BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

**FILED**
8-03-15
04:59 PM

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| Order Instituting Rulemaking to consider policy and implementation refinements to the Energy Storage Procurement Framework and Design Program (D.13-10-040, D.14-10-045) and related Action Plan of the California Energy Storage Roadmap. | Rulemaking 15-03-011<br>(Filed March 26, 2015) |

# REPLY COMMENTS OF THE OFFICE OF RATEPAYER ADVOCATES TO TRACK 1


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August 3, 2015

## I. INTRODUCTION

Pursuant to the Assigned Commissioner and Administrative Law Judges' Scoping Memo and Ruling Seeking Party Comments issued on June 12, 2015, set forth in the *Order Instituting Rulemaking to consider policy and implementation refinements to the Energy Storage Procurement Framework and Design Program (D.13-10-040, D.14-10-045) and related Action Plan of the California Energy Storage Roadmap* ("OIR") in Rulemaking ("R.") 15-03-011, the Office of Ratepayer Advocates ("ORA") hereby submits these reply comments to address the issues for Track 1 of this OIR.

In summary, ORA's comments address the following:

1. ORA supports parties' recommendations to improve the efficiency of the Request for Offers ("RFO") process, to an extent.
2. Investor Owned Utilities ("IOUs") should be required to seek approval from the California Public Utilities Commission ("Commission") of energy storage contracts via the application process rather than a Tier 3 Advice Letter.
3. The Commission's Measurement and Evaluation ("M&E") Plan should include greenhouse gas ("GHG") emission reductions attributable to procured energy storage; however, to the extent such information is excluded, ORA recommends that the CEP should identify the GHG emission reductions attributable to a storage system procured pursuant to the energy storage procurement targets.
4. The CEP should be a flexible tool to evaluate energy storage as new rules and regulations modify the value of energy storage.
5. The Commission should enable Load Serving Entities ("LSE") to procure energy storage cost-effectively by allowing up to 80 percent of allocated megawatts ("MW") to be shifted between all grid domains.
6. While ORA generally supports the application of the Power Charge Indifference Adjustment ("PCIA"), the actual metrics and calculations used should not be approved until parties have a sufficient opportunity to provide input and evaluate the Joint IOU Protocol currently proposed.
7. In regards to Self-Generation Incentive Program ("SGIP") funded and voluntarily deployed customer-sited storage, ORA recommends that the LSE that ultimately contracts with the customer deploying

the storage system for the energy and capacity of the system, should receive the credit towards its storage procurement target.

## II. BACKGROUND

On March 26, 2015 the Commission issued R.15-03-011. This OIR seeks to further address the statutory requirements of Assembly Bill ("AB") 2514,[1] to refine policy and program details as required or recommended by Decisions ("D.") 13-10-040 and D.14-10-045, and seeks to address the Commission's high priority action items identified in the California Energy Storage Roadmap. On June 12, 2015, Commissioner Carla Peterman and Administrative Law Judges Julie Halligan and Melissa Semcer issued the Assigned Commissioner and Administrative Law Judges' Scoping Memo and Ruling Seeking Party Comments ("Scoping Memo"), setting forth the procedural schedule and directing parties to file comments on the issues listed under Track 1. The issues to be addressed in Track 1 include: procurement best practices; refinement of the CEP; flexibility of energy procurement targets between grid domains; eligibility of new, not previously discussed, energy storage technologies; safety standards; energy storage target tracking for Community Choice Aggregators ("CCAs") and Energy Service Providers ("ESPs"); cost recovery; and coordination across proceedings and agencies. Parties submitted comments on July 8, 2015.

## III. DISCUSSION

### A. Issue 1: Procurement Best Practices

#### *1. Issue 1(c): What changes, if any, should be made to the energy storage specific RFO process in advance of the second biennial RFOs?*

Since IOUs each have their distinct valuation methodologies and unique service territories, ORA supports, in part, the California Energy Storage Association's ("CESA") recommendation that IOUs should clearly identify desired use cases and services needed from energy storage projects and grid locations in particular and that energy storage deployment should be pursued based on locational system needs to achieve cost-

[1] Stats 2010, ch 469.

effectiveness.[2] By identifying specific, desired use cases and need prior to solicitations where applicable, energy storage offers can be tailored to better suit the needs and constraints of IOUs. Furthermore, if the RFO timeline permits, ORA supports SolarCity's recommendation that utilities should conduct a Request for Information prior to issuing an RFO in order to ensure the RFO process is informed by robust and up-to-date information about relevant technologies.[3] However, where IOUs are unable to identify specific use cases and locations, the IOUs should not be required to provide such granular specificity. Doing so could discourage the solicitation of and, thus the adoption of a wider range of technologies, use applications, and suppliers.

