these regional Reliability Standards were “well vetted, approved, tested, and proven effective in monitoring and enforcing critical reliability elements in the Western Interconnection”\textsuperscript{31} and were developed in response to the 1996 blackouts. NERC also stated that, in developing WECC-BAL-STD-002-0 and the other seven regional Reliability Standards, the “WECC Operating Committee undertook a comprehensive review of all WECC criteria, policies, and guidelines in an effort to

\textsuperscript{29} See, e.g., NERC, Petition at Exhibit C (Record of Development of Proposed Reliability Standard), Avista, October 30, 2007 Comments at 21; Alberta Electric System Operator, October 30, 2007 Comments at 23; Bonneville Power Administration, October 30, 2007 Comments at 28; Grant County PUD, October 30, 2007 Comments at 16-17; PacifiCorp Commercial and Trading, October 30, 2007 Comments at 33-34; NorthWestern Energy, October 30, 2007 Comments at 36; Northwest Power Pool Reserve Sharing Group, October 30, 2007 Comments at 8; PacifiCorp, October 30, 2007 Comments at 34; Pacific Gas & Electric, January 2, 2008 Comments at 4; Portland General Electric Merchant, October 30, 2007 Comments at 25.

\textsuperscript{30} NERC, March 26, 2007 Petition Proposing Current Regional Reliability Standard, Docket No. RR07-11-000, at 4

\textsuperscript{31} Id.
identify all unique … criteria it believed critical to the reliability of the Western Interconnection” 32 and concluded that these eight regional Reliability Standards were of the “highest priority.” 33 These statements indicate that these eight regional Reliability Standards were necessary to maintain reliability in the Western Interconnection. Our review of the provisions relating to the calculation of minimum contingency reserve requirements in the proposed Reliability Standard indicates that they may be less stringent than the currently-effective regional Reliability Standard, WECC-BAL-STD-002-0, and may also be less stringent than the currently-effective continent-wide Reliability Standard. NERC and WECC have not provided an adequate explanation or supporting studies to resolve these concerns.

22. NERC admits that the eight hours of data illustrates that the proposed methodology for calculating contingency reserves results in a reduction of total reserves required in the Western Interconnection for each of the eight hours assessed when compared with the methodology in the current regional Reliability Standard. Neither NERC nor WECC has provided sufficient evidence that the proposed regional Reliability Standard provides adequate requirements to ensure that entities within WECC will continue to satisfy the continent-wide disturbance control standard and will not cause frequency-related instability, uncontrolled separation or cascading outages. Moreover,

32 Id.

33 Id.
the evidence provided is insufficient to demonstrate that the proposed regional Reliability Standard is more stringent than the corresponding NERC Reliability Standard.

23. Although the proposed Reliability Standard offers some added clarity by eliminating reference to the term “load responsibility” and including renewables in the calculation of contingency reserves, the Commission proposes to find that NERC and WECC have not provided sufficient technical justification to support the proposed revised method for calculating contingency reserves. Thus, we propose to remand BAL-002-WECC-1 so that WECC can develop additional support and make modifications as appropriate for a future proposal, consistent with the above discussion. In preparing its response, NERC could provide a variety of technical justifications. For example, NERC could provide statistically significant data, supported by a sampling representative of all balancing authorities and expected operating conditions (such as each season, peak periods, off-peak periods and reportable disturbances), to cover the range of operating conditions that must be addressed to ensure that the proposed amount of contingency reserve that are on-line and deliverable will exceed the performance under the NERC Reliability Standards, taking into account the specific electrical characteristics and topology of the Western Interconnection. Alternatively, NERC could provide model simulations demonstrating that the proposed amount of contingency reserves are on-line and deliverable for all expected operating conditions and will exceed the performance required under the NERC Reliability Standards, taking into account the specific electrical characteristics and topology of the Western Interconnection.
24. The Commission recognizes that NERC has suggested that confusion exists with regard to the term “load responsibility.” However, the Commission believes that any confusion concerning the term “load responsibility” has been addressed by WECC and therefore does not have a reliability impact. WECC has defined the term “load responsibility”, although not in its regional Reliability Standard.\textsuperscript{34} Under WECC’s definition for "load responsibility", a balancing authority's “load responsibility”, for maintaining adequate contingency reserves, is determined by a balancing authority's firm load (net generation minus net actual interchange); minus loads contractually interruptible within 10 minutes; minus imports where the source balancing authority is responsible for contingency reserves; plus exports where the exporting balancing authority is responsible for contingency reserves. WECC's procedures for load responsibility require that the entities (purchasing selling entity or load serving entity) that are party to the import or export are required to identify the transaction to the balancing authority using the e-tagging prescheduling tool and identify the associated contingency reserves.

