PUBLIC UTILITIES COMMISSION
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TO PARTIES OF RECORD IN RULEMAKING 12-11-005:

This is the proposed decision of Commissioner Picker. Until and unless the Commission hears the item and votes to approve it, the proposed decision has no legal effect. This item may be heard, at the earliest, at the Commission's June 23, 2016 Business Meeting. To confirm when the item will be heard, please see the Business Meeting agenda, which is posted on the Commission's website 10 days before each Business Meeting.

Parties of record may file comments on the proposed decision as provided in Rule 14.3 of the Commission's Rules of Practice and Procedure.

/s/ RICHARD SMITH for
Karen V. Clopton, Chief
Administrative Law Judge

KVC:jt2

Attachment

Decision **PROPOSED DECISION OF COMMISSIONER PICKER**
(Mailed May 16, 2016)

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)

DECISION REVISING THE SELF-GENERATION INCENTIVE PROGRAM PURSUANT TO SENATE BILL 861, ASSEMBLY BILL 1478, AND IMPLEMENTING OTHER CHANGES

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DECISION REVISING THE SELF-GENERATION INCENTIVE PROGRAM PURSUANT TO SENATE BILL 861, ASSEMBLY BILL 1478, AND IMPLEMENTING OTHER CHANGES

Summary

This decision modifies the Self-Generation Incentive Program (SGIP) to implement changes pursuant to statute, as required by Senate Bill (SB) 861 (2014) and Assembly Bill (AB) 1478 (2014),[1] and to make other program changes to improve SGIP's ability to achieve its goals.

The major changes to SGIP effected by this decision include:

- Rather than making additional funds available every year, SGIP shall be administered on a continuous basis with incentive levels declining based on the capacity reserved in the program, similar to the California Solar Initiative;
- The incentive budgets will be divided between two broad categories: energy storage and generation. Energy storage is allocated 75% of program funds, with 15% of the energy storage budget carved out for projects less than or equal to 10 kilowatts. Generation is allocated the remaining 25%, with 10% carved out for renewable generation projects;
- New incentive levels are adopted as shown in Tables 1 and 2 below;
- Beginning with program year 2017, generation projects consuming natural gas must use a minimum of 10% biogas to receive an SGIP incentive. The minimum requirement increases to 25% in 2018, 50% in 2019, and 100% in 2020;

[1] After the passage of SB 861 (Stats. 2014, Ch. 35), AB 1478 (Stats, 2014, Ch. 664) made minor modifications to Pub. Util. Code. §§ 379.6(e)(1) and 379.6(l)(4) to address impacts on customer peak demand. All code references are to the Public Utilities Code unless otherwise indicated.

- A lottery will replace the first-come, first-served system when applications received on the same day request more incentives than the remaining budget at the current incentive step. Projects which have additional greenhouse gas/grid benefits will be given priority in the lottery;
- Each participating project developer will be capped at a total of 20% of the incentive budget on a statewide basis. This replaces the previous 40% cap that applied to equipment manufacturers; and
- Eligibility for the California Supplier adder now requires third-party certification to show that at least 50% of value added occurs in California.

Table 1: Adopted Incentives for Generation Technologies

	Step 1		Step 2		Step 3	
	Incentive per kW Capacity	Max. Incentive w/ Biogas Adder	Incentive per kW Capacity	Max. Incentive w/ Biogas Adder	Incentive per kW Capacity	Max. Incentive w/ Biogas Adder
Wind[2]	$0.90	n/a	$0.80	n/a	$0.70	n/a
Waste heat to power	$0.60	n/a	$0.50	n/a	$0.40	n/a
Pressure reduction turbine	$0.60	$1.20	$0.50	$1.10	$0.40	$1
Internal Combustion CHP	$0.60	$1.20	$0.50	$1.10	$0.40	$1
Microturbine CHP	$0.60	$1.20	$0.50	$1.10	$0.40	$1
Gas turbine CHP	$0.60	$1.20	$0.50	$1.10	$0.40	$1
Fuel cell CHP	$0.60	$1.20	$0.50	$1.10	$0.40	$1
Fuel cell electric only	$0.60	$1.20	$0.50	$1.10	$0.40	$1

[2] Note that 10% of the incentives in each step shall be reserved for renewable generation technologies, meaning that natural gas fueled technologies may see their incentives decrease to a lower step while renewable technologies may remain at a higher step if they have not met their 10% carve out.

Table 2: Adopted Incentives for Energy Storage Technologies

	Step 1	Step 2	Step 3	Step 4	Step 5
Large Scale Energy Storage (>10 kW)	$0.50/Wh	$0.45/Wh	$0.40/Wh	$0.35/Wh	$0.30/Wh
Small Scale Energy Storage (<=10 kW)	$0.60/Wh	$0.55/Wh	$0.50/Wh	$0.45/Wh	$0.40/Wh

1. Background

1.1. Legislative and Procedural History

The Self-Generation Incentive Program (SGIP) has existed since 2001. The Commission created SGIP in Decision (D.) 01-03-073 in response to Assembly Bill (AB) 970 (Ducheny, Stats. 2000, Ch. 329). AB 970 directed the Commission to provide incentives for distributed generation resources. In 2003, the Legislature passed AB 1685 (Leno, Stats. 2003, Ch. 894.), which, among other things, imposed tighter nitrogen oxide emission standards on combustion-operated generation technologies in SGIP and extended SGIP through 2007. Since 2007, the Legislature has revised and extended SGIP several times.

In 2014, the Governor signed two bills extending and modifying SGIP, Senate Bill (SB) 861 and AB 1478. Pursuant to these newly enacted bills, Pub. Util. Code § 379.6 was revised to direct the Commission to implement certain modifications to the SGIP, including:

1. Authorize collections for SGIP through 2019 (§ 379.6(a)(2));
2. Authorize administration of SGIP through 2020 (§ 379.6(a)(2));
3. Require the Commission to update the factor for avoided greenhouse gas (GHG) emissions on or before July 1, 2015 (§ 379.6(b)(2));[3]

[3] The Commission implemented § 379.6(b)(2) by D.15-11-027, which set a new GHG emissions factor for SGIP.

4. Restrict SGIP eligibility to distributed energy resource (DER) technologies that:
    a. Reduce demand from the grid by offsetting customer onsite energy load (§ 379.6(e)(1));
    b. Are commercially available (§ 379.6(e)(2));
    c. Safely utilize the grid (§ 379.6(e)(3)); and
    d. Improve air quality by reducing criteria air pollutants (§ 379.6(e)(4)).
5. Subject incentive recipients to audits and inspections (§ 379.6(f));
6. Require the Commission to determine a capacity factor for each DER technology (§ 379.6(g));
7. Require the Commission to consider the relative amount and the cost of GHG emission reductions, peak demand reductions, system reliability benefits, and other measurable factors when allocating program funds between eligible technologies (§ 379.6(h)(2));
8. Simplify the requirements needed to qualify for an additional incentive as a California manufacturer (§ 379.6(j)(2));
9. Require the Commission to measure the program's overall success based on:
    a. GHG emissions (§ 379.6(l)(1));
    b. Criteria air pollutant air emission reductions and credits secured (§ 379.6(l)(2));
    c. Energy reductions as measured in energy value (§ 379.6(l)(3));
    d. Reductions of customer peak demand (§ 379.6(l)(4));
    e. Capacity factor (§ 379.6(l)(5));
    f. Avoided costs for grid upgrades and replacements (§ 379.6(l)(6)); and
    g. Improved onsite electric reliability (§ 379.6(l)(7)).

