

June 24, 2014

Edward Randolph  
Director, Energy Division  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, California 94102

**Re: Response of the California Energy Storage Alliance to Request for Informal Comments on SDG&E's LTPP Track 4 Procurement Plan**

Dear Mr. Randolph:

This provides the response of the California Energy Storage Alliance ("CESA") to the request by Ms. Lily Chow, in the Resource Adequacy and Procurement Oversight Section of the Energy Division of the California Public Utilities Commission ("Commission"), addressed to the Official Service List for the Commission's Track 4 LTPP proceeding, R.12-03-014, soliciting informal comments on SDG&E's LTPP Track 4 Procurement Plan ("Procurement Plan"). CESA understands that the Energy Division's review is limited to determining whether SDG&E has met the requisite conditions to submit a procurement application pursuant to the Commission's Decision (D.) 14-03-004. CESA further understands that stakeholders will have the opportunity to fully participate in the Commission's formal review process once SDG&E submits one or more applications seeking Commission approval of procurement conducted in accordance with the Procurement Plan.

**I. CESA's Overview of the Procurement Plan: D.14-03-004 Energy Storage Procurement Requirements Are Minimum, Not Maximum Levels**

CESA has quoted with approval in its formal comments the statement in the Proposed Decision that preceded D.14-03-004 that: "We confirm the intent of D.13-10-040 to jumpstart the use of energy storage resources in California. We strongly believe energy storage will be useful to meet LCR resources in the future; in general, we expect development of these resources to have an environmentally beneficial impact on energy supply and reliability in California." (p. 60). CESA thus emphasizes the clear and important statement in D.14-03-004 that: "For both SCE and SDG&E, the set energy storage procurement requirements in this decision are minimum, not maximum, levels. Both utilities may also procure energy storage as part of their preferred resources requirements or all-source authorizations, subject to any other conditions in this decision [Emphasis added]." (p. 88).

As you know, D.14-03-004 authorized a procurement need of 500-800 MW for SDG&E, and required that SDG&E procure at least 200 MW of preferred resources, including at least 25 MW of energy storage resources. Ordering Paragraph 6 of D.14-03-004 directed SDG&E to hold an "all-source Request for Offers" ("RFO") for some or all of the authorized capacity. Ordering Paragraph 6 also directed that the RFO comply with the requirements previously established in Ordering Paragraph 4 of the Commission's (D.)13-02-015, which directed that an all-source RFO should not exclude "any resource from the bidding process."

Further, SDG&E's Conventional Plan states that the 2017 OTC deadline for Encina is a critical driver for SDG&E's selection of new resources to fill a portion of its LCR need. Although D.14-03-004 establishes a deadline of 2021 for LCR procurement, it acknowledges that the need in San Diego's

service area could arise as early as 2018 given the retirement of Encina in 2017. Hence, given the long lead-time required to construct new conventional resources, it is critical that the process move forward as soon as possible in order to maintain reliability and to ensure that Encina meets the 2017 deadline for retirement of OTC facilities [Emphasis added]"

However, SDG&E's Preferred Plan states that SDG&E will solicit bids for up to 200 MW to be delivering in 2021 from new Energy Efficiency ("EE"), Demand Response ("DR"), Energy Storage ("ES"), Renewables, Combined Heat and Power ("CHP"), and Distributed Generation ("DG") products [emphasis added]" and projects may come online as early as January 1, 2018 and as late as July 1, 2021 in order to ensure availability by the deadline of December 31, 2021.

CESA also strongly supports the use of an all-source RFO process for selection of needed resources whenever possible, and bilateral negotiations only wherever they are proven necessary, to meet California's goals for an efficient, reliable, affordable and secure electric power system and as determined in decisions issued by the Commission.

## **II. Energy Storage should be the Most Favored Resource Because of its Flexibility, Ability to be Sited and Installed Quickly, and Cost Effectiveness vs. New Peakers**

The effective flexible capacity calculation methodologies supported by both the Commission's staff and the staff of the California Independent System Operator ("CAISO") indicate that bidirectional energy storage resources actually have two to four times more flexible capacity per MW than a conventional generator. Most energy storage resources also do not have limitations on starts or stops, allowing them to be dispatched more often and with less environmental and operational penalties. The lack of start/stop limitation will reduce bid cost recovery costs to ratepayers, increase resource utilization, and increase the total amount of flexible resources available on very short notice to the CAISO.

Energy storage resources also better support the dual-peak demand described by SDG&E in the preferred plan. The charging characteristics of bidirectional energy storage resources also allow them to absorb excess generation at times of low demand, which is an attribute which is universally seen as a key grid need going forward. Mid-day over generation of 500MW-1000MW has been seen multiple times by the CAISO already in 2014. This over generation is expected to increase over the next 10 years. It makes sense to procure resources that can fulfill flexible needs in both high and low demand time periods.

Energy storage resources also tend to be exceptionally good at "smoothing the variability associated with intermittent renewable generation." Energy storage resources have ramp rates 5-100 times faster than conventional generators, making them superior for the needs of our grid in the future. Additional energy storage resources would allow our existing fleet of combined cycle plants to operate at their optimum levels.

Finally, energy storage resources generally do not have the same environmental and siting restrictions as traditional generators, decreasing their timeline for siting and operation. Preliminary modeling in evidence in R.10-12-007 and discussed in the Commission's Energy Storage Framework Decision (D.)13-10-040 has shown that energy storage, when operated as a bulk peaker, can also be much more cost-effective than its traditional counterpart. As a general energy policy matter, and for all the reasons stated above, energy storage should be considered the most favored resource.

**III. CESA's Recommendations to the Energy Division.**

CESA does not advocate for modification of D.13-03-004. However, CESA does advocate that the Commission's Energy Division must assure that the tremendous untapped system flexibility and potential ratepayer benefit energy storage provides is fully accounted for in the Procurement Plan. CESA thus recommend that the following considerations should be carefully considered, and if appropriate, SDG&E should be directed to revise and clarify the Procurement Plan accordingly:

- Both the conventional plan and the preferred plan should be scrutinized to determine that the Procurement Plan, taken as a whole, meets all of the conditions of D.13-03-004, and is in complete accord with the intent of the Commission in light of all relevant known and reasonable foreseeable circumstances.
- The conventional resource element of the Procurement Plan should explain how energy storage has been considered and identify any reasonable modifications that may be made to the design and operation of the new Encina facility under a bilateral agreement to take full advantage of flexible storage technology. Any resulting reduction in the MW generation output, if not co located with the new thermal plants, should be added to the preferred plan.
- The preferred resource element of the Procurement Plan should be clarified to demonstrate how it meets, or can be revised to meet, the express language that "some or all" of the procurement must be done by means of an all-source RFO.
- The preferred resource element of the Procurement Plan should be revised to be consistent with the express language of D.13-03-004 by changing the phrase from "up to" to say "at least" 200 MW.
- The preferred resource element of the Procurement Plan should be revised to seek resources that can be online by end of 2017, to help fulfill stated needs of the system.

CESA thanks the Energy Division for this opportunity to review and make the foregoing recommendations set forth in these informal comments concerning the Procurement Plan.

Very Truly Yours,



Janice Lin, Executive Director

cc: Commission President Michael Peevey  
Commissioner Michel Florio  
Commissioner Carla Peterman  
Commissioner Michael Picker  
Commissioner Catherine Sandoval  
Service List for R.12-03-014