

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Continue  
Implementation and Administration, and  
Consider Further Development, of California  
Renewables Portfolio Standard Program.

Rulemaking 18-07-003  
(Filed July 12, 2018)

**COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE  
ON THE PROPOSED DECISION ACCEPTING DRAFT 2018 RENEWABLES  
PORTFOLIO STANDARD PROCUREMENT PLANS**

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In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the California Energy Storage Alliance (“CESA”)<sup>1</sup> hereby submits these comments to the *Proposed Decision Accepting Draft 2018 Renewables Portfolio Standard*

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<sup>1</sup> 174 Power Global, 8minutenergy Renewables, Able Grid Energy Solutions, Advanced Microgrid Solutions, Alligant Scientific, LLC, AltaGas Services, Amber Kinetics, Ameresco, American Honda Motor Company, Inc., Avangrid Renewables, Axiom Exergy, Better Energies, Boston Energy Trading & Marketing, Brenmiller Energy, Bright Energy Storage Technologies, Brookfield Renewables, Carbon Solutions Group, Clean Energy Associates, ConEd Battery Development, Customized Energy Solutions, Dimension Renewable Energy, Doosan GridTech, Eagle Crest Energy Company, East Penn Manufacturing Company, EDF Renewable Energy, ElectrIQ Power, eMotorWerks, Inc., Enel X North America, Energport, Engie Storage, E.ON Climate & Renewables North America, esVolta, Fluence, Form Energy, GAF, General Electric Company, Greensmith Energy, Gridwiz Inc., Hecate Grid LLC, 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 Energy Solutions, LS Power Development, LLC, Magnum CAES, Mercedes-Benz Energy, NantEnergy, NEC Energy Solutions, Inc., NextEra Energy Resources, NEXTracker, NGK Insulators, Ltd., Nuvve, Pattern Energy, Pintail Power, Primus Power, Polyjoule, 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., Tesla, 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>).

*Procurement Plans* (“PD”), issued by Administrative Law Judges (“ALJs”) Robert Mason and Nilgun Atamturk on January 22, 2019.

**I. INTRODUCTION.**

CESA generally supports the PD, which largely approved the draft 2018 Renewable Portfolio Standard (“RPS”) Procurement Plans of each of the investor-owned utilities (“IOUs”) and accepted two Commission staff proposals around the use of time of delivery (“TOD”) factors. While some near-term procurement could provide some economic benefits to ratepayers given the scheduled phase down of Federal tax credits, CESA supports the coordination with the Integrated Resource Planning (“IRP”) proceeding to receive guidance on resource-specific procurement.<sup>2</sup> The IRP is an appropriate venue for RPS procurement focused on optimizing resource investments to meet long-term goals, and the RPS proceeding is appropriately focused on procurement and near-term compliance with RPS Program requirements, as CESA views it. Even though CESA believes that the 2017-2018 IRP modeling shows material economic benefit for Californians through early renewables procurement, CESA understands that the long-positions of some LSEs and load migration may suggest that there is limited urgency to additional immediate near-term RPS procurements.

CESA greatly appreciates the consideration of RPS-paired energy storage issues, beginning with the Order Instituting Rulemaking (“OIR”) of this proceeding. The proposed use of two TOD factor options in the PD is a step in the right direction for increasingly considering and valuing the role of paired energy storage resources in RPS solicitations, and CESA encourages the Commission to continue to develop and iterate on proposals on the Effective Load Carrying

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<sup>2</sup> PD, p. 91.

Capability (“ELCC”) methodology to effectively quantify/determine the capacity value of RPS-eligible resources paired with energy storage.

**II. THE TWO OPTIONS FOR THE USE OF TIME OF DELIVERY FACTORS IN THE PROPOSED DECISION SHOULD BE ADOPTED.**

CESA supports the PD’s determination to approve the use of TOD factors for informational purposes (“Option 1”) and for least-cost best-fit (“LCBF”) valuations and calculating contract payments (“Option 2”) and agrees with the PD that the use of TOD factors for LCBF valuations only may not lead to meaningful outcomes.<sup>3</sup> While Option 2 is secure insofar as it provides clear ties between valuation and power purchase agreement (“PPA”) prices (and better supports RPS-paired storage offers) as opposed to just providing forward energy and capacity price curves to inform developers as in Option 1, CESA supports the proposal in the PD for the investor-owned utilities (“IOUs”) to develop and convey information that would “provide enough information and granularity such that the TOD factors do convey useful information to potential bidders.”<sup>4</sup> This information would support developers in submitting bids and offers that align with the IOUs’ time-specific energy needs and potentially lead to selection of least-cost and best-fit resources that may include paired storage resources. CESA thus recommends that the Commission adopt the PD on these matters and that the Commission more deeply consider the merits of Option 2 as the default use of TOD factors in the future in this proceeding.

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<sup>3</sup> PD, p. 98.

<sup>4</sup> PD, p. 99.

### **III. THE COMMISSION SHOULD CONTINUE TO DEVELOP AN ELCC METHODOLOGY THAT VALUES PAIRED STORAGE RESOURCES.**

CESA recommends that the Commission continue to iterate and refine the ELCC methodology for hybrid RPS resources that include co-located energy storage resources. A Ruling was issued on September 12, 2018 that attached a Staff Proposal that would create sub-classes of solar-paired-storage and wind-paired storage resources with four-hour energy storage durations.<sup>5</sup> The PD does not address this Staff Proposal, and we presume that this crucial topic will be addressed at a future time in this proceeding. CESA continues to support further analysis on how paired energy storage systems impact ELCC values in the context of this proceeding and in the context of and with alignment with the Resource Adequacy (“RA”) proceeding (R.17-09-020). CESA notes that data is now available to indicate the ELCC boosts associated with energy storage, as RA staff found ‘diversity benefits’ of energy storage to increase the ELCC value of variable renewable resources. Upon the issuance of the RPS Staff Proposal, multiple parties commented in support of further analysis of different durations of energy storage resources paired with RPS-eligible resources and on further development of ELCC proposals for paired storage resources. CESA anticipates that relatively small additions of energy storage will yield outsized improvements in ELCC as even small amounts of storage can help renewables ‘ride through’ key variability periods, while also shifting or extending production during key times. Continued analysis and work on the ELCC methodology for use for RA and in RPS solicitations will be a key value driver for signaling and incentivizing the development of paired storage resources.

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<sup>5</sup> *Administrative Law Judge’s Ruling Requesting Comments on Staff Proposal on Effective Load Carrying Capability, Time of Delivery Factors, and Project Viability*, R.18-07-003, issued on September 12, 2018.

**IV. CONCLUSION.**

CESA appreciates the opportunity to submit these comments on the PD and looks forward to working with the Commission and stakeholders in the RPS proceeding.

Respectfully submitted,



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