In D.15-11-027, the Commission implemented § 379.6(b)(2) by setting a new GHG emissions factor that determines eligibility to participate in SGIP that:

- Set 350 kilograms (kg)/Megawatts per hour (MWh) (down from 379 kg/MWh, the current standard) as the maximum level of CO2 emissions allowed for technologies participating in program year 2016.
- Decreased the GHG threshold for each successive program year to reflect the increasing renewables targets imposed by SB 350 (2015), with a final GHG threshold of 337 kg/MWh in 2020.
- Established 66.5% (up from 63.5%) as the minimum round trip efficiency for storage technologies.
- Maintained ten years as the period over which new SGIP projects' average emissions should be compared to the grid's emission, with the assumption of 1% annual degradation in SGIP project performance.

Energy Division and the SGIP program administrators commissioned Itron to perform three studies on SGIP to be released in 2015. The first study, the 2013 SGIP Impact Evaluation, was completed in April 2015 and reviews how SGIP has reduced the grid's energy requirements, peak demand, and pollutant emissions. The second study, the 2015 SGIP Cost Effectiveness Study, was released on November 23, 2015. The report performs cost effectiveness analyses of SGIP technologies and uses the results to make recommendations for continued participation in the program. The third study, which will cover the topic of market transformation, will not be completed until later this year.

1.2. Energy Division Staff Proposal

On November 23, 2015, the assigned Commissioner issued a ruling asking parties to comment on an attached Energy Division *Staff Proposal to Modify the*

Self-Generation Incentive Program pursuant to SB 861 and the Commission's Own Motion (Staff Proposal).[4] The Staff Proposal provided a comprehensive review of all facets of SGIP, and recommended modifications both in response to the requirements of SB 861 and Energy Division's experience overseeing SGIP. The Staff Proposal covered numerous aspects of SGIP program, including:

Program Goals and Requirements
Technology Eligibility and Performance Requirements
Usage of Biogas
Incentive Budget and Rebate Design
Rules Governing Performance Based Incentives
Operating Requirements for Energy Storage
Dual Participation in Demand Response Programs
Individual Manufacturer and Installer Caps
California Supplier Adder
Maximum Project Size Caps
(DC) Microgrids
Locational Adders
Rules for Adding New Technologies and Making SGIP Handbook Changes
Energy Efficiency Audit Requirements
System Inspection Rules
Operation and Maintenance (O&M) Project Cost Caps
Measurement, Evaluation and Public Reporting
Marketing and Outreach

Parties filed opening comments to the Assigned Commissioner's Ruling and attached Staff Proposal on January 7, 2016 and replies on January 22, 2016.[5]

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[4] The Staff Proposal is available at on the Commission website under the Proceedings link and http://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=155978793.

[5] Opening comments were filed on January 7, 2016 by Bloom Energy, Inc. (Bloom), NLine Energy, Inc. (NLine), The Utility Reform Network (TURN), the California Clean DG Coalition (CCDC), the Office of Ratepayer Advocates (ORA), Stem, Inc. (Stem), FuelCell Energy, Inc., (FCE), the California Solar Energy Industry Association (CALSEIA), Robert Bosch LLC (Bosch), the California Energy Storage Alliance (CESA), jointly by the Southern California Gas Company

Footnote continued on next page

Parties raised additional issues not covered in the Staff Proposal, including proposals related to changing rules governing application fees, fuel cell net energy metering, establishment of a lottery system to award incentive reservations, and the minimum customer contribution to project costs.

On February 25, 2016 the assigned Commissioner issued a ruling seeking parties' comments on a proposal to require natural-gas fueled technologies to use a percentage of biogas to remain eligible. Parties filed opening comments on March 10, 2016 and reply comments on March 15, 2016.[6]

2. Discussion

Today's decision adopts comprehensive modifications to SGIP. We rely on Energy Division's Staff Proposal, party comments on the Staff Proposal, and the assigned Commissioner's ruling as a starting point for developing modifications to SGIP.

(SoCalGas) and San Diego Gas & Electric Company (SDG&E), the National Fuel Cell Research Center (NFCRC), Tesla Motors, Inc. (Tesla), jointly by the Sierra Club and the National Resources Defense Council (NRDC), Doosan Fuel Cells America (Doosan), Green Charge Network LLC (Green Charge Networks), Swell Energy, Inc. (Swell Energy), Pacific Gas and Electric Company (PG&E), Foundation Windpower, LLC (Foundation Windpower), SolarCity Corporation (SolarCity), Commercial Energy, Center for Sustainable Energy (CSE), and Johnson Matthey Fuel Cells, Inc. Opening comments were late filed on January 8, 2016 by JuiceBox Energy, Inc. (JuiceBox), Nissan North America (Nissan), Southern California Edison Company (SCE), and SunVerge Energy, Inc. (SunVerge). Reply comments were filed January 19, 2016 by Custom Power Solar, January 21, 2016 by CSE, and January 22, 2016 by NLine, Bloom, CCDC, FCE, Bosch, NFCRC, ORA, jointly by SoCalGas and SDG&E, jointly by Sierra Club and NRDC, Tesla, PG&E, CESA, Foundation Windpower, Green Charge Networks, Stem, and SolarCity. Reply comments were late filed on January 25, 2016 by SunVerge and on January 28, 2016 by Swell Energy.

[6] Opening comments were filed March 9, 2016 by Maas Energy Works, Inc., and March 10, 2016 by California Bioenergy LLC, the Bioenergy Association of California, PG&E, SoCalGas, SCE, Doosan, NFCRC, FCE, CCDC, CESA, CSE, ORA, NLine, and Bloom. Reply comments were filed March 15, 2016 by Bloom, FCE, SolarCity, CESA, ORA, PG&E, and Sierra Club.

2.1. SGIP Program Goals

The Staff Proposal suggested three primary program goals in response to SB 861 (2014) and party comments: 1) Environmental, 2) Grid Support, and 3) Market Transformation. We discuss each of these goals in turn below.

2.1.1. Environmental Goals

The Staff Proposal's environmental goals included the reduction of GHGs, the reduction of criteria air pollutants and the limitation of other environmental impacts (such as water usage). For the reduction of GHGs, the Staff Propoal suggested two pathways to accomplish the goal. First, to emit fewer GHGs than the eligibility threshold. Second, to facilitate integration of renewables, which is especially applicable to storage technologies.

In comments to the Staff Proposal, parties generally agreed with these three environmental goals, though in some cases greater specificity was requested. In particular, CSE recommended that the reduction of water usage be an explicit environmental goal.[7]

On balance, we find that the Staff Proposal's suggested environmental goals meet the necessary statutory requirements while providing an adequate level of specificity for high-level program goals. We adopt these goals going forward.

2.1.2. Grid Support

The Staff Proposal's grid support goals included: 1) Reduce or shift peak demand;[8] 2) Improve efficiency (e.g., fewer line losses) and reliability of the

[7] CSE January 7, 2016 Opening Comments at 1–2.

[8] § 379.6(a)(1).

distribution and transmission system;[9] 3) Lower grid infrastructure costs;[10] 4) Provide ancillary services;[11] and 5) Ensure customer reliability of DER.[12] Parties generally supported these criteria for defining grid support, though greater specificity was sought.

We find that the Staff Proposal's suggested grid support goals meet the necessary statutory requirements and are broadly supported. We adopt them as proposed.

2.1.3. Market Transformation

The Staff Proposal's market transformation goal stated that the "SGIP should support technologies that have the potential to thrive in future years without rebates."[13] Party comments on this goal diverged significantly, with some parties arguing for its inclusion, some arguing for its removal and others proposing refinements. In particular, CSE proposed that the Market Transformation goal be defined as "the strategic intervention in defined markets to create lasting change that increases the adoption and penetration of distributed energy resource technologies."[14]

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[9] §379.6(a)(1).