Additionally, IOUs should ensure eligibility requirements are aligned with intended energy storage use cases. ORA supports parties' recommendation that certain eligibility requirements may be relaxed; however, to ensure project viability and efficiency, eligibility requirements should be aligned with the intended use cases of energy storage. Requiring heightened levels of site control and interconnection are appropriate for energy storage resources used as a generation resource, but may not be appropriate for storage resources performing more like a demand response resource. Similarly, longer duration requirements are appropriate for storage systems intended to provide electric supply capacity but are not necessary for systems intending to provide regulation services, which need faster ramping speeds.

Green Power Institute ("GPI") suggests that IOUs should follow PG&E's approach to interconnection requirements and thus, should only require an applicant to submit a full interconnection application before the energy storage contract is finalized.[4] Although this measure may allow for a more robust solicitation; instead of applying blanket requirements regardless of intended use cases, IOUs should take care to avoid

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[2] CESA Opening Comments, July 8, 2015, p. 5. Several parties also iterate that IOUs should clarify the rules and intended use cases of storage so as to improve the efficacy of the RFO process, such as Clean Coalition, SolarCity Corporation, and NRG Energy, Inc.

[3] SolarCity Opening Comments, July 8, 2015, p. 3.

[4] GPI Opening Comments, July 8, 2015, p. 7.

incongruent eligibility requirements so as to minimize procurement delays related to project viability.[5]

CESA suggests aggregated energy storage bidders should not be required to have all proposed aggregation sites to be identified ahead of time.[6] Rather than relax site control requirements across the board, CESA's proposal strikes a balance that would align eligibility requirements in energy storage specific RFOs with those of demand response solicitations, matches eligibility with need, and improves the efficiency of the RFO process.

ORA also agrees with parties that valuation methodologies for storage should reflect the true quantitative and qualitative costs and benefits of energy storage, including uncertainty. For instance, CESA notes potential uncertainties with storage resources may be deemed more novel than uncertainties with traditional resources and that market, regulatory, and/or rule changes can occur and affect all resources types.[7] This could unduly discount energy storage's ability to meet system and local needs in relation to conventional resources. With the increasing adoption of energy storage, the Commission should provide guidance on how to weigh uncertainty and assess risk such that energy storage can be meaningfully deployed and adequately compared to conventional resources.

Lastly, ORA opposes Pacific Gas and Electric Company's ("PG&E") recommendation that IOUs should be able to use the Tier 3 advice letter process, instead of the application process for procurement selection approval.[8] General Order 96B, Section 5.1 *Matters Appropriate to Advice Letters*, states that "the advice letter process provides a quick and simplified review of the types of utility requests that are expected neither to be controversial nor to raise important policy questions." The Tier 3 Advice

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[5] In its opening comments, San Diego Gas & Electric Company ("SDG&E") noted that 25 percent of the storage offers in its Distribution Reliability Request for Proposals ("RFP") failed project viability screens. SDG&E Opening Comments, July 8, 2015, p. 6

[6] CESA Opening Comments, July 8, 2015, p. 6.

[7] CESA Opening Comments, July 8, 2015, p. 5.

[8] PG&E Opening Comments, July 8, 2015, p. 2.

Letter process is inappropriate at this stage of review because energy storage procurement is a relatively nascent market requiring significant investment into new technologies and thus, transparent monitoring and oversight are imperative. Considering energy storage's status in California's energy market and grid, and the uncertainties and risk associated with storage, it is likely that procurement decisions will raise controversial and important policy questions. Also, since the California legislature requires that the Commission's energy storage program be monitored and evaluated every three years, the application process is more appropriate as it provides opportunities for greater public participation, testimony, briefs, evidentiary hearings and discovery, and enables a higher degree of accountability.[9]

### B. Issue 2: Refinement of CEP

Recognizing that capturing GHG emission reductions attributable to a storage system requires system wide modeling and comparison, ORA recommends the Commission's Measurement and Evaluation ("M&E") Plan include GHG emission reductions attributable to procured energy storage. As required by California Public Utilities Code ("Pub. Util. Code") Section 2836(b)(3), the M&E Plan is meant to be a comprehensive evaluation of the Commission's energy storage framework that will address whether the energy storage procured pursuant to the storage mandate meets the stated purposes of optimizing the grid, integrating renewables, and/or reducing greenhouse gas emissions.[10] However, to the extent the M&E Plan will not include such information, ORA recommends the CEP should identify the GHG emission reductions attributable to a storage system procured pursuant to the energy storage procurement targets.

