BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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Order Instituting Rulemaking Regarding Policies, Procedures and Rules for the California Solar Initiative, the Self-Generation Incentive Program and Other Distributed Generation Issues.	Rulemaking 10-05-004 (Filed May 6, 2010)

COMMENTS OF BLOOM ENERGY, INC. TO THE PROPOSED DECISION MODIFYING THE SELF-GENERATION INCENTIVE PROGRAM AND IMPLEMENTING SENATE BILL 412

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Bloom Energy, Inc. (Bloom) respectfully submits these comments on the Proposed Decision (PD) Modifying the Self-Generation Incentive Program (SGIP) and Implementing Senate Bill 412 as allowed by Article 14 of the California Public Utilities Commission (CPUC or Commission) Rules of Practice and Procedure.

I. Introduction

Bloom appreciates the opportunity to provide comments on the CPUC's PD regarding SGIP. The PD implementing changes from Senate Bill 412 has been long awaited and we appreciate the CPUC's thoughtful efforts to provide the appropriate program modifications. As changes to the program are made, SGIP policies should be consistent with state policies, remain technology neutral and provide incentives to develop a competitive and successful distributed generation (DG) market. A successful SGIP results in increased DG projects that are cleaner than current electricity generation and reduce demand on the electricity grid.

Bloom is a California cleantech company that provides on-site power generation systems, based on a unique fuel cell technology with roots in the NASA Mars space program. Bloom is proud to be founded in California, headquartered in California, and manufacture its fuel cell systems in California where we are now responsible for approximately 1,000 California jobs.

Our first installation was in 2008, and since then Bloom has delivered clean, reliable and affordable energy to a diverse group of customers. Thus far our customers have reduced over

125,000,000 lbs of carbon dioxide emissions, the equivalent of taking almost 10,000 cars off the road annually. To date over 15 megawatts (MWs) of Bloom servers are deployed in California, collectively generating over 95 gigawatt hours (GWhs) of clean reliable energy. The SGIP has supported all of our commercial California installations. As an easy to site and install baseload technology, we provide the perfect complement to intermittent solar and wind. Additionally, Bloom's fuel cell is fuel flexible and can run on biogas, making this technology both baseload and renewable. Technologies like Bloom's are helping to meet the Governor's goal of 12,000 MWs of distributed generation. The proliferation of fuel cells in California, and the rapid job growth at Bloom's Sunnyvale headquarters and manufacturing plant, should be considered a policy success story.

To ensure the continued proliferation of clean distributed energy resources (DERs) like Bloom's fuel cell technology, when implementing some of the new rules for SGIP contemplated in the PD, Bloom encourages the Commission to: (a) continue a competitive program that encourages market transformation and allows customer choice, and (b) remain cognizant of the need for consistency in policy design among agencies in order to provide the most certain and clear market direction.

While Bloom provides comments on many parts of this PD, we specifically encourage the Commission to consider: (1) ensuring that SGIP does not define winners and losers through a technology cap; (2) continuing SGIPs success through Budget Allocation that allows competition among technologies; (3) simplifying the greenhouse gas (GHG) measurement by making it a cumulative measurement only that eliminates the arbitrary degradation allowance; and (4) re-examining the elimination of out-of-state biogas which will hinder the development of in-state biogas and leave most customers without a renewable fuel source.

Lastly, given the detrimental impacts due to the lengthy program suspension, we strongly support the PD's timeline to lift the suspension. The suspension of the program while the Commission worked toward SB 412 implementation has been detrimental to the DG market in California, and detrimental to our opportunity to grow in California. Regulatory certainty is a key factor for companies seeking to participate in California energy markets and in its absence the market suffers. The program administrators (PAs) should comply with the 30 day limit to ensure that suspension is lifted for the remainder of 2011. Even under the most optimistic timeline, the program suspension will not be lifted until October. In order to prevent a further delay, the PAs should not defer the filing of the Advice Letter due to the timing of workshops.

II. Section 4.1 of the PD: Statement of Purpose and Program Principles

Bloom supports the revisions to the Statement of Purpose and Program Principles. Clarity on the Statement of Purpose and Program Principles provides guidance to program participants and policy makers. Bloom strongly supports the addition of market transformation and agrees "that many of the initiatives supporting DG in California are fundamentally market transformation programs." (PD, page 9). Consistent with the state's goals to create and support California jobs in the clean energy sector, Bloom recommends adding one additional Program Principle: the need to focus on simultaneously achieving the state's environmental and economic development objectives.

