UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Regional Reliability Standard BAL-002-WECC-2 – Contingency Reserve	**Docket No. RM13-13-000**

Comments of the California Independent System Operator Corporation

I. Introduction

The California Independent System Operator Corporation (ISO) submits these comments in response to the Commission's notice of proposed rulemaking to approve regional Reliability Standard BAL-002-WECC-2 (Contingency Reserve).[1] The ISO requests that the Commission clarify that the proposed standard permits non-traditional resources, such as electric storage facilities, to provide operating reserve – spinning if the resources satisfy applicable technical and performance requirements set forth in the proposed standard. This clarification is consistent with both the ISO's tariff and prior Commission orders, and is important to the development of electric storage facilities in the Western Interconnection. The ISO submitted similar comments to the Western Electricity Coordinating Council (WECC) standards drafting team during the drafting process for BAL-002-WECC-2. Although the ISO's dialog with the WECC standards drafting team was constructive, it appears that the clarification needs to come from the Commission because it involves interpretation of a Commission-approved definition in the North American Electric Reliability Corporation's glossary of terms used in reliability standards. The Commission should clarify this issue in order to ensure that all resources that meet

[1] *Regional Reliability Standard BAL-002-WECC-2 – Contingency Reserve*, 144 FERC ¶ 61,048, Docket RM13-13 (July 2013).

the technical and performance requirements of the proposed standard can compete on an even footing to provide operating reserve – spinning, and to eliminate any compliance risk associated with such equal treatment.

II. Background

On July 18, 2013, the Commission adopted a notice of proposed rulemaking to approve regional Reliability Standard BAL-002-WECC-2. If approved, the standard will specify the quantity and types of contingency reserves that balancing authorities and reserve sharing groups in the Western Interconnection must secure to ensure reliability under normal and abnormal grid conditions. If approved, the standard will also replace the currently-effective regional Reliability Standard BAL-STD-002-0 (Operating Reserves) that applies to balancing authorities and reserve sharing groups in the Western Interconnection, including the ISO.

The requirements of Reliability Standard BAL-002-WECC-2 provide, in part, that balancing authorities and reserve sharing groups must maintain a minimum amount of contingency reserve, except within the first sixty minutes following an event requiring the activation of contingency reserve.[2] The proposed standard also states that contingency reserve can be comprised of any combination of specified reserve types, including "a resource, other than generation or load, that can provide energy or reduce energy consumption."[3] Requirement 2 of the proposed standard, however, also would require each balancing authority and each reserve sharing group to maintain at least half of its minimum amount of required contingency

[2] *See* Exhibit B to the Joint Petition of the North American electric Reliability Corporation and Western Electricity Coordinating Council for Approval of WECC Regional Reliability Standard BAL-002-WECC-2 — Contingency Reserve dates April 12, 2013, Commission Docket RM 13-13, Requirement R1.1.

[3] *Id.*, Requirement R1.2.

reserve as “operating reserve – spinning” that meets both of the following technical requirements: (1) immediately and automatically responsive to frequency deviations through the action of a governor or other control system; (2) capable of fully responding within ten minutes.[4]

As discussed below, the term “operating reserve – spinning” is defined in NERC’s glossary in a manner that refers to “generation” or “load fully removable from the system.” This definition raises some ambiguity as to whether a non-traditional resource such as electric storage – which has properties of *both* generation and load depending on the circumstance – is permitted to provide operating reserve - spinning if it can meeting the two substantive requirements identified in the proposed standard.

Over the last several years, the ISO has with the Commission’s approval taken steps to reduce market barriers and introduce market enhancements in order to facilitate the participation of non-traditional resources, including electric storage facilities, in its energy and ancillary services markets. Among other actions, these steps include:

- Reducing the minimum size of a resource and its continuous energy requirements in order for the resource to provide ancillary services;[5]
- Developing regulation energy management functionality to allow resources with MWh constraints to bid their capacity to provide regulation more effectively;[6]

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4 *Id*., Requirement R2.

