

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

Application of San Diego Gas and Electric Company
(U 902 E) for Approval of Energy Storage and Energy
Efficiency Contracts Arising from the Track IV Local
Capacity Requirement All Source Request for Offers.

Application 16-03-014
(Filed March 30, 2016)

**PROTEST OF THE CALIFORNIA ENERGY STORAGE ALLIANCE
TO THE APPLICATION OF ENERGY STORAGE AND ENERGY EFFICIENCY
CONTRACTS ARISING FROM THE TRACK IV LOCAL CAPACITY
REQUIREMENT ALL SOURCE REQUEST FOR OFFERS**

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In accordance with Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the California Energy Storage Alliance (“CESA”)¹ hereby submits this protest to the *Application of San Diego Gas and Electric Company for Approval of Energy Storage and Energy Efficiency Contracts Arising from the Track IV Local Capacity Requirement All Source Request for Offers*, submitted on March 30, 2016 (“Application”).

¹ 1 Energy Systems Inc., Adara Power, Advanced Microgrid Solutions, AES Energy Storage, Amber Kinetics, Aquion Energy, Bright Energy Storage Technologies, Brookfield, California Environmental Associates, Consolidated Edison Development, Inc., Cumulus Energy Storage, Customized Energy Solutions, Demand Energy, Eagle Crest Energy Company, East Penn Manufacturing Company, Ecoult, Electric Motor Werks, Inc., ElectriQ Power, ELSYS Inc., Enphase Energy, GE Energy Storage, Geli, Gordon & Rees, Green Charge Networks, Greensmith Energy, Gridscape Solutions, Gridtential Energy, Inc., Hitachi Chemical Co., Ice Energy, Innovation Core SEI, Inc. (A Sumitomo Electric Company), Invenergy LLC, Johnson Controls, K&L Gates, LG Chem Power, Inc., Lockheed Martin Advanced Energy Storage LLC, LS Power Development, LLC, NEC Energy Solutions, Inc., NextEra Energy Resources, NGK Insulators, Ltd., NRG Energy LLC, OutBack Power Technologies, Parker Hannifin Corporation, Powertree Services Inc., Qnovo, Recurrent Energy, RES Americas Inc., Saft America Inc., Samsung SDI, Sharp Electronics Corporation, Skylar Capital Management, SolarCity, Sovereign Energy, Stem, SunPower Corporation, Sunrun, Swell Energy, Trina Energy Storage, Tri-Technic, UniEnergy Technologies, Wellhead Electric, 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>).

I. INTRODUCTION.

CESA appreciates the opportunity to comment on San Diego Gas and Electric Company's ("SDG&E's") Application for approval of energy storage and energy efficiency contracts based on local capacity requirements ("LCR") and procurement guidelines as set forth in D.14-03-004 ("Track 4 Decision") from the 2012 Long-term Procurement Plan ("LTPP") proceeding (R.12-03-014). In this protest, CESA takes no position whether or not the Commission should or should not approve SDG&E's nominal procurement of the 20-MW energy storage contract with Hecate Energy Bancroft LLC ("Hecate"). Instead, CESA focuses its protest on SDG&E's shortcomings in failing to procure the minimum 25 MW of energy storage according to the cost-effectiveness of procured energy storage resources as defined in D.14-03-004, and the mandate of AB2514. Because SDG&E has failed to meet its burden of proof, CESA recommends that the Commission order SDG&E to expand or re-run its 2014 All-Source LCR Requests for Offers ("RFO") to ensure minimum procurement requirements are met with fully binding contracts, rather than options, for cost-effective energy storage resources.

II. THE APPLICATION FAILS BY SDG&E'S ADMISSION TO MEET THE MINIMUM REQUIREMENT OF D.14-03-004 AND ALSO FAILS TO MEET THE REQUIREMENT OF D.13-10-040.

In the words of the testimony supporting the Application:

As shown in Table 1, SDG&E has executed 38.5 MW of EE and ES contracts. SDG&E acknowledges that the 38.5 MW procured through its Track IV All Source RFO is less than the 200 MW Track IV authorization target, and *the amount of energy storage procured by SDG&E in the Track IV All Source RFO is less than the 25 MW energy storage minimum.* However, SDG&E has until the end of 20215 to procure these preferred resources, and while the 38.5 MW (20 MW of which is ES) is less than the total Track IV authorization shown in Table 2 and the 25MW energy storage minimum, SDG&E believes a deliberate and measured approach in the Track IV All Source RFO was prudent and reasonable for several reasons as further highlighted below.

