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

REPLY COMMENTS OF SUNVERGE ENERGY, INC. ON THE ASSIGNED COMMISSIONER'S RULING REGARDING THE INTERCONNECTION OF ENERGY STORAGE SYSTEMS PAIRED WITH RENEWABLE GENERATORS ELIGIBLE FOR NET ENERGY METERING

November 8, 2013

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Director,
Regulatory & Energy Services

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I. SUMMARY

Sunverge Energy, Inc. ("Sunverge") hereby provides the following reply comments pursuant to the *Assigned Commissioner's Ruling Regarding the Interconnection of Energy Storage Systems Paired with Renewable Generators Eligible for Net Energy Metering* ("ACR") issued October 17, 2013 by Assigned Commissioner Peevey and pertaining to opening comments issued by SDG&E on November 1, 2013.

II. SDG&E'S OPENING COMMENTS MISCHARACTERIZE ENERGY STORAGE PROJECT ECONOMICS AND CLAIMS BASED ON ILLUSTRATIVE EXAMPLES PROVIDED BY SDG&E ARE UNSUPPORTED

The battery storage project economics example used by SDG&E to claim that energy storage is well-supported by existing incentives and needs no further cost exemptions to "adequately incent deployment"[1] does not accurately represent battery storage project economics. With regards to project installed cost, Table 1 represents a summation of the SGD&E referenced SGIP statewide data report available on the California Center for Sustainable Energy's website[2].

Table 1: SGIP Statewide Data

Reported on October 1, 2013

Program Wide Tally:	683	3	30,797	$ 158,770,119	$ 60,227,281	$ 5,155	$ 1,956
Equipment Manufacturer	Total Number of Reservations	Total Completed	Capacity [kW]	Total Eligible Costs	Current Incentive ($)	Costs per Capacity	Incentives per Capacity
Princeton Power Systems	1	0	15	$ 182,880	$ 27,000	$ 12,192	$ 1,800
Sunverge	47	1	454	$ 3,927,039	$ 1,088,489	$ 8,659	$ 2,400
Prudent Energy	1	1	600	$ 5,165,283	$ 1,200,000	$ 8,609	$ 2,000
ZBB Energy	2	0	4,000	$ 30,000,000	$ 5,500,000	$ 7,500	$ 1,375
Desert Power	2	0	2,000	$ 13,340,000	$ 4,800,000	$ 6,670	$ 2,400
BYD	1	1	1,000	$ 6,491,552	$ 2,000,000	$ 6,492	$ 2,000
Thermodynamic Industries	1	0	30	$ 194,000	$ 59,920	$ 6,475	$ 2,000
GE Energy	2	0	3,000	$ 15,652,000	$ 3,500,000	$ 5,217	$ 1,167
Stem Inc	157	0	3,937	$ 18,394,316	$ 9,362,448	$ 4,672	$ 2,378
REP Energy/Eaton Crop	69	0	1,722	$ 7,590,000	$ 4,129,376	$ 4,407	$ 2,398
Tesla	389	0	12,415	$ 51,599,002	$ 26,151,724	$ 4,156	$ 2,107
Ashlawn Energy LLC	1	0	1,000	$ 3,859,394	$ 1,157,818	$ 3,859	$ 1,158
Saft	3	0	566	$ 2,169,400	$ 1,131,934	$ 3,833	$ 2,000
SMA America	1	0	5	$ 18,700	$ 10,000	$ 3,740	$ 2,000
CODA	1	0	29	$ 107,690	$ 62,532	$ 3,720	$ 2,160
Tesla - Stationary 500	3	0	15	$ 54,603	$ 32,400	$ 3,640	$ 2,160
Trojan Battery Company	1	0	5	$ 13,606	$ 8,164	$ 2,841	$ 1,704
Outback Power Systems	1	0	5	$ 10,654	$ 5,476	$ 2,114	$ 1,087

[1] SDG&E Opening Comments, pg.2

[2] http://energycenter.org/programs/self-generation-incentive-program/program-reports

Of the three completed SGIP projects, eligible system projects costs are all greater than the $4 per kW of installed storage capacity presented in SDG&E's comments[3]. Further, the average project cost rate of all statewide incentive reservations are $5.16/kW which using the same 5kW capacity would total $25,800 of eligible project costs. SDG&E's Table 1 example, used for "illustrative purposes", does not does not consider long-term operating costs or utility bill savings potential over the lifecycle of a project. Ignoring such costs, savings, and operational timespan is not illustrative and is an insufficient basis from which a judgment on commercial economic survivability can be based upon.

Additionally, SDG&E suggests that "commercial and industrial customers, who incur demand charges, already take advantage of cost effective energy storage systems to avoid or minimize demand charges" and thusly need no additional incentives for such systems. However, in SDG&E's territory the standby charge for secondary voltage non-renewable generators is $9.69 per kW of installed capacity every month of the year[4]. Should a customer's non-coincident annual max demand happen during the Summer on-peak pricing period, it's possible they may save up to $29.46 per kW offset in that month. During the other months of the year, demand savings potential is limited to $9.81 per kW during summer months and $6.15 per kW during winter months[5]. Standby charges represent a significant portion of the potential savings and applying those charges to

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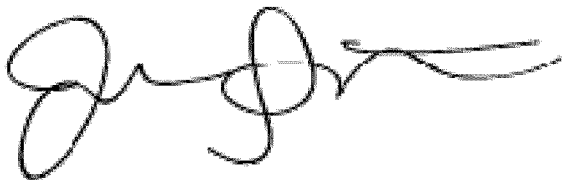
[3] $20,000 for a 5kW battery system per SDG&E Opening Comments, pg.6
[4] http://regarchive.sdge.com/tm2/pdf/ELEC_ELEC-SCHEDS_S.pdf
[5] http://regarchive.sdge.com/tm2/pdf/ELEC_ELEC-SCHEDS_AL-TOU.pdf

battery storage systems has a dramatically negative impact on project economics; doubly so when combined with upfront interconnection fees.

Claims made by SDG&E within their opening comments that current mandates and SGIP incentives adequately incent deployment of energy storage are unsupported and the example presented by SDG&E mischaracterizes real-world project economics.

Executed on November 8, 2013 in Stockton, CA

Respectfully submitted,



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