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 12-11-005 (Filed November 8, 2012)

THE DIVISION OF RATEPAYER ADVOCATES' RESPONSE TO PETITION OF THE CALIFORNIA ENERGY STORAGE ALLIANCE FOR MODIFICATION OF D.11-09-015 MODIFYING THE SELF-GENERATION INCENTIVE PROGRAM AND IMPLEMENTING SENATE BILL 412

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I. INTRODUCTION

Pursuant to Rule 16.4 of the Commission's Rules of Practice and Procedure, the Division of Ratepayer Advocates (DRA) submits this response to the Petition of the California Energy Storage Alliance (CESA) for Modification of Decision (D.) 11-09-015[1] (PFM).[2] CESA's PFM requests that the Commission modify D.11-09-015 to "clarify that small thermal energy storage systems integrated with direct expansion refrigerant based air conditioning units sized at twenty tons or less to offset on-peak energy consumption (Small TES) qualify as an "emerging" Advanced Energy Storage (AES) technology eligible for incentives under the Commission's Self Generation Incentive Program (SGIP), provided such Small TES systems meet all other applicable eligibility requirements of the SGIP."[3] Small TES systems are currently eligible for incentives under the Permanent Load Shifting (PLS) program. This proposed modification would allow qualifying "emerging" Small TES systems to receive the SGIP incentives at $2.00 per watt which is significantly higher than the PLS incentive at $0.875 per watt.

DRA recommends that the Commission consider the proposed modification of D.11-09-015 in conjunction with the California Center for Sustainable Energy (CCSE)'s Advice Letter 40, which was filed on August 14, 2013. Advice Letter 40 proposes to modify the eligibility and metering requirements, and the incentive calculation methodology in the SGIP Handbook for Advanced Energy Storage (AES) Technologies. One of the major changes Advice Letter 40 recommends is directly related to the relief sought by this PFM. Advice Letter 40 proposes to modify the eligibility requirements for Emerging Small TES projects so that if they meet the California Energy Commission (CEC) Title 24 Building Energy Efficiency Compliance Option eligibility requirements and acceptance testing criteria, TES systems may qualify as a building energy savings measure and thereby meet the SGIP minimum operating efficiency and related greenhouse gas (GHG) emission reduction criteria.

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[1] Decision Modifying the Self-Generation Incentive Program and Implementing Senate Bill 412 ("D.11-09-015"), issued September 8, 2011 in Rulemaking (R.) 10-05-004, Order Instituting Rulemaking Regarding Policies, Procedures and Rules for the California Solar Initiative, the Self-Generation Incentive Program and Other Distributed Generation Issues.

[2] The California Energy Storage Alliance submitted its petition on August 5, 2013, so DRA's response is timely filed. Commission's Rule of Practice and Procedure 16.4(f).

[3] Petition of the California Energy Storage Alliance for Modification of D.11-09-015 Modifying the Self-Generation Incentive Program and Implementing Senate Bill 412 ("CESA PFM"), pp. 1-2.

DRA recommends that the Commission direct CESA to file a supplement to its PFM that would address and consider the combined effects of this PFM and Advice Letter 40 and the potential ramifications of essentially streamlining the SGIP application and eligibility oversight process for emerging Small TES projects. The supplemental filing could also address other important questions regarding this PFM and Advice Letter 40, as elaborated below. The Commission should give interested parties the opportunity to respond to CESA's supplemental filing.

DRA also recommends that the Commission consider the budget impact of expanding the type of projects eligible for the SGIP. This includes consideration of whether capping the amount of funds available to "emerging" Small TES systems is required to ensure adequate funds are available for all eligible technologies and the goals of the SGIP (i.e., reducing peak load, reducing GHG emissions, enhanced electric system reliability and promoting market transformation of DG technologies) are achieved.

II. DISCUSSION

A. Background

The Commission established the SGIP in 2001 "to encourage the development and commercialization of new distributed generation (DG) technologies."[4] The SGIP provides ratepayer-funded incentives to qualifying projects in dollar amounts that vary depending on the technology and whether the DG facility uses renewable fuel.[5] In 2009, Senate Bill (SB) 412 directed the Commission, in consultation with the California Air Resources Board (ARB), to limit eligibility for SGIP incentives to technologies that "will achieve reductions of greenhouse gas [GHG] emissions…,"[6] and extended the sunset date of the SGIP from January 1, 2012 to January 1, 2016.[7] The Commission issued D.11-09-015 to implement SB 412 following a proceeding informed by extensive stakeholder participation and in collaboration with the ARB.[8]

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[4] D.11-09-015, p. 2, citing D.01-03-073.