\hspace{1cm}\textsuperscript{34} WECC’s interpretation of “Load Responsibility,” which was approved by the WECC Board of Directors September 7, 2007, places the responsibility on the balancing authorities to determine the amount of and assure that adequate contingency reserves are provided. See WECC Interpretation of Load Responsibility (Sept. 7, 2007), available at: http://www.wecc.biz/Standards/Interpretations/Interpretation%20of%20Load%20Responsibility.pdf. Likewise, the current regional Reliability Standard places the responsibility on the balancing authorities to determine the amount of and assure that adequate contingency reserves are provided.
B. **Use of Firm Load to Meet Contingency Reserve Requirement**

25. Requirement R1 of NERC’s continent-wide Reliability Standard BAL-002-0, allows balancing authorities to supply their contingency reserves from generation, controllable load resources, or coordinated adjustments to interchange schedules.\(^{35}\)

Similarly, WECC’s current WECC-BAL-STD-002-0 identifies acceptable types of non-spinning reserve and, among those identified, “interruptible load.”\(^{36}\)

**WECC Proposal**

26. Requirement R3 of BAL-002-WECC-1 requires that each reserve sharing group or balancing authority use certain types of reserves that must be fully deployable within ten minutes of notification to meet their contingency reserve requirement. Requirement R3.2 allows these entities to count “Interruptible Load” as contingency reserves.\(^{37}\) In addition, Requirement R3.6 allows entities to use “Load, other than Interruptible Load, once the Reliability Coordinator has declared a capacity or energy emergency.”\(^{38}\)

27. NERC contends that the changes made by the proposed regional Reliability Standard related to the treatment of firm load have reduced the number of occasions

\(^{35}\) Reliability Standard BAL-002-0, Requirement R1.

\(^{36}\) WECC-BAL-STD-002-0, Requirement WR1(b).

\(^{37}\) BAL-002-WECC-1, Requirement R3.2.

\(^{38}\) BAL-002-WECC-1, Requirement R3.6.
when an entity may use firm load as contingency reserves. NERC explains that, under the proposed regional Reliability Standard, balancing authorities or reserve sharing groups may only use firm load as contingency reserves once the reliability coordinator has declared a capacity or energy emergency. NERC also states that the proposed regional Reliability Standard continues to require that reserves must be deliverable to be included in the minimum calculations of contingency reserves.

**NOPR Proposal**

28. The Commission does not agree with NERC that the proposed regional Reliability Standard reduces the occasions when an entity may use firm load as contingency reserves. The Commission proposes to find that Requirement R3.6 is not technically sound because it permits balancing authorities and reserve sharing groups within WECC to use firm load to meet their minimum contingency reserve requirement “once the Reliability Coordinator has declared a capacity or energy emergency,” thus creating the possibility that firm load could be shed due to the loss of a single element on the system.  

29. Although NERC states in its petition that the proposed regional Reliability Standard “reduce[s] the number of occasions when an entity may use firm load as

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39 NERC Petition at 19.

40 Order No. 672, FERC Stats. & Regs. ¶ 31,204, at P 324 (identifying guidelines for what constitutes a just and reasonable Reliability Standard including the “proposed Reliability Standard must be designed to achieve a specified reliability goal and must contain a technically sound means to achieve this goal”).
contingency reserves,” the currently effective regional Reliability Standard does not allow the use of firm load to meet minimum contingency reserve levels. In fact, the current regional Reliability Standard does not mention “firm load” as an acceptable type of reserve.