...

Third, similar to the solar photovoltaic market, several of the all source product types (e.g., energy storage) are emerging technologies that are expected to decline in costs (and ultimately price) over time due to manufacturing efficiencies and design/engineering improvements. ***By taking a measured approach to contract execution, allowed by the fact that the Track IV resources are not required to be in place and delivering until year-end 2021, SDG&E's customers will likely benefit from better pricing in the future*** (Emphasis added).” (Shults Testimony, pp. ES-3-5).

As discussed below, the Hecate agreement may be binding on Hecate but fails to bind SDG&E. Through an opt-out provision, the contract is akin to an option, rather than a clear and completed and executable procurement contract. This means that SDG&E has in effect submitted no energy storage agreement at all to satisfy its obligations under D.13-10-040.

III. THE HECATE CONTRACT IS NON-BINDING AND CAN BE TERMINATED BASED ON UNDEFINED AND ARBITRARY CRITERIA.

Prima Facie, SDG&E signed a 20-MW, 20-year tolling agreement with Hecate under the terms of which SDG&E would have all the rights of output from an energy storage facility, planned to come online on January 1, 2019. The SDG&E agreement sets performance requirements of 80% roundtrip efficiency and a level of capacity availability by which monthly capacity payments would decrease if these standards are not met. The agreement also weighs the monthly capacity payments to be made more heavily during the summer months.²

The agreement also includes an “option provision of limited duration” that allows SDG&E to terminate the agreement “if it fails to continue to be attractive for SDG&E

² *Application of San Diego Gas and Electric Company for Approval of Energy Storage and Energy Efficiency Contracts Arising from the Track IV Local Capacity Requirement All Source Request for Offers*, submitted on March 30, 2016, p. 7.

customers.” SDG&E proposes to file a Tier 1 Advice Letter if SDG&E chooses to exercise this option within the “option window.”³

CESA finds the Hecate agreement to be a poorly constructed contract that does not bind SDG&E to procure any energy storage in its 2014 All-Source RFO, in violation of the procurement requirements of D.14-03-004 and of D.13-10-040. The emphasize the optionality of the contract, CESA understands the Hecate ‘contract’ can be cancelled if SDG&E, through an Advice Letter, decides that the project is “unattractive” to customers. SDG&E does not specify what constitutes an “unattractive” project for its customers, and, with no defined criteria for determining the attractiveness of the Hecate agreement (other than that it is cost-effective), SDG&E retains overly broad discretion to terminate the agreement for potentially arbitrary and/or subjective reasons. A contract that can be terminated with minimal Commission review, such as through SDG&E’s proposed Tier 1 Advice Letter submission, does not represent actual “procurement” but rather an option contract that SDG&E may or may not choose to continue through to performance on its part. CESA believes the directions of the Commission through D.14-03-004 and D.13-10-040 were clear, removing the need for such discretion. Having this RFO conclude with an illusory commitment by SDG&E can only discourage future bidders from engaging in subsequent SDG&E RFOs, causing ratepayers to miss out on the benefits from the highest value, most cost-effective energy storage bids and projects.

³ *Ibid*, p. 7.

IV. DECISIONS TO PROCURE ENERGY STORAGE SHOULD BE BASED ON CURRENT COST-EFFECTIVENESS – NOT ON FUTURE POTENTIAL COST DECLINES.