[5] D.11-09-015, p. 2.

[6] Public Utilities Code Section 379.6(b).

[7] D.11-09-015, p. 5.

[8] The process that culminated in issuance of D.11-09-015 included two Administrative Law Judge Rulings posing questions and seeking comments, two stakeholder workshops, and the issuance of two Staff Proposals. D.11-09-015, pp. 5-6.

At the time it issued D.11-09-015, the Commission was considering a separate Demand Response incentive program known as permanent load shifting (PLS). The Commission approved a PLS Program in D.12-04-045, in April 2012. D.12-04-045 prohibited mature TES technologies from participating in the SGIP.[9] D.12-04-045 established the SGIP as the appropriate source of funding for emerging TES technologies and the PLS program as the funding source for eligible mature TES technologies.

The PLS Program was ultimately implemented by Resolution E-4586, in May 2013. Resolution E-4586 determined that "there is insufficient factual record at this time to decide whether any particular TES is not mature, and therefore should be considered emerging."[10] Small TES systems are currently eligible for incentives under the PLS program. In D.11-09-015, the Commission established its policy that the SGIP should be used for emerging technologies, in order to "promote market transformation by incentivizing adoption of relatively new technologies that have the potential to achieve sufficient market adoption to realize substantial cost reductions through economies of scale."[11]

As required by Section 379.6(b) of the Public Utilities Code, the "primary screen for establishing eligibility for the SGIP" is a technology's potential to reduce GHG emissions.[12] This is reflected in the Statement of Purpose for the SGIP, which provides that the SGIP should contribute to the following:

- "GHG emissions reductions in the electricity sector;
- Demand reduction and reducing customer electricity purchases;
- Electric system reliability through improved transmission and distribution system utilization; and
- Market transformation for distributed energy resources (DER) technologies"[13]

DRA recommends that any changes to D.11-09-015 be consistent with the SGIP's Statement of Purpose, which reflects the goals of the SGIP.

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[9] D.12-04-045, Section 7.7.3.3 (pg. 152).

[10] R. E-4586, p.6.

[11] D.11-09-015, COL #3, p.68.

[12] D.11-09-015, p. 12.

[13] D.11-09-015, p. 7, p. 9.

B. DRA does not oppose deeming Small TES technologies "emerging" for the purpose of SGIP eligibility, but recommends that the Commission assess the combined ramifications of this PFM and Advice Letter 40 for the SGIP.

CESA requests that D.11-09-015 be modified to deem Small TES technologies as "emerging" for the purpose of SGIP eligibility. DRA does not necessarily oppose this request but recommends that CESA file a supplement to its PFM to address the combined effect of this PFM and Advice Letter 40 on the SGIP and the following questions:

- Is there merit for the proposal to consider a smaller version of a mature technology to be 'emerging,' because the application of the smaller version is incipient?
- To what extent would the approval of the CESA PFM more quickly exhaust the limited funding available to renewable and other emerging technology projects under SGIP?
- Would it be appropriate to limit the total amount of SGIP funding to be allocated to Small TES projects?
- Which program(s) are most appropriate for Small TES to participate in (i.e., SGIP, PLS, Energy Storage Program)
- Is there a need for a mechanism to ensure that Small TES projects cannot receive incentives under both SGIP and the PLS program, and/or IOU contracts that would be authorized pursuant to procurement targets established in the Energy Storage rulemaking?
- Are Small TES technologies likely to satisfy the SGIP GHG reduction and acceptance testing requirements?
- Is the 20 ton cut-off for Small TES reasonable and logical?

The questions above raise important issues that the Commission and interested parties should consider before the Commission determines whether to grant the relief requested in the PFM. The Commission should direct CESA to submit a supplemental filing addressing the Advice Letter 40 issue and the questions above, and give other parties the opportunity to respond.