III. Section 4.2.1.1 of the PD: Avoided GHG Emissions from the Grid

Bloom appreciates the CPUC's analysis of eligibility factors and agrees that GHG reduction is required by statute as a metric for inclusion in SGIP. However, we continue to disagree with the CPUC's methodology in developing the GHG reduction factor. Bloom asks that the methodology used in calculating emission reductions recognize the performance attributes and operational differences among technologies. Bloom also seeks clarification that

the currently proposed benchmark in the PD for DERs is an emissions rate below 379 kg CO2/MWh as stated in footnote 1 of Attachment A.

As noted in Bloom's comments on the Staff Proposal Part I, we find the California Air Resources Board (CARB or ARB) CO_2e factor[1] to be the most accurate and expert-validated grid emissions factor. We thus recommend that this factor continue to be used to guide California's GHG reduction policies, and disagree with the shift in state policy represented by the PD's optimistic assumptions about future grid emissions. The GHG metric suggested by staff is more aggressive than the CARB standard as used under the AB 32 rulemaking process. Ultimately, the state's goals and SGIP's goals are to have new technologies come online that are GHG reducing compared to what is otherwise being provided to customers at the distribution level. If the CPUC chooses an overly optimistic GHG metric, this could lead to both the unintended consequence of overlooking technologies that are in fact GHG reducing and a policy schism. Thus we encourage the CPUC's SGIP rules and methodology to remain consistent with ARB when determining the GHG metric.

In addition, Bloom requests a technology neutral approach to measuring GHG reductions, and asks that any required certification should apply to all technologies to ensure that all technologies are meeting the said standard in order to provide regulatory certainty to SGIP participants and ensure equity across technologies. The PD seems to imply that only all-electric application need to obtain a certification of GHG reductions. In order to simplify validation of GHG reductions, Bloom suggests that all technologies, not just all electric fuel cells, must obtain

[1] The CARB factor is 437 Kg CO2e/MWh as developed to estimate the GHG reductions achieved by various renewable energy and energy efficiency measures adopted as part of the AB 32 Scoping Plan. (PD page 14).

a third party verification of GHG emissions. As it is not specified in the PD, we offer a recommended path for GHG (CO2e) verification here:

- The report must be conducted by a recognized independent contractor that has been approved to conduct emission source testing on behalf of CARB, pursuant to Section 91200-21220, Title 17, of the California Code of Regulations.
- The report should document overall CO_2 emissions, electrical efficiency and thermal efficiency (if appropriate).
- The test will be submitted to the PAs and report CO_2 emissions in Kg CO_2/MWh.
- Verification of GHG emissions and eligibility as an SGIP technology should be initially complete upon submission of this report to the PAs.
- The PAs should then keep a log of eligible technologies.
- Verification should be on a technology/product basis, not on a project or site specific certification.
- Ongoing performance would be measured throughout the first five years as part of the required reporting established in the PD.

While this process is being developed and implemented, Bloom urges the commission to require the PAs to grant Conditional Reservations for all applications that meet all other requirements while GHG certification is developed and implemented. Final award of incentive dollars should be contingent on GHG certification, but reservations should not be withheld while the qualification process is being developed.

Bloom additionally recommends that, consistent with the requirement that a DER need to show *cumulative* GHG reductions, annual degradation need not be measured to ensure a technology reduces emissions. What matters are the *cumulative* GHG reductions provided by a clean DER technology as compared to the grid. Bloom suggests that the GHG measurement can be simplified and still ensure overall GHG reductions from SGIP eligible technologies. Bloom fully supports the policy that a DER is required to avoid more emissions than it would produce to

be eligible for incentive awards. The PD suggests a 1% per year degradation allowance in meeting the GHG reduction standard. This degradation allowance is an additional factor and is unnecessary in determining the overall GHG reduction of the technologies. Additionally, this 1% degradation does not recognize the operational difference amongst technologies. For instance, fuel cells are operated and maintained differently than traditional turbine technologies. Degradation happens at a varying rate, yet the most efficient fuel cells are still GHG reducing consistent with the mandate of SB 412.

