

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

Electric Storage Participation in Markets Operated  
by Regional Transmission Organizations and  
Independent System Operators

Docket No. ER19-468-000

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

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Pursuant to Rule 212 of the Federal Energy Regulatory Commission’s (“Commission”) Rules of Practice and Procedure, the California Energy Storage Alliance (“CESA”) respectfully moves to intervene and provides comments in response to the Compliance Filing of the California Independent System Operator (CAISO) to the Commission’s Order 841, ER19-468-000.

On one hand, CESA supports aspects of the compliance filing of the California Independent System Operator (CAISO) compliance filing as just and reasonable, in line with already approved practices, and compliant with Order 841. On the other hand, the CAISO is out of compliance regarding a specific metering and accounting compliance item associated with Distributed Energy Resources (“DERs”) participation and ‘double-charging’ risks.

As the Commission executes and implements FERC Order 841 in order to allow market access and competition via energy storage solutions, it is important to avoid regressive rule changes. CESA also looks forward to further work to support participation from DERs and plans to work with the CAISO to further address wholesale-retail billing-reconciliation issues or other barriers to DER participation.

**I. BACKGROUND**

Founded in 2009, CESA is a non-profit membership-based advocacy group committed to advancing the role of energy storage in the electric power sector through policy, education,

outreach, and research. CESA's mission is to make energy storage a mainstream energy resource which accelerates the adoption of renewable energy and promotes a more efficient, reliable, affordable, and secure electric power system. As a technology-neutral group that supports all business models for deployment of energy storage resources, CESA membership includes technology manufacturers, project developers, systems integrators, consulting firms, and other clean-tech industry leaders.

## **II. COMMUNICATIONS**

Communications in connection with this filing should be addressed to:

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## **III. MOTION TO INTERVENE IN DOCKET EL19-36-000**

CESA's current membership consists of 174 Power Global, 8minutenergy Renewables, Able Grid Energy Solutions, Advanced Microgrid Solutions, AltaGas Services, Amber Kinetics, American Honda Motor Company, Inc., Avangrid Renewables, Axiom Exergy, Boston Energy Trading & Marketing, Brenmiller Energy, Bright Energy Storage Technologies, Brookfield Renewables, Carbon Solutions Group, Clean Energy Associates, Consolidated Edison Development, Inc., Customized Energy Solutions, Dimension Renewable Energy, Doosan GridTech, Eagle Crest Energy Company, East Penn Manufacturing Company, Ecoult, EDF Renewable Energy, ElectrIQ Power, eMotorWerks, Inc., Enel X North America, Energport, ENGIE, E.ON Climate & Renewables North America, esVolta, Fluence, Form Energy, GAF, General Electric Company, Greensmith Energy, Ingersoll Rand, Innovation Core SEI, Inc. (A

Sumitomo Electric Company), Johnson Controls, Lendlease Energy Development, LG Chem Power, Inc., Lockheed Martin Advanced Energy Storage LLC, LS Power Development, LLC, Magnum CAES, Mercedes-Benz Energy, NantEnergy, NEC Energy Solutions, Inc., NextEra Energy Resources, NEXTracker, NGK Insulators, Ltd., NRG Energy, Inc., Parker Hannifin Corporation, Pintail Power, Primus Power, Quidnet Energy, Range Energy Storage Systems, Recurrent Energy, Renewable Energy Systems (RES), SNC-Lavalin, Southwest Generation, Sovereign Energy, Stem, STOREME, Inc., Sunrun, Swell Energy, Tenaska, Inc., True North Venture Partners, Viridity Energy, VRB Energy, WattTime, Wellhead Electric, and Younicos. The views expressed in these Comments are those of CESA, and do not necessarily reflect the views of all of the individual CESA member companies. (<http://storagealliance.org>).

CESA's intervention in this proceeding is in the public interest, and CESA's interests will not be adequately reflected by any other party, particularly given CESA's role in energy storage and participatory access to the CAISO and California electric and grid-related market places. California focused energy storage interests also have existing, planned, and expected future deployments of energy storage that may be affected by rule-changes, requiring CESA to communicate in this proceeding on their behalf. CESA therefore respectfully requests that this motion to intervene be granted.