[10] § 379.6(a)(1).

[11] Ancillary services are not listed in the statute but are an important form of grid support.

[12] System reliability is presented as an SGIP goal in § 379.6(a)(1) and required to be used as a criterion in allocating funding across technologies in § 379.6(h)(2), while customer reliability is required to be measured in gauging program success in 379.6(l). Staff proposes that the customer reliability criterion be assumed to have been met, a priori, because customers would not choose technologies which rendered their provision of electric service less reliable.

[13] Staff Proposal at 8.

[14] CSE January 7, 2016 Opening Comments at 2.

Unlike environmental and grid-related goals, market transformation is difficult to measure, yet it is a core goal of programs like SGIP. CSE's proposal captures the essence of what market transformation is seeking to accomplish, but lacks a clear metric to be used as part of the evaluation of this program. Market Transformation represents a key goal of this Program, and as such should be maintained, even if it's difficult to quantify.

Consistent with the environmental and grid support goals, we find this proposed goal to be an important one for the program, and we further find that staff's proposed language adequately captures the spirit of the goal. Therefore, we adopt the goal as stated in the Staff Proposal.

2.2. Statutory Requirements

The Staff Proposal also included two statutorily mandated program requirements: 1) maximize ratepayer value; and 2) provide for an equitable distribution of costs and benefits of the program.[15] To accomplish the first requirement, the Staff Proposal suggested that the Program should: 1) lower rebates for those qualifying technologies which meet too few of the program goals; and 2) lower rebates for those technologies that are already cost effective from the participant's perspective. Subsequent sections of the Decision provide more detail regarding the lowering of SGIP incentive levels.

The second statutory criteria addressed in the Staff Proposal was to require an equitable distribution of the costs and benefits of the program. The Staff Proposal stated as follows:

> Costs are currently allocated across all customer classes, with residential customers absorbing roughly half the cost of the program

[15] CSE January 7, 2016 Opening Comments at 2.

> even though just one percent [footnote omitted] of rebates go to projects with residential host customers. Staff proposes that future general rate cases (GRCs) adjust this allocation, so that costs are borne by customer classes more in proportion to their participation. The utilities should include reallocation proposals in their next GRC Phase II applications.[16]

Parties' comments on these two new criteria were generally supportive, with the utilities seeking less prescriptive requirements.

With this in mind, we find it is reasonable to adopt the following criteria for SGIP program design: 1) Maximize Rate Payer Value; and 2) Provide Equitable Distribution among Customer Classes. While we support Staff's recommendation that the utilities should file cost allocation proposals, we disagree with the proposed process, which will require an excessive amount of time to implement.

PG&E is scheduled to file an upcoming GRC Phase 2 application, which is currently expected in June for Test Year 2017. SCE's GRC is scheduled for Test Year 2018. SDG&E and SoCalGas will not have another GRC until Test Year 2019, or possibly 2020. These schedules would result in two years of cost reallocation for SCE customers and either one or no years of cost reallocation for SoCalGas and SDG&E customers. In order to provide a more material impact, we prefer to consider proposals that could be implemented in the beginning of 2017.

Rather than wait for the filing of GRC Phase 2 applications, the utilities should file cost allocation proposals in Tier 3 advice letters, which shall be filed no later than 60 days after the effective date of this decision.

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[16] Staff Proposal at 8.

We encourage the investor-owned utilities (IOUs) to confer with each other and the other parties. To the extent the IOUs can reach consensus, they should strive to file similar proposals.

2.3. Technology Eligibility Requirements

The Staff Proposal suggests certain requirements for participating SGIP technologies, based both on statutory requirements and prior party comments in this proceeding. The statute requires that each SGIP technology, either directly or indirectly:

1. Lower GHG emissions;[17]
2. Lower or shift peak load to off-peak;[18]
3. Be safe and commercially available;[19] and
4. Reduce criteria air pollutants.[20]

The Staff Proposal suggests two more criteria as preferable qualities, but not strict requirements.

5. Societal benefits. Technologies should provide a net benefit to society, as measured by the Societal Total Resource Cost (STRC) test, or have the potential to do so.
6. Market transformation. Technologies should demonstrate the possibility of becoming self-sufficient, or attaining market transformation.

In party comments, a consensus exists in favor of the first four criteria (GHG, lower peak, safe/commercial, criteria pollutants), although some

[17] § 379.6(b).

[18] § 379.6(e)(1).

[19] § 379.6(e)(2,3).

[20] § 379.6(e)(4).

uncertainty remains with regards to the definition of "safe and commercially available."

The 2016 SGIP Handbook Section 4.2.1 regarding Commercial Availability states, "Equipment must have at least one year of documented commercial availability at the time of Reservation Request. Alternatively, equipment may be eligible if system certification is obtained from a Nationally Recognized Testing Laboratory (NRTL) indicating that the technology meets the safety and/or performance requirements of a nationally recognized standard."[21]

The Staff Proposal suggests that a requirement be made that all eligible technologies receive a safety certification from an NRTL.

We adopt the four primary criteria from the Staff Proposal. As described above, the Commission recently adopted a revised GHG standard for SGIP, in D.15-11-027, and we do not revisit the issue in this decision. For the safe and commercially available requirement, we adopt the requirement that within one year of the effective date of this decision, all eligible technologies must be certified for safety by an NRTL. The SGIP Program Administrators may allow a developer to apply for incentives for a device that has not yet received certification from an NRTL if the certification process is underway. However, funds shall not be disbursed until certification is complete.

There is some disagreement among parties in regards to whether societal benefit and market transformation should be included as eligibility criteria. CESA, Commercial Energy, Green Charge Networks, and SolarCity all take the position that an analysis should be used to establish technology eligibility.

[21] 2016 SGIP Handbook at 45.

PG&E agrees broadly but prefers the use of a simple TRC method rather than adding other societal costs and benefits. While CSE does not agree that STRC should determine eligibility, in part because the results are too sensitive to input assumptions, CSE supports using STRC results to inform incentive levels. Bloom, CCDC, and NFCRC oppose the use of STRC to determine eligibility and critique the assumptions and data used in the SGIP Cost-Effectiveness Study.[22]

Similarly some parties, including CCDC, PG&E, and NFCRC, critiqued the market transformation criterion pointing out the challenges of estimating the future costs of participating technologies.

We acknowledge the high degree of uncertainty involved with calculating STRC and evaluating market transformation potential. However, these goals should play some role in SGIP to ensure that ratepayer funds are spent productively. For these reasons, we adopt societal benefits and market transformation as "soft" criteria that should be considered, but not strictly required. These criteria could be used in the future to evaluate the eligibility for any new technologies that seek eligibility to participate in SGIP to screen out technologies with low STRC scores or that cannot demonstrate a reasonable pathway to self-sufficiency. We note that the STRC test should be used unless or until superseded by a uniform societal cost test under consideration in Rulemaking (R.) 14-10-003.

[22] Itron, *2015 Self-Generation Incentive Program Cost-Effectiveness Study, Final Report*, October 2015, available at http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=7889.

2.3.1. Determination of Eligible Technologies

The Staff Proposal finds that all technologies currently eligible for SGIP meet the four SGIP technology requirements, with two exceptions. The Staff Proposal recommended that natural-gas-fueled pure electric fuel cells and natural-gas fired microturbines no longer be eligible for incentives. For microturbines, the Staff Proposal recommended exclusion from SGIP due to low GHG and criteria pollutant benefits and benefit/cost ratio (using the STRC approach) of 0.67. In the case of electric-only fuel cells, the reasons for discontinuing eligibility were their failure to meet the revised GHG emissions threshold and a low benefit/cost ratio of 0.69.

