

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

Application of San Diego Gas and Electric  
Company (U 902-E) for Approval of its  
2018 Energy Storage Procurement and  
Investment Plan.

Application 18-02-016  
(Filed February 28, 2018)

And Related Matter.

Application 18-03-001  
Application 18-03-002

**COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE  
TO THE ALTERNATE PROPOSED DECISION IMPLEMENTING THE AB 2868  
ENERGY STORAGE AND INVESTMENT FRAMEWORK AND APPROVING AB 2868  
APPLICATIONS WITH MODIFICATION**

Alex J. Morris  
Vice President, Policy & Operations

Jin Noh  
Policy Manager

**CALIFORNIA ENERGY STORAGE ALLIANCE**  
2150 Allston Way, Suite 400  
Berkeley, California 94704  
Telephone: (510) 665-7811 x110  
Email: [amorris@storagealliance.org](mailto:amorris@storagealliance.org)

June 13, 2019

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

Application of San Diego Gas and Electric Company (U 902-E) for Approval of its 2018 Energy Storage Procurement and Investment Plan.

Application 18-02-016  
(Filed February 28, 2018)

And Related Matter.

Application 18-03-001  
Application 18-03-002

**COMMENTS OF THE CALIFORNIA ENERGY STORAGE ALLIANCE  
TO THE ALTERNATE PROPOSED DECISION IMPLEMENTING THE AB 2868  
ENERGY STORAGE AND INVESTMENT FRAMEWORK AND APPROVING AB 2868  
APPLICATIONS WITH MODIFICATION**

In accordance with 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 *Alternate Proposed Decision Implementing the AB 2868 Energy Storage Program and Investment Framework and Approving AB 2868 Applications with Modification* (“APD”), issued by Commissioner Martha Guzman Aceves on May 24, 2019.

---

<sup>1</sup> 174 Power Global, 8minutenergy Renewables, Able Grid Energy Solutions, Advanced Microgrid Solutions, Aggreko, Alligant Scientific, LLC, AltaGas Services, Amber Kinetics, Ameresco, American Honda Motor Company, Inc., Avangrid Renewables, Axiom Exergy, Better Energies, Boston Energy Trading & Marketing, Brennmiller 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, eMotorWerks, Inc., Enel X North America, Energport, Energy Vault, Engie Storage, E.ON Climate & Renewables North America, esVolta, Fluence, Form Energy, General Electric Company, Greensmith Energy, Gridwiz Inc., Hecate Grid LLC, Highview Power, Ingersoll Rand, Innovation Core SEI, Inc. (A Sumitomo Electric Company), Lendlease Energy Development, LG Chem Power, Inc., Lockheed Martin Advanced Energy Storage LLC, LS Energy Solutions, LS Power Development, LLC, Magnum CAES, Malta Inc, NantEnergy, National Grid, NEC Energy Solutions, Inc., NextEra Energy Resources, NEXTracker, NGK Insulators, Ltd., Nuvve, Pattern Energy, Pintail Power, Plus Power, Primus Power, PolyJoule, Quidnet Energy, Range Energy Storage Systems, Recurrent Energy, RES Americas, SNC-Lavalin, Soltage, Southwest Generation, Stem, STOREME, Inc., Sunrun, Swell Energy, Tenaska, Inc., Tesla, True North Venture Partners, Viridity Energy, VRB Energy, WattTime, and Wellhead Electric. 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 believes it is important to ensure that the Commission support the accelerated deployment of energy storage, especially to support disadvantaged community (“DAC”) customers, pursuant to the intent of Assembly Bill (“AB”) 2868. In response to the Proposed Decision (“PD”) issued on February 26, 2019, CESA commented that Southern California Edison Company (“SCE”) and San Diego Gas and Electric Company (“SDG&E”) provided sufficient justification for how their proposed behind-the-meter (“BTM”) energy storage programs comply with the AB 2868 statutory requirements and that the proposed programs are not duplicative of the Equity Budget category of the Self-Generation Incentive Program (“SGIP”). Rather, CESA viewed the denial of these proposed programs as stifling energy storage deployments in DACs. CESA thus supports the APD for approving SCE’s BTM energy storage program and recommends that the Commission adopt the APD but with a modification to also approve SDG&E’s BTM energy storage program.