IV. Section 4.2.2 of the PD: Eligible Technologies

As stated above, Bloom asks that all technologies should have the same requirement of verification as GHG reducing technologies. As required by statute, all SGIP technologies must be GHG reducing. Therefore Bloom suggests that equal verification requirements should be implemented across all technologies. Having the same qualification rules for all technologies will create a more fair and just playing field.

V. Section 4.2.3.4 of the PD: Onsite Biogas (OSB) and Directed Biogas (DBG) Fuel Considerations

Bloom asks that out-of-state biogas be included in the SGIP and verified per existing state policy. Biogas is a renewable fuel with significant environmental benefits and applications that replace or displace the use of natural gas. All biogas, both on-site and directed, provides a valuable opportunity for achieving the state's GHG reduction and renewable and DG policy goals. Bloom maintains that there is sufficient information, both in the record and publicly available, on DBG supporting out-of-state biogas's continued inclusion in California's SGIP. Here we first address why we firmly believe out-of-state-gas should be included in SGIP, and then respond to the PD's reasoning on excluding out-of-state biogas.

Continued inclusion of out-of-state biogas in the SGIP is in line with current State policy. Significantly, there is precedent in existing policy on the use of biogas, from in- or out-of-state, in the Renewables Portfolio Standard (RPS)[2], Low Carbon Fuel Standard[3] and AB 32 Cap and Trade program.[4] Creating dissonance between those programs and SGIP creates a different set of rules for market participants, customers and developers alike, and will create uncertainty in the market. Moreover, DBG sourced from outside of California has been contracted for RPS procurement[5] where utility contracts receive scrutiny by the CPUC. Customers should not be treated by different rules than the utilities that serve them, and these ratepayers should not suffer from market discrimination. It would be contrary to state policy for the CPUC to now reject use of out-of-state biogas in SGIP but continue to allow it for RPS compliance. If out-of-state biogas is an eligible renewable resource for California's IOUs, it should also be an eligible renewable resource for California's ratepayers.

Eliminating out-of-state biogas from SGIP will practically eliminate DBG projects in California. Throughout the US, a significant amount of DBG comes from landfill gas (LFG) facilities, rather than other biogas sources, often due to better commercial viability. This is mainly attributable to LFG having higher volumes and lower costs associated with economies of scale of biogas production relative to other biogas production facilities such as agricultural

[2] DBG is an eligible source for the RPS program and is verified by the CEC. Renewables Portfolio Standard Eligibility Guidebook. http://www.energy.ca.gov/2010publications/CEC-300-2010-007/CEC-300-2010-007-CMF.PDF.
[3] The Low Carbon Fuel Standard does not specify the source of the biogas. Final Regulation Order. http://www.arb.ca.gov/regact/2009/lcfs09/lcfscombofinal.pdf.
[4] Air Resources Board, Cap and Trade Rulemaking, Proposed Amendments To The Regulation For The Mandatory Reporting Of Greenhouse Gas Emissions. http://www.arb.ca.gov/regact/2010/ghg2010/mandatory15dayreg.pdf.
[5] Energy Division Resolution E-4193.

methane. However, in California the Hayden Act[6] prevents LFG facilities from injecting pipeline specification biogas into the pipeline, which ultimately only leaves agricultural methane and wastewater treatment plants as a source for in-state DBG. After extensively searching for biogas resources for our customers, Bloom learned that wastewater treatment plants typically use biogas onsite and agricultural methane for DBG are extremely scarce, and that availability of these sources is extremely limited in California[7]. With the scarcity of in-state DBG sources, the opportunity to meet commercial customer demand with a renewable fuel such as DBG becomes insurmountably challenging. We propose keeping out-of-state DBG in the SGIP, which is consistent with California Energy Commission (CEC) RPS policy, or until the implementation of the Hayden Act can be reviewed to allow the use of LFG in-state[8]. If California State policy changes with regards to the RPS, Bloom proposes that the CPUC revisit the eligibility of out-of-state DBG in SGIP at that time.

As to the PD's reasoning on eliminating the use of out-of-state biogas, the PD cites: (1) verification concerns, (2) lack of local environmental benefit, (3) SGIP's success, and (4) lack of development of an in-state biogas market. However, the PD fails to accurately reflect the record and does not address comments raised by Bloom and others. For example, despite Bloom having provided extensive comments on all of these issues in prior filings, the PD does not discuss the positions taken by Bloom or describe why the PD arrives at a different conclusion. Accordingly, the PD should be revised to accurately reflect the record and address stakeholders' comments.