CESA, Green Charge Networks, CALSEIA, Tesla, Sierra Club, and Juicebox support the staff recommendation to exclude natural gas fueled electric-only fuel cells and microturbines from SGIP, generally citing the market transformation, STRC, and environmental performance findings of the Cost-Effectiveness Study. PG&E, CCDC, and Bloom argue that the currently-eligible technologies should remain eligible.

This Decision diverges from the Staff Proposal regarding the exclusion of microturbines and electric-only turbines operating on natural gas. In D.15-11-027, this Commission adopted an updated methodology for calculating whether an SGIP technology can be deemed to reduce GHGs. As long as a technology meets the performance and reporting standards set forth in D.15-11-027, then that technology should be deemed to have met the GHG reduction requirement. The Staff Proposal incorrectly applied the average GHG emission of the existing fleet of electric-only fuels to the ten-year average GHG emission rate requirement adopted in D.15-11-027. Because the GHG eligibility threshold assumes performance degradation over time, the GHG emission rate

requirement for the first year is lower than the ten-year average rate. In order to pass the GHG eligibility screen, GHG-emitting technologies must only demonstrate that their GHG emission rate will fall below the average first-year rate (shown in Appendix B of that decision) during the first year of operations. As long as a technology is certified to emit less than the first-year emission rate for the program year for which incentives are sought, the technology passes the GHG eligibility screen.

2.4. Biogas Requirements

The Staff Proposal weighed a variety of policy options related to both on-site and directed biogas. The Staff Proposal evaluated removing directed biogas from the SGIP due to its low societal benefits, administrative challenges, and low compliance rate shown in the 2014 Renewable Fuel Use Report No. 24.[23] However, due to strong support for all types of biogas, the Staff Proposal recommended keeping directed biogas in the SGIP. To support the market and achieve program goals, the Staff Proposal identified two recommendations.

The first is focused on projects utilizing 100% onsite biogas, where the program administrators can confidently determine at project commencement that no natural gas will be consumed. For these projects, Staff recommends that the program pay the project at the full onsite biogas rate, through five years of normal Performance-Based Incentive (PBI) monitoring and payments.

The second, which is for blended projects - where the biogas is either onsite or directed – is that the program should prorate the rebate payment to the percentage of fuel that is actually consumed, based on audits which are

[23] *Self-Generation Incentive Program: Renewable Fuel Use Report No. 24.* August, 2015. Available at http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=7910

conducted throughout the five-year PBI period. The payments should not be made until the annual audit is conducted and the Renewable Fuel Use Report provides data on the amount of biogas consumed.

In comments, parties, including PG&E, SoCalGas, SCE, CCDC, and ORA, are generally supportive of the Staff Proposal. CSE argues that directed biogas should be removed from the SGIP due to the lower benefits and difficulty to administer and verify, noting that it would be more appropriately supported through other programs such as cap and trade. In the case of on-site biogas – which CSE supports – they note that dairies do not often have the necessary gas capture and clean-up equipment and therefore need financial support. CSE notes that on-site biogas projects have barriers independent of price and recommends a workshop to address departing load charges and other policies that may impede widespread adoption of these projects. Fuel Cell Energy and NFCRC support both on-site and directed biogas, but recommend that the rebate levels be equal. However, Fuel Cell Energy also notes that the greatest opportunity for reducing methane emissions comes from onsite biogas projects using otherwise vented methane.

The Bioenergy Association of California posits that SGIP incentive amounts should be correlated with the carbon intensity of the resource, such that the highest incentives go to the cleanest technologies (as well as those which provide grid benefits such as flexible generation).

Bloom supports directed biogas and proposes that SGIP adopt the California Energy Commission's biogas eligibility criteria for the Renewable Portfolio Standard. Specifically, Bloom recommends that a directed biogas project "must meet the currently applicable RPS eligibility requirements for biogas injected into a natural gas pipeline."

This Decision adopts both of the Staff Proposal requirements for biogas and Bloom's proposal to incorporate the California Energy Commission's directed biogas Renewable Portfolio Standard (RPS) eligibility requirements into SGIP. The SGIP directed biogas eligibility requirements were adopted in D.11-09-015 prior to the finalization of revised RPS eligibility requirements by the California Energy Commission, and the SGIP directed biogas eligibility requirements should be revised to be aligned with those of the California Energy Commission.

2.5. Minimum Zero Emission Fuel Blending Levels

In the February 25, 2016 Assigned Commissioner Ruling on zero emission fuel blending, the Commissioner sought comments on whether to require all natural gas fueled generation technologies to blend some quantity of zero emission fuel as a pre-condition of participating in SGIP.

In comments, a number of parties opposed the adoption of a minimum zero emission fuel blending requirement. The California Bioenergy supports clean onsite generation, but finds that instead of a minimum fuel requirement, incentives should be based on GHG reductions. California Bioenergy also argues against this recommendation and notes that capturing fugitive methane is a better approach for reducing GHGs.

Other parties opposed to setting such a requirement refer to the fact that natural gas generation technologies participating in SGIP already achieve GHG reductions as a justification for not setting a minimum zero emission fuel standard. PG&E states that SGIP has a GHG emissions factor which will ensure reductions, and that it was revised as recently as last year.

Some parties that supported a zero emission fuel requirement offered proposals for implementing it. Specifically, Bloom proposed that, starting in

2018, all new projects be required to utilize 25% biogas. This requirement would increase to 50% for new project in program year 2019, and 100% for program year 2020.

We acknowledge the position of some parties that the GHG eligibility factor we recently approved ensure that all eligible technologies will achieve some degree of GHG reductions, adopting a zero emission fuel requirement is another important step towards supporting SGIP's GHG reduction and market transformation goals. California's long term GHG reduction goals require actions that will push natural gas fueled technologies further in their GHG reductions. The need to support market transformation of zero emission fuels argues for adopting a zero emission fuel blending requirement in SGIP.

Overall, Bloom's proposal represents the most balanced proposal to set a requirement for minimum zero emission fuel blending. We therefore adopt the following requirements for natural gas fueled generation technologies, based on Bloom's proposal, to blend zero emission fuels with one significant change, which is to set a minimum fuel blending requirement starting in 2017.

Table 3: Biogas Fuel Blending Requirement

Program Application Year	% Biogas Requirement
2016	0%
2017	10%
2018	25%
2019	50%
2020	100%

Given that this requirement represents a significant change to the SGIP program, the Program Administrators are directed to develop an implementation plan within 60 days of the approval of this Decision. This implementation plan will be served to the Service List of this proceeding and will

be presented at a workshop no later than 80 days from the approval of this Decision.

2.6. Incentive Budget

The Staff Proposal suggests that the SGIP incentive budget allocate 75% of incentive dollars to energy storage and 25% to generation technologies. The Staff Proposal's rationale for this breakdown of incentives is based 2015 participation, where energy storage technologies received 55% of the incentives, as well as the Staff Proposal recommendation that electric-only fuel cells not be eligible for the Program.

In comments, party positions varied widely, ranging from energy storage companies like Solarcity and Green Charge Networks strongly supporting the Staff Proposal to SoCalGas arguing that all incentives in their service territory should go to generation technologies. Parties also raised points related to whether certain technology types or project sizes should receive carve-outs. In particular, Foundation Wind argued for a 10% carve-out for renewable generation while SunVerge Energy argued that residential energy storage projects should receive a budget carve-out of 30%.