30. In the 2007 proceeding in which the Commission approved the currently effective WECC-BAL-STD-002-0, one commenter argued that the definition of “interruptible” is unclear and that firm transactions are potentially curtailable and thus interruptible under a “very narrow interpretation.”\footnote{North American Electric Reliability Corp., 119 FERC ¶ 61,260 at P 50.} The Commission rejected the protest on this issue stating that “the meaning of the term ‘interruptible’ is generally well understood in the industry, i.e., transmission or generation subject to interruption at the provider’s discretion.”\footnote{Id. P 59. The NERC Glossary defines Interruptible Load as interruptible demand or the demand that the end-use customer makes available to its load-serving entity via contract or agreement for curtailment. See NERC Glossary, available at: http://www.nerc.com/docs/standards/rs/Glossary_2009April20.pdf} Thus, if entities within WECC have interpreted the term “interruptible load” to include firm load, this is a mistake.

31. The Commission does not support a regional practice by balancing authorities or reserve sharing groups to count firm load towards their minimum contingency reserve requirements. Neither the corresponding NERC continent-wide Reliability Standard, BAL-002-0, nor the currently effective WECC regional Reliability Standard permit a balancing authority to consider firm load when satisfying minimum contingency reserve

\footnote{Id. P 59. The NERC Glossary defines Interruptible Load as interruptible demand or the demand that the end-use customer makes available to its load-serving entity via contract or agreement for curtailment. See NERC Glossary, available at: http://www.nerc.com/docs/standards/rs/Glossary_2009April20.pdf}
requirements. Accordingly, the Commission proposes to find that the proposed regional Reliability Standard is less stringent than the continent-wide Reliability Standard because it would allow entities to count firm load towards their minimum contingency reserve requirements.

32. Moreover, we are concerned that the provision of the proposed WECC regional Reliability Standard that would allow a balancing authority to include firm load as contingency reserve when an emergency is declared is inappropriate because there are provisions of NERC continent-wide Reliability Standards that specifically address the actions entities must take in emergency situations. The proposed WECC regional Reliability Standard appears to be incongruent with these other provisions. Specifically, the requirements of Reliability Standard EOP-002-2.1 ensure that entities are prepared to handle capacity and energy emergency situations, and include minimum remedies required for mitigating capacity and energy emergencies to meet the Disturbance Control Standard and resolve the emergency conditions. Attachment 1 of EOP-002-2.1, Energy Emergency Alerts, describes three emergency alert levels, in order of severity. A reliability coordinator (either by its own initiative or at the request of a balancing authority or load serving entity) may initiate a level one energy emergency alert if a load-serving entity is, or expects to be, unable to provide customers’ energy requirements or the load-serving entity cannot schedule resources due to, for example, available transfer
capability or transmission loading relief limitations. A level two alert is more severe, addressing situations when an entity can no longer provide its customers’ energy requirements. A level three alert is called when a firm load interruption is imminent or in progress.

33. As mentioned above, Requirement R3.6 of proposed BAL-002-WECC-1, would allow an entity to include firm load to satisfy contingency reserve requirements once the reliability coordinator “has declared a capacity or energy emergency” and applies when any level alert is initiated without qualification. This is of concern to the Commission because, if an entity initiated energy emergency alert level 1, under BAL-002-WECC-1, that entity could count firm load as contingency reserve instead of taking other actions to remedy the situation as set forth in NERC Reliability Standard EOP-002-2.1 (e.g., public appeals, voltage reduction, firm or non-firm imports, emergency assistance from neighboring entities, and demand-side management). This practice is not allowed under the corresponding continent-wide Reliability Standard, BAL-002-0. Since the proposed regional Reliability Standard includes requirements that are less stringent than BAL-002-0, the Commission proposes to remand BAL-002-WECC-1 and direct WECC to modify the regional Reliability Standard to ensure consistency with the continent-wide Reliability Standards.

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43 An energy emergency level 1 can be declared either if an entity foresees or is experiencing in real-time, conditions where all available resources are committed to firm load, firm transactions, and reserve commitments are being met, but the entity is concerned about sustaining its required operating reserve. Reliability Standard EOP-002-2.1, Attachment 1.
C. **Contingency Reserve Restoration Period**

34. NERC Reliability Standard BAL-002-0 provides that a balancing authority or reserve sharing group responding to a disturbance must fully restore its contingency reserves within 90 minutes following the disturbance recovery period, which is set at 15 minutes.\(^{44}\) Thus, under BAL-002-0, if there is a disturbance, a balancing authority or reserve sharing group has 105 minutes to fully restore its contingency reserves. The current WECC regional BAL Reliability Standard requires reserve sharing groups and balancing authorities to maintain 100 percent of required operating reserve levels except within the first 60 minutes following an event requiring the activation of operating reserves.\(^{45}\) Thus, currently, applicable entities in WECC have 60 minutes to restore their operating reserves to 100 percent. In the March 2007 petition asking the Commission to approve the currently effective WECC-BAL-STD-002-0, NERC explained that the increased stringency was meant to address concerns arising out of the 1996 blackouts in California and that, according to WECC, the regional requirements were critical to the reliability of the Western Interconnection.\(^{46}\)

\(^{44}\) Reliability Standard BAL-002-0, Requirements R4 and R6.