#### **IV. COMMENTS**

CESA focuses its comments on two areas of the CAISO Compliance Filing:

- The CAISO compliance approach for the application of Transmission Access Charges (“TAC”) is just, reasonable, and in line with the already approved CAISO Tariff or past FERC determinations. The application of TAC to all storage charging

would be regressive and out of line Order 841 and with regional and FERC-approved practices.

- The CAISO’s Compliance plan for avoiding double-payment from Behind-the-Meter Resources participating in the Non-Generator Resource model (“NGR”) is insufficient.

**A. The application of Transmission Access Charges as stipulated in the CAISO Compliance Filing is just and reasonable and compliant with FERC Order 841.**

FERC finds “that electric storage resources that are dispatched to consume electricity to provide a service in the RTO/ISO markets should not apply the same transmission charges as load during the provision of that service.”<sup>1</sup> The Commission should thus allow the CAISO’s Compliance Filing which does not apply TAC to energy schedules for energy storage devices that involve charging energy that is later resold. Some existing CAISO practices already accommodate this approach, and past Commission precedent regarding the treatment of charging energy for the NGR model previously authorized such an approach.<sup>2</sup>

FERC mentioned ‘downward ramping service’ as one example of the services to which no TAC allocation should apply.<sup>3</sup> In the CAISO, an energy storage device can provide such downward ramping services by charging and also by modulating its discharging. Such downward ramping support for the system can be scheduled as flexible ramping services, energy services, or through the provision of Regulation services. As shown in its compliance filing, the CAISO finds

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<sup>1</sup> FERC Order 841, Paragraph 293.

<sup>2</sup> See, 5 California Independent System Operator Corp., 132 ¶ 61,211 (2010)., as well as CAISO Tariff section 26 which allows for provisions for the application of TAC for Station Power protocols.

<sup>3</sup> FERC Order 841, Paragraph 293.

that any services which involve the accumulation of charging energy service should not receive any TAC allocation.<sup>4</sup> This is reasonable and should be approved.

Additionally, each Regional Transmission Organization or Independent System Operator (“RTO/ISO”) has its own structures and sets of market services, and the Commission should grant reasonable flexibility for each RTO/ISO to determine and define the services to which the FERC transmission charge guidance applies. Specifically, for the CAISO, ‘services’ should be connoted as the CAISO’s applicable market ‘products’ which are procured and scheduled through the CAISO’s market co-optimization, whether as price-takers (a.k.a. “self-schedules”) or as bid-in participants and offerors of services.

Given the regional variability of each RTO/ISO, it is prudent to support the CAISO’s interpretations of and application of transmission costs. Each RTO defines its products and services differently and has applicable settlement practices that are vetted and developed by the RTO/ISO in conjunction with stakeholders. Each RTO/ISO identifies a compliance regime that fits for it while complying with FERC’s rules and regulations. Support for “regional” approaches and reasonable implementation flexibility is often appropriate, given regional differences, and has been supported as a guiding principle for FERC actions in the past. The Commission itself invokes this regional flexibility concept in allowing flexibility for solutions related to metering practices in Order 841.<sup>5</sup> Pacific Gas & Electric (“PG&E”) also has supported a regional approach to

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<sup>4</sup> 4 CAISO Tariff Amendment, pp. 25-27; id., Attachment B (Marked Tariff Records), pp. 1-2 (exempting storage resources from paying TAC when charging “for later resale to the CAISO Markets or to provide Ancillary Services”).

<sup>5</sup> FERC Order 841, Paragraph 318

determine solutions related regional challenges and implementation.<sup>6</sup> The CAISO's compliance filing reflects a sufficient yet regional compliance plan for the application of TAC.

FERC Order 841 is also designed to support access and the development of reasonable participation models for energy storage. Order 841 recognizes an electric storage resources that provides services in an RTO/ISO market should not have disincentives to provide a service.<sup>7</sup> Any reading of FERC Order 841 that finds the CAISO's Compliance Plan's TAC allocation as unreasonable could contravene existing rulings on the CAISO tariff and raise barriers to energy storage participation. The Commission should avoid regressive outcomes for this broad asset class (energy storage) by authorizing this aspect of the CAISO's compliance filing.