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[6] Assembly Bill 4037, Hayden, 1988.

[7] EPA Landfill Methane Outreach Program (LMOP) shows 77 operational and 37 candidate facilities in California http://www.epa.gov/lmop/projects-candidates/index.html#map-area, whereas EPA outreach program designed to reduce methane emissions from livestock waste management operations (AgSTAR) only shows 11 operational projects http://www.epa.gov/agstar/projects/index.html.

[8] Per the Hayden Act, the CPUC developed a standard for the use of LFG. The IOUs, rather than implement the standard, simply prohibit the use of LFG. The CPUC could require that the IOUs revise their tariffs in line with CPUC GO 58-A.

The availability of biogas, from in- or out-of-state, is a critical issue impacting the development of renewable baseload DG and center point to the purpose of SGIP.

As noted in Bloom's earlier comments[9], verification and environmental benefits of DGB are clearly addressable. There are many sources, including the CEC and CARB, of expertise on DBG that should be consulted by the CPUC.

The PD references the Decision[10] allowing DBG as reason to now disallow DBG, citing that the two conditions to allow eligibility of DBG were that the SGIP had an excess of unused carryover funds and that an in-state biogas market would develop as a result. The PD states that since there is no longer an excess of funds, and there has been no significant development of in-state biogas supplies since the petition was granted, there are grounds to eliminate the use of out-of-state biogas. Citing the success of the policy and the actual use of funds to install baseload renewable generation in-state is a perverse reason to eliminate the policy. The purpose of SGIP is to deploy clean, carbon reducing DG projects by using the collected funds.

Moreover, the claim that there has been no development of in-state biogas supplies is short sighted. The program modification to allow DBG did not go into effect until May 2010 and once implemented, only lasted until December 31, 2010 when the program was suspended. Seven months is not sufficient time for developers to secure financing, permits, feed stocks, and injection authority, nor is it long enough to develop a market when there remain laws to prohibit the use of the state's largest resources -- LFG. Clearly, what was a "nascent" DBG market a

[9] Please review "Comments Of Bloom Energy, Inc. To The Ruling Requesting Comments On The Revised Staff Proposal Regarding Modifications To The Self-Generation Incentive Program**"** and the subsequent "Reply Comments" dated May 2, 2011 and May 9, 2011, respectively for additional information to address these concerns cited in the PD.
[10] D.09-09-048

mere 15 months ago has not transformed into enough of a vibrant market to warrant such a radical departure from the CPUC's adopted position. We encourage the CPUC to stay the course and, if needed, review this issue again to monitor the progress in developing a more robust market before reversing direction completely.

Additionally, treating biogas differently than other renewable sources would create an unlevel playing field. Fuel sources should be treated as equitably as possible under state laws that are aimed to regulate the energy industry in order to ensure a competitive, low cost market. Excluding out-of-state biogas from eligibility to be used in California is akin to excluding solar and wind electricity generated out-of-state. Bloom Energy believes that solar and wind energy generated out-of-state play a vital role in meeting our state's energy and environmental goals, and biogas sourced from out-of-state should be no different. No fuel, be it natural gas, wood chips, or the sun is required to be produced "in-state". The power generator should be free to procure fuel that meets the policy directive at the lowest cost possible. Additionally, natural gas is 69% of our total energy mix, with 86.5% of the natural gas used in California imported.[11] Importing energy, specifically gas, is not a new policy for California. California should continue to strive to use the cleanest portfolio of energy solutions, and the replacement of natural gas by verifiable DBG should be encouraged, not excluded from eligibility.

Regarding contract terms, Bloom asks that the contract requirements for OSB and DBG be the same in length and condition. In the PD it appears that OSB projects would be held to a 100% fuel requirement and DBG to a 75% requirement. All biogas projects should be held to the same contract requirements.

[11] California Energy Commission, California Major Sources of Energy, http://energyalmanac.ca.gov/overview/energy_sources.html.

Despite all of the aforementioned reasons that the CPUC should continue to include DBG in SGIP, should the CPUC conclude otherwise and deem that some restrictions are necessary for DBG, or additional incentives are necessary for biogas derived from in-state sources, Bloom suggests the following modifications to the SGIP: 1) allow the use of out-of-state biogas until sufficient sources of in-state DBG are available; 2) allow out-of-state DBG, but favor in-state DBG by providing additional incentives for in-state biogas to drive as much development as possible; and 3) if there is little to no project development using in-state biogas, renewable funds should be used for natural gas projects so as not to prejudice emerging technologies that cannot obtain preferable fuels.