Numerous parties argued about what the right breakdown in the incentive budget should be. In the end, the Staff Proposal's 75%/25% split strikes the right balance of the programs goals of reducing GHGs, providing grid support and enabling market transformation. Energy storage is the fastest growing source of projects for SGIP and represents the most scalable set of technologies to achieve the program goals.

Although we do not accept the Staff Proposal's recommendation to keep electric-only fuel cells out of the program, we find that a significant weighting of

incentives towards energy storage is justified in light of the program's goals, and as a result we adopt the Staff Proposal's 75%/25% incentive budget split.

This Decision also finds that setting minimum incentive carve-outs for renewables in the Generation technology category and energy storage systems that are smaller than 10 kilowatt (kW) is reasonable. In both cases, the goal of supporting market transformation justifies setting aside some minimum quantity of incentive money.

For renewable generation technologies, Foundation Windpower argued that a 10% set aside of all program funds represents a reasonable minimum threshold. A 10% set aside of all program funds represents too large of a set aside for a single sub-category of technology. Instead, a 10% set aside within the generation technology category represents a guaranteed level of funding that balances the important goal of supporting market transformation while not creating too much of a disadvantage for non-renewable generation technologies.

For small scale energy storage, SunVerge Energy argued that storage systems under 10 kW should be granted a 30% carve-out due to the fact that only 3% of energy storage project MWs have gone to support residential customer scale projects. There are currently numerous initiatives under way at the Commission that may support the need for residential customers to adopt energy storage. The coming development of default time of use rates, future changes to Net Energy Metering and the emergence of demand response opportunities for residential customers all suggest that energy storage market development is needed in the residential space. The currently low level of participation in SGIP by this customer category supports the argument that SGIP design needs to consider the unique needs of residential customers. With that in

mind, this Decision sets a 15% carve-out from the energy storage budget category for energy storage projects that are 10 kW and smaller.

In setting these two budget carve-outs, we recognize that there may be unintended consequences to program design and implementation. With that in mind, we find that the SGIP Program Administrators may seek to amend the size of these carve-outs by advice letter filing no earlier than one year from the ratification of this Decision.

Additionally, to facilitate administration of these carve-outs, the total amount of incentive set-aside for renewable generation technologies and small scale energy storage should be accounted for across all four Program Administrators and not per Program Administrator. The practical implication being that the carve-out can be exhausted by projects in one or more service territory, and does not need to be applied to the budget of each Program Administrator separately. That said, the carve-out should be applied per incentive step, with at least 10% and 15% of each incentive step, as described in the following section of this decision, reserved for renewable generation and small-scale energy storage.

2.7. Incentive Design

The Staff Proposal developed a five-part analytical framework to set incentives and a step-based incentive disbursement system. In both cases, we find that the Staff Proposal's approach strikes a good balance between the program goals and administrative effectiveness. However, we adopt some changes to the Staff Proposal based on party comments and program experience. Below is a table outlining the 2015 incentives and the Staff Proposal's initial rebate for all technologies.

Table 4: Summary of the Staff Proposals
Proposed Initial Capacity Rebate Levels ($/W)

Technology	Current Rebate (2015)[24]	Proposed Initial Rebate
Wind	$1.07	$0.90
Waste heat to power	$1.07	$0.60
Pressure reduction turbine	$1.07	$0.60
ICE CHP natural gas	$0.44	$0.60
ICE CHP onsite biogas	$1.90	$1.50
ICE CHP directed biogas	$1.90	$1.80
Microturbine CHP onsite biogas	$1.90	$1.50
Microturbine CHP directed biogas	$1.90	$1.80
Gas turbine CHP natural gas	$0.44	$0.60
Gas turbine CHP onsite biogas	$1.90	$1.50
Gas turbine CHP directed biogas	$1.90	$1.80
Fuel cell CHP natural gas	$1.65	$0.60
Fuel cell CHP onsite biogas	$3.11	$1.50
Fuel cell CHP directed biogas	$3.11	$1.80
Energy storage – 2 hour	$1.46	$1.20
Energy storage – 4 hour	--	$2.00
Energy storage – 6 hour	--	$2.40

This decision amends the Staff Proposal in several respects. First, we must adopt incentive levels for electric-only fuel cells and natural gas-fired microturbines, which we have determined should remain eligible for the program.

Second, we are now requiring that all natural gas fueled technologies utilize a minimum quantity of zero emission fuel, with any fuel usage above this minimum subject to a pro-rated incentive adder. A more detailed discussion of prorating incentives is included in a subsequent section of this decision. As a

[24] These were the incentive levels in effect at the time the Staff Proposal was issued.

result, the decision does away with a static biogas adder and instead adopts an incentive design that sets a minimum rebate and allows projects that utilize more biogas to increase the incentive up to the maximum rebate level.

Third, we find that the initial incentive proposed for energy storage in the Staff Proposal is too high. This finding is based on program experience, where the entire budget of the SGIP program has been reserved by energy storage projects within minutes of the program opening during both PG&E's limited release of SGIP incentives in December 2015 and the 2016 SGIP opening that occurred in February 2016.

Fourth, instead of continuing to award incentives based on the kW size of the project, this decision changes the basis of project sizing to kWh, such that the quantity of kWh associated with a given energy storage project will determine the incentive that the project receives.

Fifth, this decision creates a distinct incentive for small scale energy storage projects, below 10 kW in size. In an effort to support market development in the residential customer class, this decision finds that it is necessary to set a higher incentive level for these types of energy storage projects, relative to larger energy storage projects.

The following initial incentives that we adopt are based upon the Staff Proposal with modifications made reflecting the above amendments.

Table 5: Current and Revised Initial Incentive Levels ($/Wh)

Technology	Current Rebate	Adopted Initial Incentive	Adopted Max Incentive w/ bio gas adder
Generation Technologies			
Wind	$1.02	$0.90	n/a
Waste heat to power	$1.02	$0.60	n/a
Pressure reduction turbine	$1.02	$0.60	$1.20
ICE CHP	$0.42	$0.60	$1.20
Microturbine CHP	$0.42	$0.60	$1.20
Gas turbine CHP	$0.42	$0.60	$1.20
Fuel cell CHP	$1.49	$0.60	$1.20
Fuel cell electric only	$1.49	$0.60	$1.20
Energy Storage			
Large Scale - >10 kW			
Energy storage	$1.31	$0.50/Wh	n/a
	--		n/a
Small Scale - <=10 kW			
Energy storage	$1.31	$0.60/Wh	n/a
			n/a

We next move to the design of the incentive steps and the budget allocations per incentive step. As a starting point, this decision finds that the Staff Proposal's step-down design, whereby specific quantities of incentive budget are allocated to specific incentive levels, with incentives declining upon full reservation of the budget at a previous incentive step, is reasonable.

We agree with the Staff Proposal's recommendation to establish five incentive steps for the storage technology category. However, for generation technologies, we find that fewer incentive steps are merited given the significant reduction in the budget being allocated to this category. Instead of setting five steps for generation technologies, we set three steps for all generation technologies.

We also amend the Staff Proposal's rebate step declines. Specifically, we find that it is reasonable to use a static dollar amount to reduce incentives between incentive steps instead of the percentage approach that has been used by SGIP in the past. The justification behind pursuing this approach is first and foremost administrative ease. By reducing incentives by $0.10 for generation technologies and $0.05 for storage technologies at each incentive step-down, program participants will have an easy to understand benchmark for where incentives are going.

Finally, this Decision finds that an equal split of incentive across each incentive step is the most administratively efficient manner to allocate the budget within each incentive category.

The following incentive steps that we adopt are based upon the Staff Proposal with modifications made reflecting the above amendments.

