

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

Application of SAN DIEGO GAS & ELECTRIC  
COMPANY (U 902 E) for Approval of its  
Electric Vehicle-Grid Integration Pilot Program.

Application No. 14-04-014  
(Filed April 11, 2014)

**PREHEARING CONFERENCE STATEMENT OF THE  
CALIFORNIA ENERGY STORAGE ALLIANCE**

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Pursuant to Administrative Law Judge (“ALJ”) Irene Moosen’s ruling setting a deadline for submittal of written Prehearing Conference Statements by August 8, 2014, issued on August 1, 2014, (“ALJ’s Ruling”), the California Energy Storage Alliance (“CESA”)<sup>1</sup> hereby submits this Prehearing Conference Statement.

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<sup>1</sup> 1 Energy Systems Inc. | A123 Energy Systems | AES Energy Storage | Alton Energy | American Vanadium | Aquion Energy | ARES North America | Beacon Power, LLC | Bosch Energy Storage Solutions Company LLC | Bright Energy Storage Technologies | Brookfield | CALMAC | Chargepoint | Clean Energy Systems | Coda Energy | Consolidated Edison Development, Inc. | Customized Energy Solutions | Demand Energy | DN Tanks | Duke Energy | Eagle Crest Energy Company | EaglePicher Technologies, LLC | East Penn Manufacturing Company | Ecoult | EDF Renewable Energy | Enersys | EnerVault Corporation | EV Grid | FAFCO Thermal Storage Systems | FIAMM Energy Storage Solutions | Flextronics | Foresight Renewable Solutions | GE Energy Storage | Green Charge Networks | Greensmith Energy | Gridscape Solutions | Gridtential Energy, Inc. | Halotechnics | Hitachi Chemical Co. | Hydrogenics | Ice Energy | Imergy Power Systems | ImMODO Energy Services Corporation | Sumitomo Electric Group | Invenergy LLC | K&L Gates | KYOCERA Solar, Inc. | LG Chem | LightSail Energy | LS Power Development, LLC | Mitsubishi International Corporation | NextEra Energy Resources | NRG Solar LLC | OCI Company | OutBack Power Technologies | Panasonic | Parker Hannifin Corporation | PDE Total Energy Solutions | Powertree Services Inc. | Primus Power Corporation | Recurrent Energy | Renewable Energy Systems Americas Inc. | Rosendin Electric | S&C Electric Company | Saft America Inc. | SEEO | Sharp Electronics Corporation | SolarCity | Sovereign Energy Storage LLC | STEM | Stoel Rives | SunPower | TAS Energy | Tri-Technic | UniEnergy Technologies, LLC | Wellhead Electric. The views expressed in this Prehearing Conference Statement are those of CESA, and do not necessarily reflect the views of all of the individual CESA member companies. See, <http://storagealliance.org>.

**I. INTRODUCTION.**

As directed by the ALJ's Ruling, CESA hereby addresses the following issues: "How should this proceeding be coordinated with the Rulemaking to Consider Alternative-Fueled Vehicle Programs, Tariffs and Policies (R.13-11-007) given the scope outlined in the July 16, 2014 Assigned Commissioner's Scoping Memo and Ruling? In particular, what issues between the proceedings require coordination and what scheduling Considerations necessarily arise, if any?" (ALJ's Ruling).

**II. SUMMARY OF ISSUES PRESENTED IN RESPONSES AND PROTESTS FILED BY PARTIES THAT SHOULD BE COORDINATED WITH R.13-11-007.**

CESA applauds San Diego Gas & Electric Company ("SDG&E") for proactively pursuing the policy goals articulated in the Application, and supports many aspects of the proposed pilot proposed in the Application and supporting testimony submitted by SDG&E ("Pilot"). CESA also appreciates the request in the ALJ's Ruling asking parties to specifically address coordination issues and scheduling considerations related to R.13-11-007. The cost structure of, and competitive landscape that would result from, guidance provided to SDG&E in a Commission decision approving the Application will have far reaching effect. CESA therefore believes that determinations made with respect to the Application must be closely coordinated with R.13-11-007, and that the SDG&E VGI pilot must be consistent with the guiding principles adopted in R.13-11-007. Indeed, if properly structured, the Pilot can and should help to inform appropriate future proceedings. Generally, CESA believes that many aspects of the Pilot

could be readily modified to improve cost-effectiveness and better meet guiding principles currently proposed for comment by parties in R.13-11-007.<sup>2</sup>