C. DRA recommends that the Commission consider the likely impact of approving the PFM on the goals of the SGIP.

CESA requests that the Commission modify D.11-09-015 to clarify that Small TES systems qualify as "emerging" AES technologies eligible for SGIP incentives.[14] CESA contends that D.11-09-015 defines "emerging" as a technology whose "first commercial installation is less than ten years prior to SGIP funding."[15] CESA presented evidence in the form of a Declaration of its Executive Director, Janice Lin, to support the assertion that Small TES meets the SGIP timing requirement because it has only been commercially available since 2005.[16]

DRA does not disagree with CESA's argument, and as such does not oppose its request to clarify that Small TES is an "emerging" technology. However, DRA recommends that the Commission consider the impact of expanding the list of technologies eligible for SGIP incentives based on the overall goals of the SGIP, including the extent to which its approval of the PFM would more quickly exhaust the limited funding available to renewable and other emerging technology projects under the SGIP.

In order to fully assess the impact of this PFM on the SGIP, the Commission should consider the following issues:

- The amount of funds still available in the SGIP.
- The number of Small TES projects that are likely to be eligible for SGIP funding if this PFM is approved.
- The average amount of the SGIP incentives Small TES projects could receive.
- Are there other technologies that could better achieve the SGIP goals that will have a less of an opportunity to receive SGIP incentives if this PFM is approved.

The above issues should also be considered when determining if, and at what level, a cap on SGIP funding for Small TES projects should be implemented. In issuing D.11-09-015, the Commission acknowledged that "[t]he SGIP has limited funding," and that the modifications adopted therein "could result in a greater variety of technologies, and a broader range of

[14] PFM, p. 1-2.

[15] PFM, p. 4, citing D.11-09-015, p.18.

[16] PFM, p.4 and Exhibit A.

customers and projects participating in SGIP in the future."[17] Before expanding the list of technologies eligible for the SGIP, the Commission should consider whether doing so will promote the goals of the SGIP, and if not, whether a solution can be crafted that does not undermine the goals of the SGIP.

DRA acknowledges that the Commission, through D.11-09-015, recognized that AES (along with biogas and fuel cells) has the "potential to play an important role in California's energy future."[18] However, given the finite SGIP budget, DRA recommends that the Commission consider whether expanding the list of technologies eligible for SGIP incentives will best achieve the goals of the SGIP. To the extent that more SGIP incentives go to fund Small TES projects, the SGIP runs the risk of supporting California's thermal energy storage industry and one of its guiding principles, reducing peak electric demand,[19] at the expense of SGIP's other guiding principles – specifically, reducing greenhouse gas emissions and promoting market transformation for distributed energy resources (DER) technologies.[20]

In the interest of ensuring that the greatest number of eligible systems will benefit from SGIP funds, DRA recommends that the Commission consider a limit for the total amount of funding that can be applied to Small TES projects, and whether setting such a limit would help ensure that SGIP continues to promote market transformation for as many technologies as possible, each of which may play an important role in California's energy future.[21] The Commission could elect to set the limit in such a manner as to conserve a portion of the

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[17] D.11-09-015, p. 7.

[18] D.11-09-014, p. 27.

[19] "Thermal energy storage (TES) systems shift cooling energy use to non-peak times. They chill storage media such as water, ice, or a phase-change material during periods of low cooling demand for use later to meet air-conditioning loads." see PG&E Energy Efficiency Information, "Thermal Energy Storage," available at http://www.pge.com/includes/docs/pdfs/about/edusafety/training/pec/inforesource/thrmstor.pdf.

[20] D.11-09-015, p. 8. DRA recognizes that Small TES has the potential to reduce greenhouse gas emissions.

[21] In response to Rightcycle's Petition for Modification of D.11-09-015 DRA suggested a cap on the total amount of incentives available to systems that received the $2/watt biogas adder, so that adequate funds are available for all technologies. This recommendation was intended to help ensure that SGIP continues to promote market transformation for as many technologies, each of which may play an important role in California's energy future, as possible.

renewable/emerging technology budget for projects that do not qualify as Small TES technologies. While recognizing that this adds another layer of prescriptive administration to an already highly detailed program, DRA offers this suggestion as a means for keeping the SGIP more closely aligned with D.11-09-015's adopted Statement of Purpose and guiding principles.

III. CONCLUSION

It would be premature to grant the relief requested in the PFM before resolving issues related to the request, including the potential combined effects of this PFM and Advice Letter 40 on the SGIP. DRA recommends that the Commission allow CESA to file a supplement to its PFM to address and consider the combined effects of this PFM and Advice Letter 40, followed by the opportunity for other parties to respond. DRA also recommends that the Commission consider whether granting this request would substantially limit the incentives available for renewable technologies and other emerging technology projects and whether a limit on the total amount of SGIP funding available specifically for Small TES projects best advances the goals of the SGIP.

Respectfully submitted,

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