

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

California Independent System  
Operator Corporation

Docket No. ER11-4353-000

**MOTION TO INTERVENE AND COMMENTS OF THE  
CALIFORNIA ENERGY STORAGE ALLIANCE**

Pursuant to Rules 211 and 214 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“FERC”), 18 C.F.R. § 385.211 and 18 C.F.R. § 385.214 and the Commission’s Combined Notice of Filings #1 dated August 23, 2011, the California Energy Storage Alliance (“CESA”)<sup>1</sup> hereby moves to intervene and offer comments in support of the proposed Regulation Energy Management Tariff Amendment (“REM Tariff”) filed by the California Independent System Operator Corporation (“CAISO”).<sup>2</sup>

**I. BACKGROUND.**

CESA is an industry group advocating for the rapid expansion of use of energy storage, in all of its many forms, to promote growth of renewable energy and a clean, affordable, and reliable and secure electric system. CESA is technology-neutral and supportive of all business models for deployment of energy storage resources. CESA’s member companies include a diverse range of advanced energy storage technology and manufacturing companies, systems integrators, and renewable energy developers. Since January 2010, when CESA first joined with CESA member, Beacon Power, to submit a regulation service proposal to the CAISO, CESA has

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<sup>1</sup> See, <http://www.storagealliance.org>.

<sup>2</sup> California Independent System Operator Corporation tariff filing per 35.13(a)(2)(iii): 2011-08-22 CAISO Regulation Energy Management Amendment to be effective 12/1/2011 (“REM Tariff”).

worked with the CAISO and its stakeholders to arrive at the REM Tariff.<sup>3</sup> Of course, CESA strongly supports the Motion to Intervene and Comments of Beacon Power, as well as the Motion to Intervene and Comments of The Electricity Storage Association filed in this docket on this date.

## **II. COMMUNICATIONS AND CORRESPONDENCE.**

Address all communications and correspondence concerning this proceeding to:

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## **III. MOTION TO INTERVENE IN THIS PROCEEDING.**

CESA is an unincorporated association, the membership of which consists of A123 Systems, Altairnano, Applied Intellectual Capital/East Penn Manufacturing Co., Inc., Beacon Power Corporation, CALMAC, Chevron Energy Solutions, Debenham Energy, Deeya Energy, Enersys, EnerVault, Exide Technologies, Fluidic Energy, General Compression, Greensmith Energy Management Systems, HDR, Inc., Ice Energy, International Battery, Inc., LightSail Energy, Inc., MEMC/SunEdison, Powergetics, Primus Power, Prudent Energy, RedFlow, RES Americas, Saft America, Inc., Samsung SDI, SANYO, Seo, Sharp Labs of America, Silent Power, Sumitomo Electric, Suntech, SunPower, Sunverge, SustainX, Xtreme Power, and Younicos. CESA's intervention in this proceeding is in the public interest, and the interests of CESA and CESA's member companies will not be adequately represented by any other party. CESA therefore respectfully requests that this motion to intervene be granted.

## **IV. COMMENTS.**

It has been over 18 months since CESA joined with Beacon Power in working with the CAISO's staff to develop the REM Tariff. Since then, CESA, Beacon Power, and other CESA member companies, have participated actively in the CAISO's stakeholder process that is

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<sup>3</sup> *Participation of Energy Storage in CAISO's Ancillary Service Market*, January 12, 2010.

culminating with the CAISO's REM Tariff filing in this docket. The REM Tariff will certainly remove significant administrative and software barriers, and begin opening the CAISO's ancillary services markets to energy storage resources offering regulation capacity on a basis comparable to traditional generation resources.

A. **Approval of the REM Tariff is an Essential Step That Must be Taken to Open the CAISO's Markets to Full Participation of Energy Storage Resources.**

Without the REM Tariff, energy storage resources that have less than one hour of storage capacity are severely restricted from participating in the CAISO's ancillary service markets. Under the REM Tariff, the CAISO will maintain a resource's state of charge by balancing the energy dispatched from the resource in providing regulation service with offsetting dispatches from the real-time energy imbalance market in subsequent intervals. As proposed, resources can elect to utilize the REM Tariff to satisfy the 60-minute continuous energy requirement in the day-ahead market and the 30-minute continuous energy requirement in the real-time market.

As noted, the REM Tariff is the culmination of a lengthy and robust CAISO-lead stakeholder process to facilitate full participation of energy storage resources in the CAISO's ancillary services markets. CESA is therefore very pleased to strongly urge FERC to approve the REM Tariff in its entirety.