CESA is also concerned that both the PD and APD maintained its determination to not approve the proposed in-front-of-the-meter (“IFOM”) energy storage investments of the three investor-owned utilities (“IOUs”). While the IFOM energy storage investments of SCE and Pacific Gas and Electric Company (“PG&E”) lack sufficient detail to justify Commission approval, CESA believes that SDG&E’s proposed projects could be approved if additional documentation is submitted – *i.e.*, the filing of Supplemental Testimony that includes explanatory information and additional plans to justify how the utility-ownership model is appropriate, at least in these cases.<sup>2</sup> CESA reiterates our recommendation that the Commission consider our proposed

---

<sup>2</sup> CESA proposed a procedural pathway in our comments to the PD. See *Comments of the California Energy Storage Alliance to the Proposed Decision Implementing the AB 2868 Energy Storage Program and Investment Framework and Approving AB 2868 Applications with Modification*, filed on March 18, 2019 in A.18-02-016, *et al.* <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M274/K960/274960764.PDF>

procedural pathway to allow some projects to be approved if sufficiently justified in terms of statutory compliance, cost effectiveness, etc., and if additional plans are included whereby AB 2868-directed third-party solutions and/or competition from third-party solutions are incorporated as part of SDG&E's 2020 Energy Storage Applications. Without adoption of the procedural pathway that CESA suggested previously in its comments, there could be a significant delay in deployment of energy storage projects, resulting in an unfortunate situation that goes against the intended spirit of "accelerating widespread deployment of distributed energy storage systems" envisioned by AB 2868. Nearly three years have passed since AB 2868 was signed into law, yet zero megawatts of energy storage pursuant to this law have been deployed. CESA urges the Commission to adopt our proposed procedural pathway to support the intent of AB 2868 and deploy energy storage projects in the near term to improve resiliency of the electric supply serving public-sector and low-income customers in the state.

## **II. THE COMMISSION SHOULD APPROVE BOTH SCE'S AND SDG&E'S BTM ENERGY STORAGE PROGRAMS.**

CESA agrees with the APD in approving SCE's BTM energy storage program on the basis of targeting an underserved customer base and for leveraging synergies with the Multifamily Affordable Solar Housing ("MASH") Program and the Solar on Multifamily Affordable Housing ("SOMAH") Program. Importantly, the APD also justified the approval of SCE's BTM energy storage program based on minimal or no participation in the SGIP Equity Budget, which is just starting to be addressed via comments and responses to a Ruling issued on April 15, 2019 in Rulemaking ("R.") 12-11-005.<sup>3</sup> Given the unknown timeline and nature of changes to the SGIP Equity Budget, the APD wisely approves SCE's BTM energy storage program to support more

---

<sup>3</sup> APD at p. 52.

near-term energy storage installations that would provide grid benefits and reduce greenhouse gas (“GHG”) emissions and criteria pollutants, depending on the operational requirements established via a subsequent Advice Letter filing.<sup>4</sup>

CESA agrees with the APD’s determination and rationale for approval regarding SCE’s MASH/SOMAH Energy Storage Program. Party comments and responses to the Ruling in R.12-11-005 is only the starting point of modifications to SGIP, as CESA imagines that the scope of changes to incentive levels, funding allocation, operational requirements, and additional goals (*i.e.*, resiliency) may necessitate workshops, staff proposal(s), and/or additional comments from parties in response to workshops and staff proposal(s). A PD in R.12-11-005, recently issued on May 31, 2019 regarding GHG and operational requirements of SGIP projects, deferred on the adoption of operational requirements of Equity projects, pointing to the additional record and solution development needed to spur participation in the Equity Budget.<sup>5</sup> Altogether, changes to the Equity Budget will take some time, so the APD reasonably approves SCE’s BTM energy storage program to accelerate energy storage deployments in the near term for low-income and DAC customers. Additionally, as SCE’s BTM energy storage program is implemented and begins to gain participation, CESA believes that this two-year pilot will highlight key lessons learned and recommendations that could be incorporated into the Equity Budget regarding incentive levels and operational requirements to support broader market transformation for low-income and DAC customers.