\(^{45}\) WECC regional Reliability Standard WECC-BAL-STD-002-0, Measure of Compliance WM1.

\(^{46}\) NERC, March 26, 2007 Petition Proposing Current Regional Reliability Standard, Docket No. RR07-11-000, at 5.
35. In approving WECC-BAL-STD-002-0, the Commission found that WECC’s requirement to restore contingency reserves within 60 minutes was more stringent than the 90 minute restoration period set forth in NERC’s BAL-002-0.\textsuperscript{47}

**WECC Proposal**

36. WECC proposes to replace the current 60 minute restoration period requirement with a new provision that would require the restoration of contingency reserves within 90 minutes from the end of the disturbance recovery period (15 minutes). NERC states that the 60 minute restoration period required by the current regional Reliability Standard was developed and used under a manual interchange transaction structure among vertically integrated utilities. NERC states that, due to a substantial increase in the number of market participants and interchange transactions in the Western Interconnection, entities within the Western Interconnection have implemented an electronic tagging system (e-tagging). NERC states that the adoption of the e-tagging system accommodates multiple market participants and the corresponding increased number of interchange transactions makes the current mid-hour reserve restoration period more cumbersome and makes the inappropriate rejection of reserve restoration transactions more likely because such transactions are outside the e-tagging cycle. Thus, NERC contends that eliminating the 60 minute reserve restoration requirement and adopting the proposed new requirements, which provide the same reserve restoration

\footnote{\textit{North American Electric Reliability Corp.}, 119 FERC ¶ 61,260 at P 53.}
period as NERC’s BAL-002-0, results in more efficient communication among balancing authorities because it aligns the restoration of contingency reserves with the e-tagging system approval cycle.

**NOPR Proposal**

37. The Commission proposes to remand the regional Reliability Standard BAL-002-WECC-1 based on the lack of any technical justification or analysis of the potential increased risk to the Western Interconnection resulting from the increase in the contingency reserve restoration period. Without sufficient data, the Commission is unable to determine whether the increase in contingency reserve restoration period is sufficient to maintain the reliable operation of the Bulk-Power System in the Western Interconnection. A requirement to restore contingency reserves following a disturbance improves reliability by ensuring an entity will be in position to respond to the next disturbance, thus preventing adverse reliability impacts. When a contingency has occurred and operating reserves, generation or interruptible load, have been deployed, the system typically has insufficient reserves to respond to another contingency until such reserves are replenished. During this time, the system is in a vulnerable position, an emergency state, in which the next contingency could lead to cascading outages. Exposure in such a state should be limited to the extent possible. The Commission notes that in the Western Interconnection a significant number of transmission paths are voltage or frequency stability limited, in contrast to other regions of the Bulk-Power System where transmission paths more often are thermally limited. Disturbances that result in a
“stability limited” transmission path overload, generally, must be responded to in a shorter time frame than a disturbance that results in a “thermally limited” transmission path overload. The Commission understands that this physical difference is one of the reasons for the need for certain provisions of regional Reliability Standards in the Western Interconnection.

38. Proposed BAL-002-WECC-1 does not include a requirement that an entity restore either contingency reserves or operating reserves. Instead, proposed compliance measure M1 provides that an entity should have documentation to prove it maintained the required contingency reserve level except during the 105 minutes following a disturbance, which represents a 45 minute increase over the current requirement. As an initial matter, a Reliability Standard should set forth substantive compliance obligations in the “Requirements” section of the Reliability Standard, and not in the “Compliance Measures” section. Moreover, we believe that there is no need for a provision of regional Reliability Standard that simply restates the requirement of a corresponding continent-wide Reliability Standard. This is unnecessary, duplicative, and potentially confusing if the regional Reliability Standard is intended to create the same obligation as the continent-wide Reliability Standard. Instead, the regional Reliability Standard should remain silent with regard to any such requirements, and possibly cross-reference the corresponding continent-wide Reliability Standard as appropriate.