VI. Section 4.3 of the PD: Incentive Design

Bloom supports technology based incentives as this acknowledges the differences inherent to different technologies as well as the market progress of individual technologies.

A. Section 4.3.2 of the PD: Structure of Performance-Based Incentive (PBI) Payments – A Hybrid Performance-Based Incentive (PBI)

If the commission proceeds with a hybrid PBI, Bloom requests that once an application is approved, 100% of the expected funds for those projects should be reserved. This will ensure that if the project succeeds and performs as expected the incentive award payment will be available for the project. This is important as the customer and the technology developer now bear even more risk as the incentive award is not paid up front.

B. Section 4.3.3.2 of the PD: Tiered Incentive Rate

Bloom supports maintaining the current tiered incentive structure. Maintaining the current structure, a tiered incentive with a cap at 3 MW, will ensure that SGIP remains an onsite generation program that will further wide deployment of DG for many customers, not just using the limited funding to support a few projects.

C. Section 4.3.3.3 of the PD: Incentive Decline

Bloom supports a declining incentive. This is a program modification that will ensure market development and show the continued success of SGIP. Well developed policies like this will form a healthy competitive market. Bloom reiterates its earlier suggestion of a 15% annual decline, or even possibly a more aggressive 20% annual decline starting in 2013. Given the recent concern over incentive levels, available funds, the number of years that SGIP has existed, and the ability for market participants to plan when given ample notice and regulatory certainty, a faster decline starting in 2013 recognizes the development of distributed generation technologies and the critical role of incentives like SGIP to transform, not permanently subsidize, markets.

D. Section 4.3.4 of the PD: Calculation of SGIP Incentive

Bloom strongly supports the PD's recommendations that the calculation of incentive dollars be awarded based on actual output (a performance based award) and that in order to do so there also be a technology based standard for waste heat capture. Bloom supports incentive payments that require a minimum efficiency and per kWh payment based on the capacity factor, rewarding the best performing projects and penalizing under-performing projects.

Additionally, Bloom asks that all technologies that use biogas are required to meet the same efficiency standards as prescribed by the program for that specific technology. Although a biogas project will be inherently GHG reducing, the CPUC and SGIP PA should still require that a project meets minimum efficiency standards. To ignore this creates a loophole where a customer can commit to using biogas but the developer is not held to an efficiency standard and can inefficiently use a scarce resource. Rather, biogas should be used as efficiently as possible to

maximize all possible benefits from using renewable sources and further the objective of the program to advance the most efficient clean energy technologies.

E. Section 4.3.5 of the PD: Incentive Allocation per Technology Supplier and Installation Contractor

The proposed technology supplier limit will significantly limit customer choice, unbalance a level playing field, skew the market, and perversely create an incentive for technologies that are in less demand. Instead of creating an arbitrary cap that prevents customers from choosing their preferred technology, Bloom encourages the CPUC to, instead of adopting a cap on a single supplier or contractor, adopt policies such as review and modification of incentive levels, declining incentives, and open rules that allow those technologies with the greatest customer demand that meet the policy goals to succeed.

One of the goals of SGIP is to facilitate investment in competitive clean energy technologies in California. Section 4.3.5 accepts the Staff's proposal to cap the SGIP's annual budget at 50% for a single technology provider or installation contractor. However, regardless of its good intentions, this proposed change will punish California companies and technologies for being successful, and effectively undermine the larger goal of the program. For example, if a customer is considering investment in the non-solar DG technologies available in SGIP, they will be economically forced to choose a technology that has not met this cap, or simply opt not to move forward with a clean energy project. If this 50% cap was in place in 2010, it would have led to fewer DG projects moving forward in our state, fewer jobs being created in our state, with the SGIP funds instead continuing to sit unutilized in the IOUs' accounts.