---

<sup>4</sup> *Ibid* at p. 53.

<sup>5</sup> *Proposed Decision Approving Greenhouse Gas Emission Reduction Requirements for the Self-Generation Incentive Program Storage Budget* issued on May 31, 2019 in R.12-11-005 at p. 36-37 and 54-55. <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M294/K815/294815788.PDF>

The APD, however, rejects SDG&E's proposed Expanded CARE Pilot Program due to the need for additional development, including around program administration and scope and scale of the program.<sup>6</sup> CESA urges the Commission to reconsider this determination and recommends that the Commission approve SDG&E's proposed program, which will target a different customer base (*e.g.*, transitional housing, short- or long-term care facilities, group homes, and nonprofit group living facilities) and offer incentives that complement the MASH and SOMAH programs, similar to SCE's MASH/SOMAH Energy Storage Program proposal. CESA views the two program proposals as similar in leveraging synergies with other programs while targeting an underserved customer base. By using the eligibility criteria of the MASH and SOMAH programs, SDG&E's Expanded CARE Pilot Program would ensure that low-income and DAC customers are effectively targeted and have program administration streamlined (*e.g.*, around marketing, education, and outreach). Similar to SCE's MASH/SOMAH Energy Storage Program, CESA views SDG&E's energy storage program as an opportunity to address near-term gaps in access to energy storage installations for low-income and DAC customers as well as an opportunity for stakeholders and the Commission to learn from SDG&E's three-year pilot to inform modifications to SGIP Equity Budget to support broader market transformation for this underserved customer class.

The APD's decision to not approve SDG&E's Expanded CARE Pilot Program appears to be due to the lack of sufficient detail regarding certain aspects of their proposal. However, rather than outright rejecting SDG&E's proposal, CESA recommends that the Commission conditionally approve SDG&E's Expanded CARE Pilot Program as long as SDG&E provides additional program design and implementation details via a subsequent Tier 3 Advice Letter that addresses the Commission's concerns. In CESA's view, SDG&E's proposal provides a sound foundation

---

<sup>6</sup> APD at p. 26.

for the program design that only requires some additional information on certain details, which could be expressed in “Appendix guidelines” similar to how the PD and APD provided Appendix A guidelines for the IOUs’ IFOM energy storage investments. In doing so, the Commission will be supporting near-term energy storage deployments for underserved customers “expeditiously,” as expressed in the APD,<sup>7</sup> while broader changes to the SGIP Equity Budget are being discussed, developed, and implemented.

**III. THE COMMISSION SHOULD ADOPT CESA’S RECOMMENDED PROCEDURAL PATHWAY AND APPROVE SDG&E’S PROPOSED PROJECTS UPON FURTHER SHOWING, WHERE REASONABLE.**

As expressed in our comments to the PD, CESA continues to aim to chart an expeditious process for approving projects that comply with pre-determined criteria – *e.g.*, projects that were pursued through a competitive solicitation pursuant to Appendix A and/or that build on the existing record regarding key projects already submitted in the AB 2868 Applications. The AB 2868 Applications present an opportunity for the Commission to accelerate energy storage deployments that support the range of statutory goals, especially around supporting DAC customers. As such, upon further showing by SDG&E, CESA believes it is reasonable for the Commission to consider moving forward with the proposed projects where additional information demonstrates cost-effectiveness and compliance with statutory requirements. CESA recognizes that the utility-owned projects and use cases proposed by SDG&E as among the first of their kind, so it may be reasonable to allow these projects to move forward, so long as SDG&E pursues third-party solutions and/or competition from third-party solutions in supplemental plans. The application of energy storage considered by SDG&E requires the capability to serve public-sector and low-income customers during certain grid conditions; to the best of CESA’s knowledge, there are no examples of projects

---

<sup>7</sup> *Ibid* at p. 26.

deployed and installed that serve a similar function at the scale that SDG&E has proposed. In comparison to overall storage megawatts deployed for applications like flexible peaking capacity and renewable integration, the total amount of megawatts deployed in California, across the US, and even globally on microgrids is very small.<sup>8</sup> It highlights the nascence of the microgrid resiliency application and the importance of accelerating energy storage projects to facilitate learning and provide near-term benefits to local communities.