Table 6: Adopted Incentives for Generation Technologies ($/W)

	Step 1		Step 2		Step 3	
	Incentive per Watt Capacity	Max. Incentive w/ Biogas Adder	Incentive per Watt Capacity	Max. Incentive w/ Biogas Adder	Incentive per Watt Capacity	Max. Incentive w/ Biogas Adder
Wind[25]	$0.90	n/a	$0.80	n/a	$0.70	n/a
Waste heat to power	$0.60	n/a	$0.50	n/a	$0.40	n/a
Pressure reduction turbine	$0.60	$1.20	$0.50	$1.10	$0.40	$1
Internal Combustion CHP	$0.60	$1.20	$0.50	$1.10	$0.40	$1
Microturbine CHP	$0.60	$1.20	$0.50	$1.10	$0.40	$1
Gas turbine CHP	$0.60	$1.20	$0.50	$1.10	$0.40	$1
Fuel cell CHP	$0.60	$1.20	$0.50	$1.10	$0.40	$1
Fuel cell electric only	$0.60	$1.20	$0.50	$1.10	$0.40	$1

[25] Note that 10% of the incentives in each step shall be reserved for renewable generation technologies, meaning that natural gas fueled technologies may see their incentives decrease to a lower step while renewable technologies may remain at a higher step if they have not met their 10% carve out.

Table 7: Adopted Incentives for Energy Storage Technologies ($/Wh)

	Step 1	Step 2	Step 3	Step 4	Step 5
Large Scale Energy Storage (>10 kW)	$0.50/Wh	$0.45/Wh	$0.40/Wh	$0.35/Wh	$0.30/Wh
Small Scale Energy Storage (<=10 kW)	$0.60/Wh	$0.55/Wh	$0.50/Wh	$0.45/Wh	$0.40/Wh

2.8. Project Size

The Staff Proposal supports continuing to allow projects greater than 1 MW to participate in SGIP, with capacity above 1 MW receiving a diminished incentive. Currently, SGIP has no absolute limit on size of projects that can participate, but incentives are reduced to 50% for the second MW of capacity, 25% for the third MW, and no incentive for capacity above 3 MW. The Staff Proposal suggested that projects be allowed to receive incentives for capacity up to 5 MW. Several parties, including Green Charge Networks, Bloom, CESA, Bosch, Stem, NFCRC, and SolarCity opposed expanding the project size cap for incentives. Generally, these parties noted that the program is already oversubscribed and increasing the incentive size cap would exacerbate the problem. SolarCity and CSE proposed reducing the incentive size cap to 2 MW and 1 MW respectively. We agree with most of the parties' comments on this point and do not adopt the change proposed by staff. Instead we will retain the current size cap and rebate levels.

Table 8: SGIP Project Size Caps and Rebate Levels

Project size	<1 MW	1-2 MW	2-3 MW
Generation Technologies	100%	50%	25%
Energy Storage Technologies	100%	50%	25%

2.9. Load-Based Rebate Caps for Paired Storage

The Staff Proposal noted that some ambiguity exists in regards to how the current SGIP rules should be applied to energy storage paired with generation. Specifically, it is unclear whether paired storage is limited by the lower of or the greater of the customer's load or the paired generator's capacity. In addition, this language appears to contradict the direction in D.11-09-015, which states, "No minimum or maximum size restrictions given that project meets onsite load.[26] As a solution, the Staff Proposal suggests that the SGIP Handbook be amended to explicitly state that the system sizing requirements for energy storage paired with generation should be based solely on the customer's previous 12-month annual peak demand. This was supported by PG&E, CSE, Bosch, CALSEIA, Tesla, and SolarCity. Green Charge Networks also supports this recommendation, with the caveat that a 10% buffer be added for extra flexibility. We find that the language proposed in the Staff Proposal is a reasonable clarification. The SGIP Handbook should be clarified to clearly indicate that the size of the SGIP storage system shall only be limited by the customer's load, not the paired capacity.

2.10. Locational Adder

To maximize the grid and ratepayer benefits of SGIP, the Staff Proposal introduced the concept of implementing a locational adder. With a locational adder, benefits (or costs) associated with an SGIP project would be reflected in SGIP payments. Most parties support the concept of implementing a locational adder, though PG&E, SCG, SDG&E, and SCE note that the Distribution

[26] D.11-09-015, Published September, 2011: Available online at: http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/143459.PDF.

Resources Plan (DRP) proceeding (R.14-08-013) will inform these locational benefits in the near future. PG&E notes that implementing a locational adder now would overlap with DRP efforts. CSE, CESA, and TURN all support the staff's proposal to address a locational adder at some future date. We agree that once more detailed information is available – likely through the DRP – evaluating and implementing locational benefits would contribute to program goals. We authorize Energy Division to conduct analysis and take the necessary steps to develop a proposal for a locational adder for this proceeding, or a successor proceeding, once a final locational net benefits methodology has been adopted in R.14-08-013. Any activity to develop locational adders should also coordinate closely with work in the Integrated Distributed Energy Resources proceeding (R.14-10-003).

2.11. Cap on Operation & Maintenance

Section 3.3.3 of the 2015 SGIP Handbook includes "Warranty and/or maintenance contract costs" in the list of items which can be included in total project costs. The Staff Proposal suggests limiting this component to 10% of the claimed project costs, which CESA advocated in their comments on the Assigned Commissioner's Ruling. The intent behind this 10% cap on O&M costs is to ensure accurate data and prevent inflated project costs. This recommendation is supported by PG&E, Bosch, and CESA, although Bosch supports a 10% cap to the warranty during the warranty period. Bloom argues participant cost caps would be best applied to capital costs only. NFCRC opposes the 10% cap, arguing that it is too restrictive. We adopt this recommendation from the Staff Proposal because we believe that ratepayers' interests will be protected by discouraging project cost inflation and improving the accuracy of reported project costs.

2.12. Performance Based Incentive Rules

The SGIP adopted performance-based incentive payments via D.11-09-015 in 2011. The intent was to reward and ensure continued performance of projects funded by the program. Most parties have expressed support for the existing PBI payment structure, and the Staff Proposal evaluated the effectiveness of the payment structure while addressing two recommendations for modifications. One party, Etagen, suggested reducing the payout period from five years to three years to save administrative costs. SoCalGas and SDG&E support the existing PBI, but recommend revisiting the option of adjusting the structure in post-sunset years. Considering these comments, the Staff Proposal recommends maintaining the five-year payout period as a mechanism to ensure continued performance and ratepayer benefit. We agree. This mechanism financially rewards projects that continue to meet program goals over time and should be maintained. We may consider revising the payment structure after the SGIP sunset date. Another option for reducing administrative costs, as advocated by CESA, is to raise the project size threshold beyond which PBI payments are required from the current 30 kW to 50 kW. They assert this would reduce both administrative and operating costs, resulting in ratepayer savings. We find a 30 kW threshold to be a fair balance of limiting administrative burden with protecting ratepayer investment and adopt the Staff Proposal's recommendation to keep it intact.

2.13. Dual Participation in Demand Response Programs

The majority of parties commenting on the April 2015 Assigned Commissioner's Ruling supported continuing to allow dual participation in SGIP and demand response programs, with PG&E, CSE, Green Charge Networks, CESA, Bosch, and Stem all in support. Bloom and CCDC are both supportive of

this proposal, but note that a single action (e.g., discharge) should not receive payment from multiple sources. The Staff Proposal noted that Resolution E-4728 disallowed fossil-fueled generators from participating in the Demand Response Auction Mechanism program.[27] Additionally, a September 2015 Energy division proposal would forbid fossil-fueled generators from participating in demand response, beginning in 2017.[28] Apart from the fossil-fueled generation technologies that are currently excluded from demand response participation, or that may be excluded in the future, we see no compelling reason to prohibit projects receiving SGIP funds from providing demand response services.