As required by D.14-03-004, SDG&E and other investor-owned utilities (“IOUs”) are required to procure cost-effective energy storage resources. The Commission has already defined “cost effectiveness” as resources that provide benefits exceeding costs. However, according to the prepared testimonies of Patrick Charles and Emily Shults and the report by the Independent Evaluator (“IE”), SDG&E decided to procure energy storage amounts below the minimum 25 MW procurement target due to expectations of decreasing future energy storage capital costs and the relatively short development and construction periods for energy storage projects. This approach may erroneously assume that such cost-reductions were not already adequately included in the Hecate or other offers submitted to SDG&E. Ms. Shults adds that the quickly evolving state of battery technologies causes bids to be out of date by the time the project commences construction.⁴ SDG&E represents that it is thus taking a “deliberate and measured approach” to allow customers to benefit from reduced pricing and ratepayer costs “by optimizing its procurement where possible”.⁵ The IE report elaborates further of the “opportunity costs” of procuring energy storage today rather than in the future when capital costs have fallen further:⁶

During contract negotiations, SDG&E management began to question the value of an Energy Storage contract that had been shortlisted. SDG&E’s concern was that the RFO was driven by a capacity need for 2022; the resource did not have to be operational earlier. Energy storage can currently be

⁴ *Prepared Direct Testimony of Emily C. Shults on Behalf of San Diego Gas & Electric Company*, submitted on March 30, 2016, p. 5.

⁵ *Ibid*, pp. 5-6.

⁶ *San Diego Gas & Electric: Independent Evaluator Report – 2014 LCR RFO*, submitted on March 24, 2016, p. 23.

permitted and constructed quickly, and the market expects battery pricing to drop significantly in coming years. If so SDG&E would be locked into a high-priced out-of-market contract and will not share in the cost reductions enjoyed by the developer. SDG&E management saw itself facing the opportunity cost of not delaying the contracting for this capacity, and was particularly sensitive to this due to its recent experiences with solar PV contracts negotiated several years ago but for which the plants have only recently been built. SDG&E management eventually decided to terminate the contract negotiation.

CESA finds SDG&E's determination to not procure additional energy storage among the shortlisted offers as unreasonable and in violation of D.14-03-004. First, SDG&E does not procure energy storage resources based on their cost-effectiveness *today*, which should be the criteria for procuring at least the minimum energy storage requirement. Future capital costs of other potential and unknown projects should not factor into the bid evaluation and contract negotiation process. Based on that logic, ratepayers would always benefit from delaying procurement of any energy resource, given that cost declines will always occur with increased learning and manufacturing efficiencies, which every maturing industry achieves to varying degrees.

Any bids where the benefits of the proposed energy storage resource exceeded its costs existed should be deemed to comply with the cost-effectiveness requirement. In fact, the act of short-listing bids demonstrates cost-effectiveness because these bids were based on Net Market Value ("NMV"). The Office of Ratepayer Advocates ("ORA") comes to a similar understanding of cost effectiveness for short-listed bids in Pacific Gas & Electric's ("PG&E") 2014 Energy Storage RFO.⁷ Based on the SDG&E IE report, there were three other bids with higher NMV than the Hecate bid that could also have been selected as presently cost-effective projects. The

⁷ *Prepared Testimony on Pacific Gas and Electric Company's Application from its 2014-2015 Energy Storage Solicitation and Related Cost Recovery*, submitted on April 25, 2016, p. 2.

Hecate bid, meanwhile, was selected because it “created less risk exposure” despite being a lower-value bid and not having these lesser risks specified.⁸ In essence, it is only reasonable to procure energy storage resources to the net benefit to ratepayers today because such procurement advances California’s abilities to incorporate and use energy storage solutions to meet grid needs and to provide other services. Energy storage solutions remain a relatively new resource class, hence D.14-03-011 structured procurement plans to facilitate greater market access and adoption for these resources, all while providing greater benefits than costs.

Second, the presumed technology risk of procuring energy storage today is overstated. SDG&E acknowledges that energy storage resources can be quickly permitted, deployed, and constructed unlike conventional generation resources, which from CESA’s perspective, suggests that there is little “risk of buying too soon” – *i.e.*, the time gap between contract execution and construction completion is short, leading to smaller deviations from when capital costs are first locked in.⁹ If anything, CESA believes that this presumed technology risk can be mitigated through quicker implementation of procured energy storage resources. Furthermore, there are mechanisms to mitigate the technology price risks that have concerned SDG&E. Conventional generation resources, for example, are not without commodity price risk, which are mitigated through hedging strategies and futures contracts. Similarly, contractual arrangements could be made between SDG&E and bidders to share in the cost savings of energy storage technologies as costs decline from the time of contract execution to the time of project operation, thereby

⁸ *San Diego Gas & Electric: Independent Evaluator Report – 2014 LCR RFO*, submitted on March 24, 2016, p. 25.