Furthermore, a technology cap is in direct conflict with the broader policy agenda of Governor Brown to widely deploy DG. Alternatively, other policy instruments such as review and modification of incentive levels, declining incentives, and open rules – all of which are

currently included in the PD – will ensure that technologies with the best market potential are deployed in a manner that allows California to meet its energy policy goals. It remains unclear why the CPUC chose 50% as the supplier limitation, other than to punish successful companies, and it would be helpful if the CPUC described more fully the benefits of such a policy. As stated earlier, this policy would limit customer choice and result in fewer DER projects moving forward in California, stifling the impact SGIP can make in achieving our state's environmental, energy and economic goals.

F. Section 4.3.6 of the PD: SGIP Incentive Limit as Share of Project Cost

Bloom supports the PD's determination to limit the incentive share of the project cost, and suggests that a similar requirement be applied for emerging technologies. For emerging technologies the incentive share of project costs may exceed 30% and Bloom appreciates and absolutely agrees with the CPUC that limiting the incentive share of a project's costs to 30% would hinder emerging technologies growth. However, there should be *some* limit on the share of incentive dollars used for a given project. Although Bloom's customers have needed the SGIP to develop a project, the customer has not done so without their share of capital investment. Additionally, clean tech providers also need to take on their own risk and burden through sharing project costs. Bloom therefore proposes that there should be an incentive limit for emerging technologies, perhaps set at 50%, ensuring that the customer and/or developer has some "skin in the game" and the ratepayer funded incentive does not pay for an unreasonable percentage of the project costs.

VII. Section 4.4 of the PD: Budget Allocation

As SGIP includes many differing technologies, allocating specific funds to specific technologies is the equivalent of creating 'carve outs' and technology caps. In a program with many technologies, maintaining equal access to the available funds is critical so as not to pick

winners, but rather let those technologies that are market viable and that meet the program principles compete. Ensuring that SGIP design does not pick technology winners and losers, but rather maintains a competitive program that allows technologies to succeed based on their relevance and ability to meet customers', ratepayers' and policy makers' expectations is a fundamental policy element of a successful incentive program.

Bloom supports the PDs recommendation of an Emerging Technology category to recognize the unique challenges new technologies face. However, the proposed modifications to the SGIP budget allocations as outlined in Section 4.4 would unnecessarily limit customer choices for distributed technologies in California. Accordingly, Bloom asks that the budget allocation be 75% Renewable and Emerging Technologies; 25% Non-Renewable Conventional CHP.

Bloom understands that there is clear state law and policy directive to have a preference and carve out for renewable technologies, thus the 50% Renewable allocation that has been a long-standing design of SGIP. However, delineation between Emerging Technologies and Non-Renewable seems counter to the program principles of market transformation, efficiency, and GHG reduction.

Between 2006 and 2009, SGIP funds were under-utilized, and instead of funding new clean energy projects, ratepayer funds sat dormant in the utility coffers. Over the past couple of years, we have seen the results of the state providing a clear market signal of available state support for clean energy projects. The CPUC should recognize that growth in the form of jobs and projects is a sign of a successful and robust SGIP.

Under the budget as outlined in Section 4.4, emerging technologies would be allocated no more than $18.675 million annually. Assuming the recommended incentives of $2/W- $2.25/W,

Bloom estimates that at most 8.3-9.3 MWs of emerging DER will be deployed. We are deeply concerned that artificially capping the emerging technology market will stifle its development in California, and perversely incentivize less efficient technologies.

Furthermore, there are dozens of companies in California with the potential to make large-scale DER investments across multiple California locations. Given the size and characteristics of California commercial customers' electric loads, the DER market will pursue those customers and projects of this scale in order to achieve maximum market penetration. If the proposed budget allocation is adopted as is, deployment of Emerging Technologies at a large scale will be impossible. To limit such transactions would ensure that the emerging technology market will not realize maturity for the foreseeable future and would be contrary to the Governor's environmental, energy, and economic development goals in California.

Bloom supports the PD's recommendation that funds shift from the Non-Renewable fund to the Renewable or Emerging fund as needed without Advice Letter. Further, we suggest that this shift take place automatically so as not to delay project development or create uncertainty around availability of funding. Additionally, regardless of the budget allocation structure, a project that is renewable (including biogas or storage paired with an eligible renewable project) should be funded entirely from the Renewable fund. As written it appears that the CPUC is proposing a modification as to how renewable projects are accounted for, splitting the incentive between the Renewable fund and the Non-Renewable/Emerging Technology fund. Currently, if a project is renewable, the whole incentive amount is accounted for out of the Renewable category. Bloom opposes this new funding methodology and asks that Renewable projects of any kind are fully funded from the Renewable budget allocation. This provides consistency as well as a more accurate market design for renewable projects to equitably compete against one another.

