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



Order Instituting Rulemaking Regarding Policies, Procedures and Rules for the California Solar Initiative, the Self-Generation Incentive Program and Other Distributed Generation Issues.

Rulemaking 08-03-008 (Filed March 13, 2008)

REPLY OF THE CALIFORNIA CENTER FOR SUSTAINABLE ENERGY AND THE CALIFORNIA ENERGY STORAGE ALLIANCE TO RESPONSES TO THE AMENDED JOINT PETITION OF THE CALIFORNIA CENTER FOR SUSTAINABLE ENERGY AND THE CALIFORNIA ENERGY STORAGE ALLIANCE FOR MODIFICATION OF DECISION 08-11-044

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#### I. INTRODUCTION

In accordance with Rule 16.4(g) of the California Public Utilities Commission ("Commission") Rules of Practice and Procedure and Administrative Law Judge ("ALJ") Maryam Ebke's e-mail message of September 16, 2009, authorizing this filing, the California Center for Sustainable Energy ("CCSE") and the California Energy Storage Alliance ("CESA") (together, "the Joint Parties") respectfully submit this Reply to the Joint Response of Utility Savings & Refund, LLC and Prudent Energy International ("Respondents") to their Amended Joint Petition for Modification of Decision of D.08-11-044 ("Petition")<sup>1</sup>. CCSE has authorized the undersigned to sign this Reply on its behalf.<sup>2</sup>

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<sup>&</sup>lt;sup>1</sup> In D.08-11-044, the Commission determined that advanced energy storage ("AES") systems that meet certain technical parameters and are coupled with eligible SGIP technologies, currently wind and fuel cell technologies, will receive an incentive of \$2 per watt of installed capacity. The Petition seeks to limit application of the overly restrictive requirement, for incentive eligibility under the Self-Generation Incentive Program ("SGIP"), of "hundreds of partial daily discharge cycles" ("Discharge Requirement") to AES coupled with wind generation technologies only; and eliminate the Discharge Requirement entirely for AES systems coupled with all other SGIP-eligible technologies.

<sup>&</sup>lt;sup>2</sup> CESA's membership presently consists of A123 Systems, Inc., Beacon Power Corporation, Chevron Energy Solutions, Debenham Energy, LLC, Fluidic Energy Inc., Ice Energy, Inc., Prudent Energy International, PVT Solar, StrateGen Consulting, Xtreme Power Solutions and ZBB Energy Corporation. The views expressed in this Reply are those of the Joint Petitioners, and do not necessarily reflect the views of all of the individual CESA member companies.

The Joint Parties appreciate the interest of all stakeholders in the proposed modifications to the SGIP. The Respondents contend, "that changing the technical parameters, without substantial stakeholder input, will result in additional burdens to the Program Administrators, as they discover and attempt to deal with the unintended consequences of an apparently unnecessary and potentially confusing modification." (Response, p. 5).

# II. ELIMINATING THE HUNDREDS OF PARTIAL DAILY DISCHARGE REQUIREMENT FOR NON-WIND APPLICATIONS WILL NOT IMPOSE UNMANAGEABLE BURDENS FOR THE PROGRAM ADMINISTRATORS.

The solicitude of the Respondents for asserted "burdens" on the Program Administrators ("PAs") is misplaced, given they support the Petition.<sup>3</sup> In D.08-11-044 the Commission stated: "We believe that the adopted definition is generic enough to allow all qualified AES systems to participate in SGIP. However, because the likelihood exists that our definition maybe overly restrictive, and in regard to the Working Group's concern, we require the PAs to monitor AES applications and report to the Commission if they find the adopted parameters are creating unfair advantages, or adversely impacting the ability of qualified AES systems to participate." (p. 11). In their Response, the PAs state: "The Petition is consistent with the Commission's intention to eliminate barriers for AES systems to be able to participate in SGIP. Additionally, the proposed modifications to D.08-11-044 will positively impact SGIP's goal of peak demand reductions." (pp 2-3).

# III. HUNDREDS OF PARTIAL DAILY DISCHARGE CYCLES IS AN IMPRECISE RESTRICTIVE REQUIREMENT AND IS NOT SUPPORTED BY THE RESPONDENTS' PROTEST.