39. The only justification offered by NERC for the extension of the reserve restoration period to match the continent-wide Reliability Standard is the adoption of the e-tagging
system by entities in the Western Interconnection. The e-tagging system is an efficient tool used for day-ahead and hour-ahead market accounting and as input for day-ahead and hour-ahead transfer capability analysis of scheduled interchange transactions and development of day-ahead and hour-ahead capacity and energy resource schedules. Proposing to adapt reliability requirements to resolve problems extending from software to the extent it is intended to better enable economic transactions is not a technical justification since it does not address any change in the need for the reliability requirement. Extending the contingency reserve restoration period from 60 minutes to 105 minutes increases exposure to unstable operating conditions. Although adoption of the e-tagging system may result in more efficient communication among transmission operators and balancing authorities for day-ahead and hour-ahead scheduling, this fact alone does not appear sufficient to justify the extension of the reserve restoration period.

40. Although NERC BAL-002-0 provides for a 90 minute contingency restoration period, WECC explained in 2007 that it needed a shortened contingency restoration period to ensure the reliability of the Bulk-Power System in the Western Interconnection. In its March 2007 petition for approval of the currently effective WECC regional Reliability Standard, NERC presented arguments from WECC that its experience in the 1996 blackouts led to an analysis of essential criteria to ensure the reliability of the Bulk-Power System in the Western Interconnection and, as a result, WECC developed more
stringent requirements as it relates to this issue for the region.\footnote{48 NERC, March 26, 2007 Petition Proposing Current Regional Reliability Standard, Docket No. RR07-11-000, at 4-5.} The proposal in the immediate proceeding, however, offers marketing or administrative reasons for increasing the contingency reserve restoration period. NERC does not provide a technical justification regarding how this proposed modification adequately ensures the reliability of the Bulk-Power System in the Western Interconnection. We encourage Regional Entities periodically to reevaluate their need for regional Reliability Standards. However, when a Regional Entity proposes to modify a regional Reliability Standard it previously claimed was necessary to maintain reliability in that region by adopting less stringent requirements, the Regional Entity must demonstrate that the modified requirements are sufficient to maintain reliability in the region.

41. It appears to the Commission that the proposed modification set forth in Measure M1 may weaken the reliability of the Bulk-Power System in the Western Interconnection. Accordingly, the Commission proposes to remand BAL-002-WECC-1 and to direct WECC to either: (1) retain the current 60 minute rule; or (2) provide technical justification and supporting data demonstrating how WECC will maintain adequate reliability with the proposed 105 minute reserve restoration period. The regional entity could provide a variety of technical justifications to support this modification. For example, WECC could perform a statistically significant analysis of the level of risk associated with the conditions using the 60 minute reserve restoration period as compared
to the projected level of risk associated with the proposed 90 minute restoration period. The analysis must demonstrate that the proposed revisions do not expose entities within the Western Interconnection to a level of risk that is greater than the level of risk accepted by entities operating under the requirements of the continent-wide NERC Reliability Standard, taking into account the specific electrical characteristics and topology of the Western Interconnection. Alternatively, WECC could perform model simulations, representative of all operating conditions, showing how the system would deploy contingency reserves after a first contingency (n-1) and, prior to restoration of the reserves, apply a second contingency (n-1-1) to determine if the system will stabilize.

Based on comments made by the Reliability Standards drafting team, submitted as part of the development record in Exhibit C to the NERC petition, the Commission believes that NERC should be able to provide this information without any undue burden.49

D. Including Demand-Side Management as a Resource

42. In Order No. 693, the Commission directed the ERO to submit a modification to continent-wide Reliability Standard BAL-002-0 that includes a Requirement that explicitly allows that demand-side management be used as a resource for contingency reserves, and clarifies that demand-side management should be treated on a comparable basis and must meet similar technical requirements as other resources providing this

49 NERC Petition, Exhibit C at p. 24 (stating that “the WECC Performance Work Group performed studies in 2005 that show little if any increase in risk to the system by changing the restoration period to the NERC time”). The referenced studies, however, are not part of the record in this proceeding.
The Commission directed the ERO to list the types of resources that can be used to meet contingency reserves to provide users, owners and operators of the Bulk-Power System a set of options to meet contingency reserves. The Commission clarified that the purpose of this directive was 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 reserves on this basis without requiring the use of any particular contingency reserve option. The Commission further clarified that in order for demand-side management to participate, it must be technically capable of providing contingency reserve service, with the ERO determining the technical requirements.