5 *Cal. Indep. Sys. Operator Corp.*, 132 FERC ¶ 61,211 (2010).

6 *Cal. Indep. Sys. Operator Corp.*, 137 FERC ¶ 61,165 (2011).

- Implementing a market model that recognizes the ability of non-traditional resources to operate as either generation or load and that can be dispatched to any operating level within their entire capacity range;[7] and
- Implementing a performance payment that reflects the accuracy with which a resource responds to control signal in connection with providing regulation up and regulation down.[8]

In light of these enhancements, the ISO anticipates that the number of electric storage resources seeking to participate in its markets will increase over the next several years.[9] It is important that these resources have an opportunity to participate in the ISO's energy and ancillary services markets on an equal footing with other resources.

III. The Commission should clarify that a non-traditional resource such as electric storage may provide operating reserve – spinning under regional Reliability Standard BAL-002-WECC-2 so long as the resource meets the substantive requirements of the standard

The ISO supports approval of the proposed Reliability Standard BAL-002-WECC-2. As written, however, the proposed standard could create an ambiguity with respect to whether electric storage facilities may provide operating reserve - spinning. Specifically, this ambiguity arises from whether electric storage fits within the categories of generation or load within the meaning of the definition for "operating reserve – spinning" contained in NERC's glossary of terms. The glossary of terms defines operating reserve – spinning to mean:

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7 *Id.*

8 *Cal. Indep. Sys. Operator Corp.*, 140 FERC ¶ 61,206 (2012).

9 *See e.g.,* Proposed Decision of Commissioner Peterman in California Public Utilities Commission Rulemaking 10-12-007, which, if adopted, would establish a procurement target of 1,325 MW of energy storage to be procured by California's large investor owned utilities by 2020. http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M076/K387/76387254.PDF

> The portion of Operating Reserve consisting of:
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> 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
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> load fully removable from the system within the Disturbance Recovery Period following the contingency event.[10]

The glossary does not, however, provide definitions for the terms *generation*, *load* or *synchronized*.

The Commission should clarify that non-traditional resources, including electric storage facilities, may qualify to provide operating reserve – spinning so long as they meet the technical and performance requirements established in Requirement 2 of the proposed standard, which provides that the resource must be (1) immediately and automatically responsive to frequency deviations through the action of a control system; and (2) capable of fully responding within ten minutes.

Non-traditional resources like electric storage can operate as both generation and load. For this reason, the ISO's tariff defines non-generator resources, which is the term the ISO uses for non-traditional resources such as electric storage, to mean "resources that operate as either generation or load and that can be dispatched to any operating level within their entire capacity range . . . ."[11] Under this tariff definition, the ISO considers electric storage facilities generation or load depending on the resource's operating configuration.[12] In addition, the ISO's tariff provisions

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[10] Glossary of Terms Used in NERC Reliability Standards at 46. http://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary_of_Terms.pdf

[11] Appendix A to ISO tariff, Master Definition Supplement.

[12] The Commission has approved this tariff definition and has in other instances recognized that electric storage can serve as generation or load. *See e.g. Western Grid Development, LLC* 130 FERC ¶ 61,056 (2010) at P 44 stating "electricity storage devices, . . . , do not readily fit into only one of the traditional asset functions of generation, transmission or distribution. Under certain circumstances, storage devices can resemble any of these functions or even load."

allow non-generator resources to provide spinning reserve if they respond immediately and automatically in proportion to frequency deviations through the action of a control system.[13] These requirements, which are consistent with the technical and performance requirements that the proposed standard establishes in Requirement 2, ensure that the resource is effectively "synchronized" to the electricity grid. So long as an electric storage resource has unloaded capacity that it can make available to the ISO, the resource should be able to offer that capacity as operating reserve – spinning like any other resource that meets applicable technical requirements and has unloaded capacity to provide.[14]

This approach is also consistent with prior Commission orders, including Order 784[15], Order 755[16] and Order 890[17], that recognize non-traditional resources may provide ancillary services if the resources are technically capable of providing the service. By providing the requested clarification, the Commission will create regulatory certainty that electric storage resources stand on equal footing with other resources to offer their capacity as contingency reserves to balancing authorities or

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[13] Appendix K to ISO tariff, Part B1.2

[14] In the ISO's markets, operating reserve – spinning would equate with contingency-only spinning reserve. *See* ISO tariff sections 8.2.3.2 and 30.5.2.6.2 .