The CEP provides qualitative and some quantitative information based on end uses of storage. ORA opposes the IOUs' assertion that the CEP does not need to be modified because it already includes metrics for GHG reductions and renewable

[9] Pub. Util. Code Section 2836(a)(4) requires the Commission to reevaluate the storage targets and procurement and policies once every three years.

[10] D.13-10-040, p. 66.

integration. In particular, SCE states that the CEP's "levelized energy value metric[11] includes GHG value, which results in a higher energy value if the offers reduce GHG emissions and a lower energy value if the offers increase GHG emissions."[12] While the energy value attributed to energy storage may incorporate avoided costs of GHG emission credits, if the CEP is meant to provide the Commission with a method to compare and evaluate energy storage offers, then it is necessary to have a full picture of what the storage system provides. In doing so, the Commission can better evaluate the cost-effectiveness of incorporating energy storage into California's GHG emission reduction policy.

Due to possible double counting, GHG emission reductions should not be included in the qualitative component of the CEP. Additionally, the qualitative, 0, 1, or 2 ranking system for end uses does not allow for an adequate representation of emission reductions since simultaneous functions are not assessed. Therefore, ORA recommends GHG emission reductions should be included within the descriptive information in the CEP spreadsheet.

Additionally, while ORA understands the value of including energy storage's ramping and dual use abilities in the CEP,[13] it may be premature to assign any particular values for those characteristics. To the extent that an RA value assigned to an energy storage offer does not fully capture the system's ramping abilities, ORA recommends the CEP may include a placeholder, but should not include any actual values prior to the CAISO's conclusion of its Flexible Resource Adequacy Criteria and Must Offer Obligations – Phase 2 and its Reliability Services Initiative – Phase 2. Also, the CEP should include values for dual use abilities when a procured storage system actually operates as dual use. Nevertheless, the CEP should be a flexible benchmark tool that can

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[11] The CEP defines "energy value" as the market value of energy deliveries based on the hourly generation profile of each offer considering operating characteristics and limitations, such as delivery date, delivery term and delivery location and operational constraints. CEP for Energy Storage Benchmarking and General Reporting Purposes, Revised December 1, 2014, p. 8.

[12] SCE Opening Comments, July 8, 2015, p. 6.

[13] CESA Opening Comments, July 8, 2015, pp. 8-9.

accommodate and incorporate changing rules that directly affect energy storage valuation.

### C. Issue 3: Flexibility of Energy Storage Targets Between Grid Domains

ORA supports parties' fairly unanimous recommendation that storage targets within grid domains be flexible. Furthermore, ORA supports PG&E's recommendation, in part, to apply qualitative boundaries for shifting procurement between grid domains. ORA agrees "flexibility should be available in each storage procurement cycle" because this can enable cost-effective procurement while meeting local and system need.[14] ORA also agrees "the shifting of [MWs] into the customer domain should not alter the procuring entity's overall storage target;"[15] however, ORA seeks clarity as to what standard should apply to assess whether MW shifting altered an entity's storage target to ensure accountability. If increasing the ability to shift MWs between grid domains presents perverse incentives and enables IOUs to more readily defer procurement to later periods,[16] ORA suggests IOUs demonstrate that shifting MWs between grid domains cost effectively meets the designated needs of the IOU more so than the alternative.

ORA also supports quantitative boundaries for MW shifting between grid domains so that the Commission has a chance to evaluate market development and ratepayer impacts due to selective procurement. As such, ORA recommends the Commission impose a shifting maximum of 80 percent of MWs allocated to each grid domain, thus requiring that each IOU procure at least 20 percent of the MW procurement targets established for each grid domain. This would enable equal treatment across the transmission, distribution, and customer-sited grid domains while also encouraging market development.

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[14] PG&E Opening Comments, July 8, 2015, p. 3.

[15] Id.

[16] "An IOU may seek to defer up to 80 percent of MWs to later procurement periods based on a showing that it cannot procure enough operationally or economically viable projects to meet the targets within a given period." D.13-10-040, Conclusion of Law 28, p. 74.