⁹ *Ibid*, p. 23.

reducing any concerns about these energy storage projects being “out of market”.¹⁰ Moreover, fleet diversity may provide additional yet unquantified benefits, suggesting adoption of energy storage in advance is preferable. Based on the prepared testimonies and the IE report, however, such contractual arrangements and benefits do not seem to have been explored by SDG&E.

CESA recommends that the results in this Application be determined not to exceed SDG&E’s burden of proof due to failed compliance with minimum procurement targets and that the Commission order SDG&E to expand and/or re-run the 2014 All-Source LCR RFO using a present-day cost-effectiveness test to the benefit of ratepayers today and potentially incorporating contractual arrangements to mitigate any technology price risks.

V. **CONTINGENCIES OUTSIDE OF A BIDDER’S CONTROL THAT CAUSE NON-CONFORMING BIDS ARE COSTLY AND UNNECESSARY.**

If the Commission were to grant CESA’s request to expand or re-run the 2014 All-Source LCR RFO, CESA recommends that the contingency provisions in the bid evaluation process for SDG&E’s future solicitations be revised and/or eliminated. In this RFO, SDG&E established that certain bids would only be conforming contingent upon the Commission approving the SDG&E’s proposed time-of-use (“TOU”) periods in a separate application. SDG&E asserts that these “contingent conforming” bids were eliminated based on low NMVs in the bid evaluation process even before the Commission ultimately denied SDG&E’s proposed TOU periods.¹¹ However, from a bidders’ perspective, such contingency provisions represent a huge risk for bidders and a drain on their resources as their bids could be found non-conforming due to a

¹⁰ *Ibid*, p. 28.

¹¹ *San Diego Gas & Electric: Independent Evaluator Report – 2014 LCR RFO*, submitted on March 24, 2016, p. 19.

regulatory decision outside of its control. While some regulatory risks can reasonably be accommodated by bidders, the unusual and extreme nature of the SDG&E proposal's link to unapproved TOU rate applications unreasonably complicates and hinders the bid formulation process. Taken to extremes, SDG&E could establish arbitrary contingent conforming bid requirements, rendering all storage projects non-conforming. The Commission must thus seriously and appropriately limit the use of contingent-conforming bid structures.

If this RFO were to be re-conducted, CESA recommends that this provision be eliminated.¹²

VI. SDG&E SHOULD PROVIDE SHORT-LISTED BIDDERS WITH SUFFICIENT AND NEGOTIATION TIME TO MEET REASONABLE CONTRACTING REQUIREMENTS.

The IE report correctly highlights several mid-course bid evaluation and contract negotiation processes that caused bidders to reasonably perceive the process as being unfair. Most notably, the IE report highlighted SDG&E's "pattern bargaining" with bidders in which it would negotiate extensively with one bidder to address all the "complex" issues first with that bidder before beginning negotiations with the next short-listed bidder. The first bidder ended up discontinuing negotiations while the second bidder ended up with significantly less time to negotiate its contract.¹³ CESA believes that pattern bargaining leads to sub-optimal outcomes for ratepayers and does not provide sufficient time for potentially more qualified and cost-effective bidders. This bidding and negotiation process also leads to a perception of unfairness as the IE points out, which may deter bidders from participating in future SDG&E solicitations. CESA

¹² A similar provision contingent on adoption of SDG&E's proposed TOU periods (A.15-04-012) has been included in SDG&E's 2016 Preferred Resources RFO, which should be eliminated as well.

¹³ *San Diego Gas & Electric: Independent Evaluator Report – 2014 LCR RFO*, submitted on March 24, 2016, p. 27.

recommends that short-listed bidders be given sufficient and more equitable negotiation time with SDG&E's procurement team.

VII. CONCLUSION.

CESA requests that the Commission require SDG&E to expand or rerun its RFO. CESA hopes that SDG&E can learn from this deeply flawed solicitation and demonstrate leadership in cost-effective energy storage procurement for the benefit of ratepayers today.

Respectfully submitted,



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