**A. Ownership of Electric Vehicle Infrastructure.**

The issue of utility ownership of behind-the-meter electric vehicle (“EV”) infrastructure is particularly important in relation to R.13-11-007. CESA strongly believes that, in its proposed form, the Pilot would require a change in existing Commission policy with respect to utility ownership of behind-the-meter EV infrastructure. Therefore the issue should not be addressed in the Application until such time as R.13-11-007 has adopted rules on the subject that reflect developments since it was last addressed by the Commission in 2011.<sup>3</sup> However, if the Pilot were modified to test multiple deployment and ownership models and provide actionable comparative data<sup>4</sup>, CESA believes the Pilot could actually then be productively used to inform R113-11-007 and establish a fair and reasonable trajectory for future EV policy development. Revisiting the role of the utility should thus not be addressed in this proceeding without the ownership question having been first resolved in R.13-11-007. It is important to note that the cost-effectiveness study results provided by SDG&E’s witness, J.C. Martin, appears to support a cost-effective - and therefore highly encouraging - result for *both* utility-owned and non-utility owned infrastructure in his Revised Prepared Direct Testimony, dated July 29, 2014.<sup>5</sup>

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<sup>2</sup> See, *Assigned Commissioner’s Scoping Memo and Ruling*, issued July 16, 2014 (“AFV Scoping Memo”).

<sup>3</sup> See, *Phase 2 Decision Establishing Policies to Overcome Barriers to Electric Vehicle Deployment and Complying With Public Utilities Code Section 740.2*, issued July 14, 2011.

<sup>4</sup> For the data to be truly actionable, bias due to exogenous competitive advantage needs to be eliminated by providing the same opportunities for utility and non-utility EV infrastructure developers to participate in the program

<sup>5</sup> See, Table 6-12, at page JCM-33 comparing SDG&E VGI Rate scenario vs. Non-utility Flat Fee scenario.

## **B. Target Markets.**

The issue of what constitutes an underserved market has yet to be addressed by the Commission. CESA's view, and apparently the view also promulgated in the AFV Scoping Memo, is that broadly speaking the EV charging market is a *new* market that is undergoing tremendous growth from a small base, combined with technological, business model, and regulatory innovation, highlighting the importance of Phase 1 of R-13-11-007 to develop a "foundational policy and a regulatory framework". Specific submarkets, such as multifamily residential and workplace charging are already being successfully addressed by the private sector.<sup>6</sup> Consistent with the role of SDG&E to ensure equitable and universal access to affordable electricity to its customers, SDG&E should continue to serve a comparable role in underserved markets, such as public transit corridors and dense urban centers.

## **C. Charging Station Deployment.**

The issue of what constitutes a pilot is essentially determined by the Commission on a case-by-case basis. SDG&E's proposed 5,500 EV charging stations represents a roughly 9x increase in the number of currently deployed EV charging stations in SDG&E's entire service territory. As such, it is simply not a pilot in its current form – and would likely stifle competition with private industry market participants. Further, given the time constraints set forth in the AFV Scoping Memo, a "true pilot" should test a number of market approaches, specifically multiple ownership and deployment models to help ensure that competition and thus innovation can be encouraged in this newly emerging EV charging market. CESA suggests that the merits of alternative ownership models can best be tested through a pilot with 750 stations that are utility led, and up to 750 stations at 75 sites that are third party led, with a cap of an additional

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<sup>6</sup> CESA is aware of 18 companies already developing in SDG&E territory alone. See CESA's Response to the Application for additional detail.

4,000 charging stations that would be eligible to have access to the pilot rate structure only. CESA notes that 1,500 ratepayer funded stations would still be approximately 3x the number of public EV charging stations currently deployed in SDG&E's service territory, but would not result in SDG&E holding an overwhelming market position that would deter outside investment in the territory. In general, the Commission's policy should be that, EV charging equipment on the customer side of the meter should be selected, purchased, and owned by customers, and reimbursed by SDG&E, to promote customer freedom of choice.<sup>7</sup>

**D. Rate Structure.**

CESA strongly agrees with SDG&E that the EV charging rate structure is critical to EV adoption (given that the cost to charge is fundamental to the overall value proposition of EV adoption) as well as optimal integration with the grid via price signals. Given the importance of the rate structure, CESA particularly supports the proposed rate structure pilot, but believes it should be a pilot option for third parties as well in order to:

- provide a broader cross section of customer types tested for consumer acceptance and usage patterns, and
- create a level playing field between third party developers or operators and SDG&E.

It would be very interesting to test, for example, in a near term pilot, the impact of an innovative EV rate structure under a third party-owned deployment model, in addition to one that is utility owned. The cost-effectiveness results of such a scenario were not modeled in the Mr. Martin's testimony referred to above but could be effectively tested in an appropriately structured pilot. It is also worth mentioning that cost competitiveness versus gasoline should

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<sup>7</sup> CESA supports SDG&E's proposal to maintain the utilities' traditional role of investing in upgrades and interconnection infrastructure at the pilot charging locations. CESA also believes that allowing SDG&E to invest in "make-readies" would be a good, measurable, first step in evaluating the needed utility role in the market and could proceed independently of progress in R.13-11-007.

also be a consideration of the proposed rate structure, particularly if captive customers of SDG&E's infrastructure don't have a choice to use other tariffs. While dynamic rates are an important tool to help align California's vehicle electrification and grid decarbonization goals, *excessive* cost volatility (*i.e.* volatility that results in pricing periods where charging exceeds the cost of gasoline) could result in ratepayer perception that EVs are not cost competitive versus gas, decrease consumer adoption of EVs, and erode the state's ability to meet California's greenhouse gas ("GHG") reduction goals as legislated in AB32.