1. **BAL-002-WECC-1**

**WECC Proposal**

The proposed regional Reliability Standard does not explicitly address the use of demand-side management as a resource for contingency reserves. NERC states that it raised this concern with WECC, and WECC responded that the drafting team wrote the

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51 Id. P 331, 335.

52 Id. P 333.

53 Id. P 334.
regional Reliability Standard “to permit load, Demand-Side Management, generation, or another resource technology that qualifies as Spinning Reserve or Contingency Reserve to be used as such.” WECC further explained that demand-side management that is deployable within ten minutes is a subset of interruptible load, which is an acceptable type of reserve set forth in proposed Requirement R3.2.\textsuperscript{54}

**NOPR Proposal**

44. While WECC indicates that the phrase “interruptible load” is intended to include demand-side management as contingency reserve, we believe that the regional Reliability Standard should state this explicitly, consistent with Order No. 693. Accordingly, pursuant to section 215(d)(5) of the FPA, we propose to direct WECC to develop a modification to BAL-002-WECC-1 that explicitly provides that demand-side management, that is technically capable of providing this service, may be used as a resource for contingency reserves. Consistent with the Commission’s directive in Order No. 693, the modification should list the types of resources, including demand-side management, which can be used to meet contingency reserves. The modification should also ensure comparable treatment of demand-side management with conventional generation or any other technology and allow demand-side management to be considered as a resource for contingency reserves on this basis without requiring the use of any particular contingency reserve option.

\textsuperscript{54} NERC Petition at 40.
45. In addition, there appears to be a conflict related to the definition of Spinning Reserve as it is used in the proposed regional Reliability Standard. Requirement R3.1 provides that Spinning Reserves may be used to meet the minimum contingency reserve requirement. The NERC Glossary defines Spinning Reserves as “[u]nloaded generation that is synchronized and ready to serve additional demand.” This definition omits the use of demand-side management or other technologies that could be used as a resource because it limits acceptable Spinning Reserve resources to generation resources. An alternative definition of spinning reserves exists in the NERC Glossary as Operating Reserve – Spinning, which includes as part of the definition of Operating Reserve, “load fully removable from the system within the Disturbance Recovery Period following the contingency event.” Thus, this second definition would capture the use of demand-side management as a resource in the calculation of spinning reserve because it allows entities to include reductions in load as spinning reserve resources. Furthermore, the definition of Operating Reserve-Spinning is consistent with our instruction on the continent-wide Reliability Standard as discussed in Order No. 693.55 Accordingly, we propose to direct the Regional Entity to develop a modification to the regional Reliability Standard that

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55 Order No. 693, FERC Stats. & Regs. ¶ 31,242 at P 333 (indicating that NERC’s continent-wide Reliability Standard should provide for the inclusion of other technologies that may be able to provide contingency reserves, including demand-side management). The Commission understands that NERC is currently developing modifications to BAL-002-0 that will, inter alia, address relevant directives set forth in Order No. 693.
references this broader definition of spinning reserve to include demand-side management.

2. **NERC Glossary**

46. As discussed above, the NERC Glossary offers two definitions of spinning reserve: Spinning Reserve and Operating Reserve-Spinning. The definition of Spinning Reserve does not include demand-side management as a resource, whereas the definition of Operating Reserve-Spinning does. Considering that the term Spinning Reserve is not used in any approved Reliability Standard other than the current regional Reliability Standard, WECC-BAL-STD-002-0, the Commission proposes to direct NERC to remove this term from the NERC Glossary upon retirement of the current regional Reliability Standard.

