

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**Frequency Regulation Compensation            )     Docket No. AD10-11-000  
in the Organized Wholesale Power            )  
Markets Technical Conference                )**

**COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM  
OPERATOR CORPORATION**

The California Independent System Operator Corporation (the ISO) appreciates the opportunity to provide written comments following the Frequency Regulation Compensation in the Organized Wholesale Power Markets Technical Conference held May 26, 2010.<sup>1</sup> As the ISO has previously stated, in the context of the significantly evolving state and federal policy landscape, the ISO continues to evaluate the impacts the integration of variable energy resources will have on its operations and markets and to explore effective ways to accommodate increasing amounts of variable energy resources.<sup>2</sup> The ISO continues to recommend that the Commission not make any material changes to its policies because of the numerous important initiatives in progress, in California and elsewhere, that will yield much greater insight than we have today into the policy and operational issues raised by the expansion of variable energy resources capacity and the alternative ways to address them. Given the facts that certain pending policy considerations may substantially alter the electricity industry's policy landscape, and that a wealth

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<sup>1</sup> See Notice establishing date for comments re Frequency Regulation Compensation Organized Wholesale Electric Markets, Docket No. AD10-11 (May, 27, 2010).

<sup>2</sup> See Integration of Variable Energy Resources. FERC Docket No. RM10-11-000, Comments of the California Independent System Operator Corporation, at p. 2.

of promising new research on variable energy resources integration is still in progress, the CAISO recommends that any actions taken by the Commission after this technical conference should provide the flexibility for Regional Transmission Organizations and Independent System Operators to work collaboratively with their respective stakeholders to identify frequency regulation needs to meet the emerging operational requirements resulting from increased penetration of variable energy resources.

## **I. COMMENTS**

### ***Session 1 – Value of Higher-Quality Frequency Regulation Service in Organized Electric Markets***

The increasing penetration of variable energy resources will create new operational challenges to manage the grid reliably. The ISO recognizes that new technologies are emerging which can address some of these operational needs. At this time, however, the value of higher quality frequency regulation remains unclear in the ISO's market. California is implementing multiple environmental goals that relate to the power sector, including implementing a Renewables Portfolio Standard (RPS). The ISO is currently conducting studies of the operational impact of the 20 percent RPS by 2012/2013 and the 33 percent RPS by 2020. Initial operational simulations reflect the need for increased regulation and load following capacity and ramp rate (MW / minute) requirements. The ISO is also commencing a stakeholder initiative in connection with integrating variable energy resources that will review whether new market enhancements and products are necessary to meet the ISO's emerging operational challenges. Resources which are able to address these

emerging operational requirements will become increasingly valuable as the ISO experiences greater participation by variable energy resources.

At this time, the ISO believes higher quality resources in general will help integrate variable energy resources, but does not have sufficient operational experience to verify that faster responding resources will lower overall regulation procurement requirements. The ISO intends to address how to meet the duration requirement for regulation as part of its stakeholder process assessing market enhancements related to the ISO's renewable integration studies.

### ***Session 2 – Performance, Compensation, and Market Design***

The ISO recently reviewed its existing ancillary services certification standards with stakeholders and will be filing tariff language shortly which removes barriers to entry by ensuring standards are technology agnostic. The previous certification standards vernally presumed the ancillary services products would be provided by traditional generation resources, thus the product requirements took in to consideration the capabilities of traditional generation. As part of its review, the ISO assessed how the ancillary services were utilized to meet current reliability standards. The ISO then decided to set the product certification standards to the minimum requirement needed to meet operational requirements, which will soon be filed with the Commission.

The ISO's market does not reward resources for performance that exceeds the definition of a particular ancillary services product. Performance incentive payments such as a "mileage" payment for exceeding a particular ancillary service product requirement may in some cases be a reasonable interim alternative to creating a new ancillary services product for which a deep pool of resources cannot

provide. For example, the creation of a fast response regulation product may be premature given the limited number of resources able to provide that product and the uncertainty regarding the incremental value to traditional regulation. But, as the pool of resources increases or emerging operational requirements necessitate, it may be preferential to have a distinct product with clearly defined certification standards. Thus, a balanced approach to ensure resources are able to benefit from any performance incentive is preferable.

## II. CONCLUSION

The emerging operational needs resulting from increased participation of variable energy resources may require modifications to the minimum requirements of existing ancillary services products or creation of new products. The ISO plans to continue to work collaboratively with stakeholders to review its market design and products.

Respectfully submitted,

*/s/Andrew Ulmer*

Donald Tretheway  
Senior Market Design and Policy  
Specialist  
The California Independent System  
Operator Corporation  
151 Blue Ravine Road  
Folsom, CA 95630  
Tel: (916) 608-5995  
Fax: (916) 608.7296

Andrew Ulmer  
Senior Counsel  
The California Independent System  
Operator Corporation  
151 Blue Ravine Road  
Folsom, CA 95630  
Tel: (916) 608-7209  
Fax: (916) 608.7296

Attorney for the  
California Independent System  
Operator Corporation