Microgrid resiliency is a nascent and among the first of its kind use case that is different from more familiar operations of energy storage resources to provide peak capacity, frequency regulation, or various wholesale market services, where third-party owned and operated systems are prevalent. By contrast, energy storage for distribution applications (*e.g.*, deferral, microgrid resiliency) under third-party or utility ownership models is being tested today via the Distribution Investment Deferral Framework (“DIDF”) and under utility pilot programs (*e.g.*, Electric Program Investment Charge [“EPIC”] projects) and has involved learning around how energy storage can be incorporated into distribution system operations, protection, and planning. In our comments to the PD, CESA disagreed with SDG&E’s view on whether third parties can provide microgrid resiliency services, but for the purposes of increasing SDG&E’s understanding of energy storage as a microgrid resiliency asset (*e.g.*, to operate energy storage in islanding mode) and to fulfill the intent of AB 2868, CESA believes that it is reasonable to consider the approval, upon further review, of SDG&E’s proposed and shovel-ready IFOM storage projects. With SDG&E gaining

---

<sup>8</sup> Publicly available data is limited at the moment but Navigant estimates that the *global cumulative* energy storage microgrid market in 2017 is just 238.4 MW, while GTM estimates that the *United States alone* deployed 311 MW in 2018 *alone*.

See Navigant Research’s *Market Data: Energy Storage for Microgrids* report.

<https://www.navigantresearch.com/reports/market-data-energy-storage-for-microgrids>

See GTM Research’s *Global energy storage outlook 2019* report.

<https://www.woodmac.com/reports/power-markets-global-energy-storage-outlook-2019-295618>



experience on how to operate energy storage in islanding mode to provide critical power service to public-sector, low-income, and DAC customers during outages in the electric grid, CESA hopes that SDG&E will better understand how third-party-owned energy storage systems as microgrid assets could also be incorporated into distribution system operations and planning. The Commission should weigh these factors and choose to support SDG&E's procurement in light of the growing importance of these use cases for cases where SDG&E shows that utility-owned approaches make sense.

By pursuing our recommended procedural path, CESA believes that SDG&E will be afforded additional time to effectively submit supplemental information that could inform the Commission's decision on SDG&E's proposed energy storage investments. In comments to the PD, SDGE submitted an independent evaluator's report on the Phase 1 Request for Proposals ("RFP") conducted and completed for its AB 2868 project sites. The PD and APD was revised to conclude that the report contained numerous errors and omissions that made it difficult to interpret and determine the accuracy of the procurement cost information. In addition to the lack of clarity and the non-standardized approach to valuation, the revised PD and APD discussed how the report only provided contract cost information but did not substantiate ratepayer benefit. With CESA's proposed procedural path, SDG&E may be able to more effectively present their RFP results, such as through a more standardized approach to valuation as outlined in Appendix A of the PD and APD, or show compelling evidence for why they pursued a modified path to the guidelines in Appendix A. To support the acceleration of energy storage deployments, CESA believes this procedural pathway would ensure that the Commission has complete information to assess the reasonableness of SDG&E's proposed energy storage investments while adhering to the statutory intent and goals of AB 2868.

**IV. CONCLUSION.**

CESA appreciates the opportunity to submit these comments to the APD and looks forward to working with the Commission going forward in this proceeding.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Alex J. Morris".

Alex J. Morris  
Vice President, Policy & Operations  
**CALIFORNIA ENERGY STORAGE ALLIANCE**

Date: June 13, 2019