The Respondents claim that the Petition's statement "only one discharge is all that is required to meet the proposed discharge parameters if the Joint Petition is granted" is incorrect. The Respondents further argue that 'multiple daily cycles will be vital' to a specific storage/fuel cell project they are developing with the University of California, Irvine, under a grant

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<sup>&</sup>lt;sup>3</sup> See, Joint Response of Southern California Edison Company, Pacific Gas and Electric Company, San Diego Gas and Electric Company, and Southern California Gas Company to the Amended Joint Petition of the California Center for Sustainable Energy and the California Storage Alliance for Modification of D.08-11-044, filed August 18, 2009. Along with CCSE, the foregoing parties constitute the "Program Administrators."

<sup>&</sup>lt;sup>4</sup> Legislation currently awaiting the Governor's signature (SB 412, Kehoe) would expressly allow the Commission to adjust the amount of rebates and evaluate other public policy interests, including, but not limited to, peak load reduction and load management.

application to the California Energy Commission ("CEC"). (Response, p. 4). The Joint Parties agree that our comments as originally submitted suggesting that 'only one discharge is all that is required' is also imprecise. With the benefit of hindsight, we will accept the Respondent's suggestion of 'multiple daily cycling' as a means to *describe* how an energy storage system will interact with the onsite load and a fuel cell. The <u>actual</u> number of daily AES discharge cycles for fuel cell applications will certainly vary by project.

Here, we find that the Respondent's specific assertion ... that "the AES must be able to cycle multiple times per day, *perhaps* hundreds of times per day (Emphasis added)" contrary to their intent, actually <u>supports</u> the Joint Parties' original recommendation. Without doubt, the expected duty cycle of AES in various applications will depend on the application itself and each project will consider the ability of AES to meet specific design requirements or project goals; one such requirement typically considers lifecycle cost versus the frequency of charge and discharge cycles including the discharge as a percentage of rated capacity. Stipulating a specific number or a required minimum number of daily discharges and in particular, setting the bar arbitrarily high at 'hundreds of partial daily discharge cycles' is an imprecise and restrictive requirement. The Joint Parties suggest an alternative minimum eligible cycling requirement as follows: "the ability to cycle, or change the flow of energy, multiple times per day. The system must also have the ability to partially or fully discharge at its maximum output capacity (measured in kilowatts) at least 115 times per year." This new requirement provides the PAs with sufficient latitude to determine on a case-by-case basis eligible AES technologies that will achieve the peak load reduction goals of the SGIP.

AES is an important distributed energy resource that is just gaining momentum for commercial deployment in California. Further, as a recent-addition into the SGIP, the Joint Parties believe that as a technology class, it should be afforded every opportunity to be successful. Success in part will come by encouraging competition and greater choice for end use customers. An arbitrarily high requirement for hundreds of partial daily discharge cycles works against that objective. Further, the Joint Parties' position on this matter is based on a broad range of stakeholder input that has been informally provided to CCSE since December 2008. These stakeholders include CESA members, other SGIP PAs, various additional energy storage manufacturers, and various end-use customers interested in applying for AES incentive funding and who are actively considering various AES technologies, including, but not limited to,

electro-chemical, electro-thermal, and electro-kinetic. Notably, substantial stakeholder public input in support of the removal of this requirement was made apparent and expressed at a formal workshop held during the Advanced Energy Storage Roundtable (AES08), a widely attended energy conference held at UC San Diego in La Jolla, California, December 2-4, 2008, very soon after D.08-11-044 was issued.

#### IV. CONCLUSION

The Joint Parties appreciate the opportunity to address the concerns expressed by the Respondents. For the reasons stated herein, the Joint Parties urge the Commission to grant the Amended Joint Petition as expeditiously as possible and limit application of the Discharge Requirement to AES systems coupled with wind technologies only and amend the Discharge Requirement for AES systems coupled with other SGIP-eligible technologies as follows:

"the ability to cycle, or change the flow of energy, multiple times per day. The system must also have the ability to partially or fully discharge at its maximum output capacity (measured in kilowatts) at least 115 times per year."

Finally, the Joint Parties hereby request a shortened comment period of as few days as possible for filing of comments on the Proposed Decision when it is issued.

Respectfully submitted,

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September 22, 2009

<sup>5</sup> 115 is the average number of summer on-peak days.

### **CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a copy of Reply of the California Center for Sustainable Energy and the California Energy Storage Alliance to Responses to the Amended Joint Petition of the California Center for Sustainable Energy and the California Energy Storage Alliance for Modification of Decision 08-11-044 on all parties of record in proceeding R.08-03-008 by serving an electronic copy on their email addresses of record and by mailing a properly addressed copy by first-class mail with postage prepaid to each party for whom an email address is not available.

Executed on September 22, 2009, at Woodland Hills, California.

Michelle Dangott

### <u>SERVICE LIST - R.08-03-008</u>

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