**E. Charging Station Payment Method.**

The end customer experience will play a big role in EV adoption. For this reason, CESA believes that the EV charging station payment method should also be tested in a near term pilot. For example, should there be other payment options other than direct bill to facilitate higher EV charging infrastructure utilization? EV charging infrastructure users who live outside of SDG&E service territory would require such a mechanism, and CESA believes that addressing out of market customers is critical to improve the utilization rate of ratepayer funded EV infrastructure and developing a more diverse and actionable data set from the Pilot.

**F. Equipment Specifications.**

The question of equipment specifications, programming/data access APIs (Application Programming Interfaces) for rates, and data submission for billing, and other standards are also an entirely open issue in both the Application and R.13-11-007. CESA maintains that such specifications should be open, public access, and not proprietary to SDG&E's service territory, so as not to hinder broader development of standards, and expected innovation among entrepreneurs and investors who may find new applications and services to enhance EV adoption over time.

### **G. Interconnection.**

Interconnection is another foundational regulatory and policy issue of concern to CESA. SDG&E's decisions in the interconnection process, as the local regulated monopoly, give it a privileged position to impact the timing, viability, and relative competitiveness of projects developed by third parties versus that of SDG&E-owned infrastructure. The Pilot could be utilized to develop acceptable standards, and potential barriers for interconnection, for both utility-owned and non-utility owned EV charging systems. Data can be collected, for example, on interconnection timeliness and costs for various EV charging stations participating in the modified Pilot. What R.13-11-007 can usefully explore more deeply is whether utility deployed and privately deployed assets are being interconnected on a level playing field. CESA particularly applauds SDG&E's proposed "second service drop" concept and recommends that it should be made available to all market participants as a rate based mechanism to simplify and reduce the cost of interconnections, and accelerate the deployment of EV infrastructure into existing properties.

### **III. COORDINATION OF PROCEEDINGS: COMMENTS ON SCHEDULE.**

The AFV Scoping Memo states that in Phase 1 of the proceeding, "One of the challenges in this proceeding will be the coordination with the on-going AFV proposals in other proceedings, pilot activities currently underway and the need to capture the experience and recorded results from these pilots." (AFV Scoping Memo, at p. 10). Indeed, the AFV Scoping Memo expressly requests comments from parties on the point: "5. How should the Commission identify and consider in this proceeding best practices achieved and lessons learned from current AFV pilot project results? (AFV Scoping Memo, at p. 14). In an ideal world, as suggested above, pilots would help to inform the foundational policy and regulatory framework necessary



to build and operate a new Commission-approved vehicle grid integration (“VGI”) program. Necessarily, such a pilot would test innovative new tariffs and alternative ownership and market deployment models, while allowing for innovation and competition.

SDG&E has requested expedited consideration of its Application (Application, at p. 3), and the proposed schedule set for in the Application sets a goal of issuance of a Proposed Decision by November 14, 2014 (at p. 7). CESA supports SDG&E’s request for expedited treatment in general terms, provided that the Pilot is expanded as recommended above, but does not proffer a specific target date for issuance of a proposed decision by the Commission. If the Pilot may be considered by the Commission “as-is,” then CESA recommends that any implementation be delayed until after a final decision has been issued on Phase I of R.13-11-007.

The AFV Scoping Memo sets forth the following schedule for Phase 1 of R.13-11-007:

Phase 1 Comments on proposed Guiding Principles and Current Program Issues to be filed and served - August 29, 2014.

Phase 1 Reply Comments on proposed Guiding Principles and Current Program Issues to be filed and served - September 12, 2014.

Interim PD on Guiding Principles and Current Program Issues target date – November 21, 2014.

Phase I VGI first workshop Notice and Agenda served – September 2014.

Phase 1, 1<sup>st</sup> VGI Workshop – October 2014.

Post-Workshop Comments to be filed and served – October 2014.

Post-Workshop Replies to be filed and served – October 2014.

Phase 1, 2<sup>nd</sup> VGI Workshop – January 2015

Interim PD on VGI Issues target date – April 2015

The issues raised in SDG&E’s VGI Pilot Application are complex and require substantial preparation and consultation with subject matter experts and industry representatives. For these reasons, CESA requests that hearings not occur until mid-October at the earliest. CESA also

notes that scheduling a hearing too close to the upcoming Energy Storage North America conference (September 30 - October 2) is a singularly important a concern, as the limited resources of CESA will be significantly constrained in the weeks leading up to that long scheduled event.

**IV. CONCLUSION.**

CESA thanks the Commission for the opportunity to submit this Prehearing Conference Statement, and hopes that it will be helpful to the Commission and the parties in efficiently focusing the discussion at the upcoming Prehearing Conference.

Respectfully submitted,



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