## D. Issue 6: Energy Storage Tracking for CCAs and ESPs

### 1. *Issue 6(a): For SGIP funded projects deployed within a CCA or ESP's service territory, which entity, the IOU or the CCA/ESP, should receive credit for the project toward their respective storage procurement target?*

San Diego Gas & Electric Company ("SDG&E") notes an issue of double counting may arise if a storage resource counts towards customer-sited targets by virtue of utilizing SGIP funding and if that resource is also selected in an RFO or RFP as an aggregated resource since such a product would presumably "count" towards that LSE's procurement targets.[17] Pub. Util. Code Section 2835(f)'s definition of "procurement," provides a reasonable solution to this conundrum.[18] The MWs of a SGIP funded storage system originally counted towards a particular LSE's procurement target should be transferred to the LSE that later contracts for or acquires the rights to the energy and capacity of the storage system, since LSEs are presumably required to fulfill their procurement targets via "procurement."[19]

### 2. *Issue 6(b): Which entity, the CCA/ESP or the IOU (or a combination thereof) should receive credit for energy storage projects that are voluntarily deployed within the service territory of a CCA/ESP?*

ORA agrees with parties that "voluntarily deployed" energy storage is meant to mean storage deployed without a financial incentive or subsidy from any LSE. Given this, ORA opposes the Alliance for Retail Energy Markets' and Direct Access Customer Coalition's ("AReM-DACC") and Shell Energy North America (US), L.P.'s ("Shell Energy") recommendation to allow customers the ability to retain "credit" towards

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[17] SDG&E Opening Comments, July 8, 2015, fn 20, p. 15.

[18] Pub. Util. Code Section 2835(f) states that "procurement" means "to acquire by ownership or by a contractual right to use the energy from, or the capacity of, including ancillary services, an energy storage system owned by a load serving entity, local publicly owned electric utility, customer, or third party."

[19] Pub. Util. Code Section 2836 requires the Commission to adopt "procurement targets," if appropriate.

storage procurement and to dispense with it to whichever entity the customer wishes.[20] Unlike the Renewable Portfolio Standard and the Cap and Trade programs, MWs of energy storage cannot be bought and sold independent of a storage system's energy and capacity rights as a method to fulfill an IOUs storage target. Furthermore, similar to the situation SDG&E noted in regards to SGIP funded energy storage, by enabling a customer who voluntarily deploys energy storage to dispense the credit for their storage as they please and to also later bid into a storage RFO, that same storage system could be counted twice. Alternatively, the LSE that ultimately pays for the energy and capacity value of a voluntarily deployed storage system should receive the credit towards its procurement target. This presents a more transparent method of tracking procurement compliance and is consistent with Pub. Util. Code Section 2835(f).

### E. Issue 7: Cost Recovery/PCIA

ORA supports the Commission's determination that "requiring departing customers[21] to assume a fair share of their costs, and thus avoiding cost shifting, is also consistent with the Commission's policy of holding captive ratepayers harmless as required by state law."[22] ORA also supports the Commission's principle that "stranded costs should be recovered from those customers who benefited from the stranded asset as well as those customers on whose behalf the IOU incurred these costs."[23] As such, ORA supports the application of the PCIA for future energy storage solicitations. In ensuring that bundled customers fair no better and no worse as a result of departing load,[24] the Commission should keep in mind the overall purpose and impact of the PCIA on bundled customers, departing load, and incentives for storage deployment. Also, in the event

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[20] AReM-DACC Opening Comments, July 8, 2015, p. 5; Shell Energy Opening Comments, July 8, 2015, pp. 3-4.

[21] Departing load is defined as "retail customers who were formerly IOU customers but now receive energy, transmission and distribution services from publicly owned utilities, self-generation or other means." D.08-09-012, p. 2.

[22] D.04-12-048, Conclusion of Law 14, p. 229.

[23] D.08-09-012, Findings of Fact 2 and 3, p. 95.

[24] D.08-09-012, p. 45.

storage resources are procured as dual use, the Commission should consider appropriate avenues to ensure that costs are allocated accordingly, such as the Cost Allocation Mechanism, the PCIA, or transmission or distribution retail rates.

Currently, parties are in the process of reviewing and commenting on the proposed Joint IOU Protocol on the PCIA mechanism. This review includes the determination of appropriate inputs to the market price benchmark. Therefore, until parties have had the opportunity to comment and contribute to the Joint IOU Protocol, it would be imprudent for the Commission to reach a conclusion regarding the actual mechanics of the PCIA. This should not, however, preclude the Commission from addressing the overarching policy considerations raised by parties regarding the PCIA.

## IV. CONCLUSION

ORA respectfully requests the Commission adopt the recommendations identified above.

Respectfully submitted,

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August 3, 2015