2.14. SGIP Incentive Caps

2.14.1. Manufacturer Cap

The manufacturer cap was originally adopted to promote diversity within the program and prevent any single participant from garnering an inequitable share of program funds. In comments on the Staff Proposal, there was strong support for removing the manufacturer cap with some parties advocating for replacing the manufacturer cap with a developer cap. Others, including ORA, SCE, Green Charge Networks, Bloom, NFCRC, and Swell support a combined manufacturer and developer cap. These parties argue it is most equitable to implement caps on both equipment manufacturers as well as project developers. We find that the application of a manufacturer cap is cumbersome and increases

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[27] Resolution E-4728. Approval with Modifications to the *Joint Utility Proposal for a Demand Response Auction Mechanism Pilot Pursuant to Ordering Paragraph 5 of Decision 14-12-024*. J uly 23, 2015. Available at http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M153/K436/153436367.PDF.

[28] *Demand Response and Back Up Generation Energy Division Staff Proposal*, September 21, 2015, attached to Administrative Law Judge's Ruling issued on September 29, 2015 in R.13-09-011. Available at http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M154/K510/154510256.PDF.

uncertainty for project developers who have limited insight into a given manufacturer's progress towards a cap. Additionally, this limits customers' ability to choose the specific technology that best meets their needs. We hereby revoke the 40% manufacturer cap. To protect ratepayer interests and ensure diversity, we will instead adopt a developer cap.

2.14.2. Installer/Developer Cap

In place of the 40% manufacturer cap, we adopt a 20% developer cap. In their comments, SolarCity puts forth the New Jersey's Solar Renewable Energy Certification program's application of a developer cap – which requires that the relevant parent company be listed on all applications. We find that this will ensure diversity and prevent any gaming by program participants. Specifically, we adopt the following language to implement a 20% developer cap: any single developer/installer (or any combination of affiliated developers/installers under the same majority ownership) is limited to 20% of the available funding for a given technology category's total in each incentive step. The SGIP Program Administrators shall not issue conditional reservations to a project installed by a developer (or combination of affiliated installers/developers under the same majority ownership) that has already received reservations for active projects in a given step such that the total exceeds the percentage allocation for that step. Each reservation application shall include the name and address of the customer; the customer's account number; the name and address of the developer/installer; the name and address of the developer/installer's parent company, defined as an entity with a majority ownership interest in the developer/installer (direct parent and ultimate parent, if applicable); the identity of the owner; and the identity of the host.

The Staff Proposal recommended that any manufacturer or installer caps be applied by utility territory as program administrators are challenged to update one another on their collective progress towards a maximum cap for any particular firm. Several parties, including SCE, CSE, and Commercial Energy support this recommendation to apply caps by program administrator. Others, such as Bloom and Tesla, argue for a state-wide cap, noting that applying caps on an IOU basis constrains program participation. We find that the current policy of a state-wide cap is most consistent with the policy goals of the program. We acknowledge that this does require coordination between program administrators. However, changing the requirement to be IOU-specific would disrupt the market by requiring developers to pursue far-away customers and in practice could result in funding for only a single project per developer in territories with smaller budgets. We adopt the Staff Proposal recommendation that the program administrators and/or Energy Division be authorized to propose modifications - via advice letter and/or resolution - to the rules associated with manufacturer and installer caps, based on their experience with the caps under the new rules. This will facilitate a fluid program that supports the market with limited interruption.

2.15. California Supplier Adder

SGIP provides a 20% incremental adder to the applicable SGIP incentive rate for projects in which the equipment used is manufactured in California. The requirements for qualifying as a California supplier were clarified in SB 861 and

codified in Public Utilities Code Section 379.6.[29] To effectuate this modification and ensure that the majority of value creation occurs in California, we adopt the Staff Proposal recommendation that equipment will be deemed to be manufactured in California if 50% or more of its value is determined to have been added in a manufacturing process (or processes) located in California.[30]

This was supported by the majority of parties including PG&E, SCE, and Green Charge Networks, with other parties recommending modifications to the 50% rule such as the sliding scale proposed by Commercial Energy. While we find merit in the sliding scale argument which would pro-rate the adder based on the percentage of value addition done in State, this would be administratively burdensome. We recommend that SGIP program administrators seeking to make this determination contract with a third party or take advantage of the new "Made in California" program which was noted in the comments of the California Clean DG Coalition.[31]

We also adopt the Staff Proposal's recommended process, which we excerpt from the Staff Proposal below:

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[29] SB 861 removed "California supplier" code requirements related to the business definition, the domicile of the owners, the location of the company headquarters, the length of time manufacturing, etc.

[30] Just as with the individual manufacturer cap … for purposes of determining eligibility for the California manufacturer adder for a given project, the program administrators should consider only the equipment of types 4, 5, 14, and 18 (see the 2015 SGIP Handbook Section 3.3.3). The entity supplying the largest amount of value of this capital equipment is the one whose California credentials will be considered in each project. If at least 50% of the value of that entity's capital equipment in that project is deemed to have been added in a California process, then that project should receive the 20% California manufacturer bonus.

[31] SB12 (Corbett, 2013) establishes a program within the Governor's Office to certify products as "Made in California."

> Beginning twelve months after the date of the decision that will follow this Staff Proposal, the program administrators should deny requests for the "California supplier" adder for suppliers that have not received this new certification, even suppliers which are currently approved as California suppliers. Until that time, currently grandfathered California supplier participants may continue to qualify, and new suppliers may apply for the California supplier status to the program administrators under the current criteria. To ensure that the vendor or the agency performing the certification has adequate time to perform its work before the beginning of the new requirement, the program administrators should ensure that the vendor's or agency's window for receiving applications from would-be California SGIP suppliers opens no later than six months after the date of the decision which will follow this Staff Proposal. The program administrators should file a Tier 2 advice letter to modify the timing of this roll-out in the event they believe this is needed.[32]

2.16. Treatment of DC Micro-Grids

The Staff Proposal evaluated whether micro-grids, either in their entirety or as individual system components, should be eligible for SGIP incentives. The Staff Proposal recommended that the generation and storage components of a given DC micro-grid should continue to be eligible for incentives under SGIP.

PG&E, CSE, SCE, and Bloom supported the Staff Proposal's recommendation, with SCE requesting clarification on what "controls" or "wires" to exclude. Bosch notes that the current metering standard language in the Handbook is an AC one and that while a DC standard does not exist, these technologies are tested at the same level of rigor. Accordingly, Bosch recommends that applicants be permitted to show Program Administrators the technical details of DC equipment; this stance is also supported by CSE.

[32] Staff Proposal at 32–33.

We find merit in this argument that SGIP participation be AC/DC agnostic. We support the Staff Proposal's recommendation that the generation and storage components which are part of a given DC micro-grid are eligible for SGIP rebates – albeit with no incremental micro-grid adder. We support the Staff Proposal's recommendation that the controls and wiring components of the DC system should not be eligible for rebates as they are neither generation nor storage.

2.17. Energy Efficiency Audit Requirements

In D.11-09-015,[33] the Commission established the requirement that prior to receiving SGIP incentives, customers must obtain an energy audit and submit the audit report to the program administrators, with certain exemptions allowed. The Decision additionally required that the applicant perform all measures from the audit report with paybacks less than two years, with exemptions granted for cases where the applicant could explain and document why the measure(s) was not feasible.

CESA, CSE, Green Charge Networks, and SolarCity all oppose the current practice of requiring customers to invest in energy efficiency measures with less than a two year payback.