VIII. Section 4.5 of the PD: Other SGIP Program Modifications

A. Section 4.5.1: Measurement, Evaluation, Marketing and Outreach Budgets and Expenditures

Bloom suggests that any defined budgets and all expenditures for Measurement and Evaluation and Marketing Outreach should be allocated from the existing PAs' budgets. As much of the PAs' budgets have gone unused, Bloom has previously asked that these funds be moved to the program budgets in order to see more project development. This suggestion has not been addressed. At a minimum, budgets for measurement, evaluation, marketing and outreach can be easily funded through existing and future administration budgets.

B. Section 4.5.2: Metering Requirements

Bloom continues to support monitoring system performance to ensure SGIP projects that receive incentives perform as required and we look forward to participating in the Staff workshop. Bloom foresees that our concerns will remain focused on the cost burden of such requirements and whether or not data provided by the customer would suffice if it meets the defined standards.

C. Section 4.5.5: Energy Efficiency Audit

Bloom continues to agree that energy efficiency measures should be reviewed to help customers achieve the most savings and greatest environmental benefit. In order to seamlessly make this adjustment to the project process, Bloom asks that more specificity be given to this requirement. For example, a standardized SGIP energy efficiency questionnaire, similar to those developed for the California Solar Initiative, would be a simple mechanism. Whatever the deemed process is, it should not preclude applications from being filed or an application being processed when the program suspension is lifted. If needed, PAs should include this document

in the Advice Letter filing as an updated to the handbook to create no lapse or gap in the application process.

D. Section 4.5.6: Maximum Reservation Hold Time

Bloom supports re-instating an application fee. In regard to the reservation hold time, Bloom supports the CPUC in developing a policy to deter non-viable projects from preventing the development of viable projects. Bloom asks that the maximum reservation hold time be one extension of six months only, not two. Allowing an additional year is overly generous given the length of time that is already taken to develop the project with the customer leading up to the application process.

E. Section 4.5.7: Warranty Requirement

Bloom agrees that only providing a five year warranty for parts is insufficient to maintain the integrity of the projects supported by SGIP funds. We agree in principle with the requirement of ensuring performance, not just parts, and extending the performance guarantee to 10 years for all non-wind technologies. However, due to the intricacies of financial reporting and accounting for warranty costs, the language of the requirements in this section needs to be precise.

For the new technologies supported under SGIP, like fuel cells and storage, it's nearly impossible to accurately estimate all warranty costs over the next 10 years. Therefore, these technology providers tend to offer shorter warranties, with the option of extended service agreements, rather than 10-20 year warranties. Bloom Energy, for example, offers a power performance guarantee as part of its service agreement, and Bloom strongly supports the CPUC's decision to require all other technology providers to do the same. When moving forward with

updating the warranty requirements, Bloom urges the CPUC to preserve the language in the SGIP Handbook that reads:

> If the standard equipment warranty for any major system component is of insufficient duration to meet the requirement, the customer must purchase, if one is available, an extended warranty to bridge any gap in duration, which may exist.
>
> Then, and only if an application can demonstrate that a standard and/or extended warranty combination is unavailable to meet the warranty requirement – OR if the extended warranty
> requires the purchase of a maintenance contract – the System Owner is to enter into a maintenance contract as a substitute measure.[12]

This SGIP Handbook language recognizes the challenges emerging technologies face with regards to warranty requirements, and provides an alternative method to achieve the same result. Bloom Energy encourages the preservation of this important provision.

Bloom Energy looks forward to participating in the Energy Division staff workshop on the subject of warranty to ensure that the requirements meet the intent of ensuring project performance, but does not impose non-commercial terms.

IX. Conclusion

Bloom very much appreciates the efforts of the Commission to incent DG in California. The SGIP has been, and can continue to be, a key part of our state's energy future. We believe our comments provide the right fixes to an already well-crafted Proposed Decision and we encourage the Commission to carefully weigh the issues presented with the needs of a burgeoning market. Clean energy technology needs the regulatory certainty, proper incentives

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[12] SGIP Handbook, p. 15.

and a level playing field to move forward with the transformation of the energy markets we are all striving for.

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Respectfully submitted,

By:_____/s/_____

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