47. Although the definitions of Operating Reserve-Spinning and Operating Reserve-Supplemental both include “[l]oad fully removable from the system within the Disturbance Recovery Period following the contingency event,” which is broad enough to include demand-side management, demand-side management should still be explicitly included. Consistent with Order No. 693, the proposed directive to remove the term Spinning Reserve from the NERC Glossary would promote 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 operating reserves on this basis without requiring the use of any particular operating reserve option.\(^{56}\)

\(^{56}\) See id.
Moreover, in order for demand-side management or any other technology to be used as a spinning reserve resource, it must be technically capable of providing operating reserve service.\textsuperscript{57} Accordingly, the Commission proposes to direct the ERO to develop modifications to the definitions of Operating Reserve-Spinning and Operating Reserve-Supplemental to provide for the inclusion of other technologies that could reliably contribute to operating reserves, including demand-side management.\textsuperscript{58}

IV. \textbf{Information Collection Statement}

48. The Office of Management and Budget (OMB) regulations require that OMB approve certain reporting and recordkeeping (collections of information) imposed by an agency.\textsuperscript{59} The information contained here is also subject to review under section 3507(d) of the Paperwork Reduction Act of 1995.\textsuperscript{60} By remanding the proposed Reliability Standard the Commission is maintaining the status quo until future revisions to the Reliability Standard are approved by the Commission. Thus, the Commission’s proposed action does not add to or increase entities’ reporting burden.

\textsuperscript{57} See id. P 334.

\textsuperscript{58} The Commission recognizes that there may be regional limitations on the amount of demand-side management, or other technically capable resources, that can be reliably employed. Any modifications proposed to the Commission must allow regional discretion to make this determination based on the technical issues inherent to those regions.

\textsuperscript{59} 5 CFR 1320.11.

\textsuperscript{60} 44 U.S.C. 3507(d).
V. **Environmental Analysis**

49. 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.\(^{61}\) The Commission has categorically excluded certain actions from this requirement as not having a significant effect on the human environment. 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.\(^{62}\) The actions proposed herein fall within this categorical exclusion in the Commission’s regulations.

VI. **Regulatory Flexibility Act Certification**

50. The Regulatory Flexibility Act of 1980 (RFA)\(^{63}\) generally requires a description and analysis of final rules that will have significant economic impact on a substantial number of small entities. The RFA mandates consideration of regulatory alternatives that accomplish the stated objectives of a proposed rule and that minimize any significant economic impact on a substantial number of small entities. The Small Business Administration’s Office of Size Standards develops the numerical definition of a small entity.


business. For electric utilities, a firm is small if, including affiliates, it is primarily engaged in the transmission, generation and/or distribution of electric energy for sale and its total electric output for the preceding twelve months did not exceed four million megawatt hours. The RFA is not implicated by this proposed rule because by remanding the proposed Reliability Standard the Commission is maintaining the status quo until future revisions to the Reliability Standard are approved by the Commission.

VII. Comment Procedures

51. The Commission invites interested persons to submit comments on the matters and issues proposed in this notice to be adopted, including any related matters or alternative proposals that commenters may wish to discuss. Comments are due [insert date that is 60 days from publication in the FEDERAL REGISTER]. Comments must refer to Docket No. RM09-15-000, and must include the commenter's name, the organization they represent, if applicable, and their address in their comments.

52. The Commission encourages comments to be filed electronically via the eFiling link on the Commission's web site at http://www.ferc.gov. The Commission accepts most standard word processing formats. Documents created electronically using word processing software should be filed in native applications or print-to-PDF format and not in a scanned format. Commenters filing electronically do not need to make a paper filing.

64 See 13 CFR 121.201.
53. Commenters that are not able to file comments electronically must send an original and 14 copies of their comments to: Federal Energy Regulatory Commission, Office of the Secretary, 888 First Street, NE, Washington, DC 20426.

54. All comments will be placed in the Commission's public files and may be viewed, printed, or downloaded remotely as described in the Document Availability section below. Commenters on this proposal are not required to serve copies of their comments on other commenters.

VIII. Document Availability

55. 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 FERC's Home Page (http://www.ferc.gov) and in FERC'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.

56. From FERC'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.

57. User assistance is available for eLibrary and the FERC’s website during normal business hours from FERC Online Support at 202-502-6652 (toll free at 1-866-208-3676)
or email at ferconlinesupport@ferc.gov, or the Public Reference Room at (202) 502-8371, TTY (202)502-8659. E-mail the Public Reference Room at public.referenceroom@ferc.gov.

By direction of the Commission.

Nathaniel J. Davis, Sr.,
Deputy Secretary.