PG&E's comments, submitted on December 20, 2018, inappropriately conflate energy storage 'charging for later wholesale resale' as end loads, a la customer lighting.<sup>8</sup> PG&E overlooks the specific FERC statements regarding "downward ramping service."<sup>9</sup> Energy available for later wholesale marketing is naturally different from retail loads. Energy stored for later wholesale marketing is fungible and still reliant on the transmission system for delivery, unlike retail loads (of a load-serving entity) which do pay transmission charges. This fundamental difference is not reflected in PG&E's logic. CESA notes that this basic logic is already effectuated for California's CPUC-jurisdictional Station Power provisions, in which retail electric uses, even when delivered to a wholesale generator's premises, are billed at retail (and so include transmission charges). This

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<sup>6</sup> See "Comments of Pacific Gas and Electric Company on Notice of Proposed Rulemaking," RM13-2-000, November 28, 2014, pg. 9. PG&E comments that:

"Regional solutions should be the preferred approach to resolve regional challenges. Regional solutions can be more readily focused to address regional issues and involve fewer tradeoffs. Moreover, regional solutions can be tailored and perhaps implemented more rapidly than larger national changes. Regional solutions can more clearly direct costs of solutions based on causation."

<sup>7</sup> FERC Order 841, Paragraph 293.

<sup>8</sup> "Motion to Intervene and Comments of the Pacific Gas and Electric Company," pgs 4-5.

<sup>9</sup> FERC Order 841, Paragraph 293



accounting and settlement system highlights how transmission charges for end loads to load-serving entities (“LSEs”) are appropriate but different from temporarily storing energy for later wholesale marketing (via directed CAISO services).

In conclusion, CESA finds ample support for finding the TAC charge inapplicability of the CAISO’s Compliance Filing as just and reasonable.

**B. The CAISO’s Compliance plan for avoiding double-payment from Behind-the-Meter Resources is insufficient.**

FERC’s order indicates duplicative wholesale and retail billing could potentially limit the participation of DERs in wholesale markets and that such double-payments would create inefficiencies. FERC finds that, in cases where a distribution utility is unable or unwilling to net out the double-payments on the retail bill, the RTO/ISO must take steps to seek to net-out the wholesale charges of the bill.<sup>10</sup> The CAISO’s compliance filing does not address this matter sufficiently.

The CAISO responds to Paragraph 321 by explaining how users of its Proxy-Demand Resource participation model (“PDR”) avoid the double-counting risk. This does not, however, ensure that users of the CAISO’s Distributed Energy Resource Provider (“DERP”) model, which is actually the NGR model, avoid double billing. The double counting risks identified in Paragraph 321 specifically apply to DERP and/or BTM NGR users.<sup>11</sup> The reference to the compliance of the PDR model is, while nice to note, irrelevant to the compliance of the DERP-NGR model.

While CESA appreciates and salutes the progress made by the CAISO to develop participation pathways to its markets for behind-the-meter energy storage, CESA believes further progress is needed to improve these participation models, including through compliance with the

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<sup>10</sup> FERC Order 841, Paragraph 321.

<sup>11</sup> CAISO Tariff Amendment, pg. 29.

provisions to avoid double-counting stipulated in Order 841. The PDR model, while useful, has limits such that some DERs may naturally need or want to use the DERP-NGR model. PDR, for instance, does not allow for the provision of Regulation. Thus, in order to allow market access to sell Regulation, DERs must avail themselves of the DERP-NGR model. If the latter model involves inappropriate double-payment by resources, the model cannot reasonably be used.

CESA recommends the CAISO provide a compliance path for Paragraph 321 and allow development of any implementation approaches through its Energy Storage and Distributed Energy Resources (“ESDER”) initiative, which seeks to address and improve market participation pathways for energy storage and DERs.

**V. CONCLUSION**

CESA appreciates the Commission’s considerations of these remarks. CESA recommends the Commission find the CAISO’s compliance approach for the applicability of TAC charges as reasonable, while also directing CAISO to better comply with Ordering Paragraph 321. CESA looks forward to further discussions regarding market participation and access by Distributed Energy Resources.

Respectfully submitted,



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February 7, 2019

## CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the *Motion to Intervene and Comments of the California Energy Storage Alliance* on all parties of record in proceeding *ER19-468-000* 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 February 7, 2019, at Calabasas, California.

  
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Michelle Dangott

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