[15] Final Rule in RM11-024, *Third-Party Provision of Ancillary Services; Accounting and Financial Reporting for New Electric Storage Technologies*, 144 FERC ¶ 61,056 (2013) (Order 784) at P 119 and Schedule 3 thereto clarifying that non-generator resource may provide regulation and frequency response service. The ISO allows regulation up to substitute for spinning reserves when it is economic to do so. *See* ISO tariff section 8.2.3.5.

[16] Final Rule in RM11-7 *et al., Frequency Regulation Compensation in the Organized Wholesale Power Markets,* 137 FERC ¶ 61,064 (2012) (Order 755) at P 5 recognizing that emerging technologies such as energy storage and demand may be capable of providing regulation.

[17] Final Rule in RM05-17-000, Preventing Undue Discrimination and Preference in Transmission Service (2007) (Order 890) at P 888, modifying Schedules 2, 3, 4, 5, 6, and 9 of the pro forma OATT to reflect that "Reactive Supply and Voltage Control, Regulation and Frequency Response, Energy Imbalance, Spinning Reserves, Supplemental Reserves and Generator Imbalance Services, respectively, may be provided by generating units as well as other nongeneration resources such as demand resources where appropriate."

reserve sharing groups in the Western Interconnection. The Commission should, accordingly, clarify in any final rule that electric storage facilities are resources capable of providing operating reserve - spinning.

Importantly, the ISO believes the Commission can make this clarification as part of its approval of the standard. The clarification is consistent with the requirements of BAL-002-WECC-2 that permit balancing authorities and reserve sharing groups to secure contingency reserves from a number of sources. Although BAL-002-WECC-2 also provides that 50 percent to the minimum required contingency reserve meet the technical requirement of operating reserve - spinning (i.e. immediately and automatically responsive to frequency deviations through the action of a control system and capable of fully responding within ten minutes), the requirements do not preclude any permissible sources of contingency reserve from providing operating reserve – spinning, so long as they meet applicable technical requirements. Imposing this clarification, moreover, would not require any modification to the definition of operating reserve – spinning in NERC's glossary because, as noted, the terms generation, load, and synchronized that are used in defining this term are not themselves defined and are sufficiently general to support the interpretation that non-traditional resources like electric storage qualify to provide the operating reserve - spinning. The clarification would, however, remove any potential compliance concerns associated with this interpretation and thus would remove a potential barrier to the ability of electric storage resources to compete on equal footing.[18]

[18] If the Commission were to conclude that the definition in the glossary of terms is not sufficiently broad to support this interpretation, the ISO requests that the Commission approve the standard as written but direct NERC to promptly revise its definition of "operating reserve – spinning" to unequivocally encompass non-traditional resources such as electric storage. The ISO does not propose this option in the first instance, however, because it does not appear to be necessary and

IV. Conclusion

The Commission should clarify that the proposed regional Reliability Standard BAL-002-WECC-2 (Contingency Reserve) permits non-traditional resources, including electric storage facilities, to provide operating reserve – spinning if the resources satisfy applicable technical requirements. This clarification is consistent with both the ISO's tariff and prior Commission orders, and is important to the development of electric storage facilities in the Western Interconnection.

Dated: September 23, 2013

Respectfully submitted,

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could potentially delay the ability of non-traditional resources such as electric storage to participate in the market for this service.

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon the parties listed on the official service lists in the above-referenced proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 23rd day of September 2013.

/s/ Anna Pascuzzo

Anna Pascuzzo