B. **CESA Strongly Urges FERC to Support Expedited Examination of Pay-for-Performance Compensation for Ancillary Services in Phase 2 of the CAISO's Renewable Integration Market and Product Review.**

The REM Tariff is an essential step that must be taken to begin removing barriers to full participation of energy storage resources in the CAISO's ancillary services markets. That said, how the CAISO compensates resources that provide regulation service is the next barrier that must be surmounted. CESA agrees with the CAISO's observation in the REM Tariff transmittal letter dated August 22, 2011, that "development of a 'mileage payment' for resources providing regulation service does not obviate the need to implement the REM market enhancement proposed by the REM Tariff to allow energy storage resources with a physical MWh constraint to bid or self-schedule their full capacity of regulation." (Transmittal Letter, at page 14). The CAISO clearly recognizes that it must encourage resources to offer faster regulation service and

compensate regulation service providers based on actual MWs of response to a CAISO control signal.<sup>4</sup>

Today, payment for regulation service is based only on the amount of capacity offered into the CAISO's regulation service market, not the speed or quality of response that an energy storage resource can provide. This means that the additional regulation service provided by fast-ramping energy storage resources is not fully compensated under the CAISO's current tariffs. All resources, regardless of how frequently they are deployed or how much area control error correction they provide, are currently paid the same \$/MW price per MW of capacity offered into the CAISO's ancillary service markets. Pricing is based solely on the amount of MW of capacity an energy storage resource offers to be available to respond to a regulation signal from the CAISO, not on how much the resource is actually deployed to provide frequency regulation or how much ACE Correction it provides. Compensating resources solely based on the amount of capacity offered to be available when called upon is not enough because it does not reflect the amount and quality of service each resource is actually providing to the CAISO when it responds to a CAISO control signal.

FERC should indicate to the CAISO that improvement on the frequency regulation signal created by the system operations software towards more even balance between upward correction and downward correction is desirable for lowering the cost of the service. The REM Tariff provides the means to begin obtaining the benefits from using advanced energy storage technologies in the provision of frequency regulation service. However, the result of the signals not resulting in a net zero energy balance is that these frequency regulation providers must reduce the range of operations in order to accommodate the drifting signal. As these providers are more efficient than similar sized capacity from thermal generation, every use of these resources reduces the total quantity of regulation resources required. If, in the future, the CAISO can implement a net zero energy balance for the frequency regulation signal, more of the benefit from fast acting storage would be available.

The CAISO will need to compensate all resources, regardless of technology, for the additional value they add by providing greater regulation, not just ramping, capability. Of course, as stated in the REM Tariff, the CAISO "will need to comply with any requirement to

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<sup>4</sup> *Renewable Integration Market Vision & Roadmap, Day of Market, Initial Straw Proposal*, July 6, 2011, pp. 18-20.

develop a mileage payment arising from the Commission’s proposed rulemaking into frequency regulation compensation in organized wholesale power markets,”<sup>5</sup> (Transmittal Letter, at page 14). CESA is very troubled to be compelled to note here that there is no reference to pay-for-performance in the most recent version of the Revised Straw Proposal in the CAISO’s Renewable Integration and Market Product Review, Phase 2.<sup>6</sup> Since it now appears that the CAISO intends to defer any action at all on pay-for-performance compensation, or a “mileage” payment, it is essential that FERC strongly encourage the CAISO to immediately work on next step to ensure that the CAISO’s ancillary services markets compensate resources commensurate with the type of service they provide as a very high priority. Given that the CAISO agrees that there is merit to examining the implementation of a mileage payment and recognizes its need to comply with any requirement to develop a mileage payment arising from FERC’s frequency regulation compensation NOPR,<sup>7</sup> CESA respectfully requests that FERC issue its Final Rule in that NOPR expeditiously.

## V. CONCLUSION

CESA looks forward to continuing to work with the CAISO and FERC to ensure that appropriate rules are in place to develop competitive and efficient ancillary services markets.

Respectfully submitted,



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DOUGLASS & LIDDELL

Counsel for the  
**CALIFORNIA ENERGY STORAGE ALLIANCE**

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<sup>5</sup> *Order on Notice of Proposed Rulemaking re Frequency Regulation Compensation in the Organized Wholesale Power Markets*, Docket Nos. RM11-7-000; AD10-11-000, 134 FERC ¶ 61,124 (October 2011).

<sup>6</sup> *See, Renewables Integration Market Revision & Roadmap, Revised Straw Proposal*, August 29, 2011.

<sup>7</sup> *See* CAISO Transmittal Letter dated August 22, 2011 at 14.

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a copy of *Motion to Intervene and Comments of the California Energy Storage Alliance* on all parties of record in proceeding *ER11-4353* by serving an electronic copy on their email addresses of record and by mailing a properly addressed copy by first-class mail with postage prepaid to each party for whom an email address is not available.

Executed on September 12, 2011, at Woodland Hills, California.

  
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Michelle Dangott

**SERVICE LIST - ER11-4353-000**

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