We find merit in this argument and note that the California Solar Initiative (CSI) did require an audit but did not force customers to invest in energy efficiency measures. We continue to support the requirement for an energy efficiency audit, which is consistent with the State's loading order and supported by most parties. However, we remove the previous rule requiring customers to

[33] Published September 16, 2011 and available online at the Commission's website at : http://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/143459.PDF.

invest in measures with a two year payback. While the Commission continues to support energy efficiency, we do not find that a uniform requirement to invest is an efficient way to support innovation and instead prescribes customers' investment choices. To prevent unnecessary costs, we adopt the Staff Proposal's recommendation that the cost of performing the audit be limited to a maximum of 5% of the requested incentive payment.

2.18. Storage Operating Requirements

In evaluating the role of energy storage for peak load shifting, the Staff Proposal noted that this technology provides the greatest benefit to the grid during times of peak demand. As system capacity needs often materialize during weekdays during the warmer 6 months of the year, a two-hour discharge of a storage system every weekday for 26 weeks would yield 260 hours of total dispatch. Based on this, the Staff Proposal recommends setting the minimum equivalent hours of dispatch for both commercial and residential storage systems at 260 hours.

Most parties, including CSE, Green Charge Networks, Bosch, CALSEIA, Tesla, SolarCity, Stem, and Commercial Energy support this proposal. Several parties, such as the Sierra Club, SunVerge, Juicebox, and SCG, argue that storage should be required to operate in a manner most helpful to the grid. According to the Sierra Club, this would correspond with times of heightened flexible system capacity needs as identified by the California Independent System Operators.

We agree that storage is most beneficial to meet ramping needs but do not wish to be overly restrictive in mandating certain hours and months for charging and discharge. These periods may shift over time and are potentially inconsistent with a given host customer's needs. We agree with CSE that making modifications to tariffs is the appropriate venue for giving customers the right

operating incentives. We adopt the Staff Proposal's recommended 260-hour discharge requirement for commercial systems as a means to ensure grid benefits without prescribing the specific hours the discharges must occur.

For residential storage applications, the Staff Proposal recommended that the dispatch requirements be the same as those for commercial systems. This would entail raising the minimum hours of dispatch from the currently-required 104 hours to the 260 hours required for commercial customers.

As noted above, most parties supported this proposal, though CESA recommends a discharge requirement lower than 260 hours. However, given that commercial customers have different rate structures and are more likely to spend a higher percentage of their monthly bill on demand charges than residential customers do, we find this comparison inconsistent. Additionally, we seek to promote the development of residential energy storage systems and do not wish to mandate overly-strict operating requirements. Therefore, we will maintain the existing requirement that residential energy storage systems dispatch an average of two hours per week for a total of 104 hours per year.

2.19. Second Life Batteries

Second life (or used) batteries are currently not eligible for participation in SGIP. According to section 4.2.5 of the SGIP Handbook "Ineligible Equipment" is defined as equipment that is "rebuilt, refurbished or relocated." Nissan states that second-life electric vehicle batteries are commercially available and should be considered eligible for use in stationary storage projects. Green Charge Networks and CSE support this argument and note that they can still be covered by warranty. We acknowledge the benefits of using second life batteries, but the intent of SGIP is to support a DER market by providing incentives for new equipment. Refurbished DER equipment should generally be cheaper than new

equipment and therefore need less financial support than new equipment. Therefore, we will maintain the SGIP requirement that all technologies receiving incentive support be new.

2.20. Sampling for Inspections

Inspections ensure that each SGIP system is designed and installed in a manner that ensures grid benefits as well as customer safety. However, these inspections are not without costs and can be administratively cumbersome to apply.

In their comments to the Staff Proposal, CESA suggested that for systems under 10 kW, a sampling be used in lieu of inspecting every installation. Balancing the need for ratepayer protection with a streamlined and administratively efficient program is an important consideration. The Staff Proposal suggested directing the program administrators to hold a workshop on a sampling protocol within six months of the date of this Decision. This workshop would lead to a workshop report which in turn would inform a future advice letter filing recommending a sampling methodology. PG&E states that a workshop is not needed, while SCE supports the Staff Proposal.

To solicit more information on this topic - and discuss suggestions in a transparent fashion - we will require the program administrators to hold a workshop and publish a report including recommendations within six months of the date of this decision.

The program administrators should be allowed to file an advice letter proposing changes to the inspections/sampling regime, following the publication of this workshop report, if they believe it will benefit the program.`

2.21. Measurement & Evaluation and Public Reporting

D.01-03-073 originally set forth the SGIP measurement and evaluation (M&E) requirements. In order to streamline and simplify the requirements, the Staff Proposal recommends the following modifications:

1. Within six months, an SGIP M&E Plan should be developed by Energy Division staff in consultation with program administrators; this mimics the CSI program where M&E was directed by Energy Division, not Administrative Law Judge (ALJ) ruling.

2. M&E funds be used to evaluate administrative performance every year and fiscal performance every other year, with the first rounds of each being completed within twelve months of this Decision.

3. Publicize the online report covering performance for participants receiving PBI payments, including energy generated (kWh), gross and net GHG emissions, number of charging and discharging events and total amount of energy charged and discharged (for storage), amount and type of fuel consumed, and heat recovered (for Combined Heat and Power (CHP)).

Parties were divided on measurement and evaluation issues. TURN and SolarCity both support making the online report covering the metrics detailed in #3 above public. ORA finds no need for additional M&E studies since the program will sunset in five years, but does see value in auditing and evaluating program administrators. PG&E and SoCalGas both note that while audits may provide useful information, they do require significant resources.

We agree that audits are useful tools and have yielded important information in the past about the relative administrative processes and financial safeguards in program administrator territories. We find that the Staff Proposal's recommendations strike a reasonable balance between reduced

administrative burden and safeguarding ratepayer investment. We adopt the Staff Proposal's recommendations.

2.22. Marketing & Outreach

Most of the Commission's demand-side programs, besides SGIP, include requirements for M&O plans and approved budgets for utilities, program administrators or third parties to educate customers about the benefits of the programs. The Staff Proposal recommends that the program administrators hold a workshop to consider whether an M&O program would have value, to flesh out how it would operate, and publish a workshop report within 6 months.

PG&E, CSE, and SCE support the proposal for a workshop on this topic as well as this proposed schedule, while SDG&E, SoCalGas, Bloom, and TURN advocate against additional M&O activities, citing the strong participation in the SGIP as evidence that no additional encouragement is needed to increase uptake. ORA notes that a workshop focused on directing M&O efforts to encourage deployment of under-participating technologies may be useful.

We adopt the Staff Proposal's recommendations for the program administrators to hold a workshop to solicit feedback on whether an M&O program would have value and to publish a corresponding report within 6 months of this Decision. In addition, several parties, including Bosch, SolarCity, and Green Charge Networks, call for quarterly outreach meetings. These parties note that this would provide a venue for participants to ask questions, discuss proposed changes, and provide feedback to program administrators. This was effective in the CSI Program and would benefit SGIP as well.

We direct the program administrators to begin hosting quarterly workshops, the first of which should be done before the opening of SGIP under the modified rules adopted in this decision.

2.23. Program Administration

D.15-12-027 directed program administrators to continue accepting new applications for incentives until 50% of their respective 2016 SGIP program funds were reserved. Based on the number of 2016 applications in the queue, it is reasonable to no longer accept Renewable/Emerging Technologies Level 2 applications, effective immediately. Program administrators shall make funding available to projects in the queue until 50% of their 2016 SGIP program funds are reserved and shall not disburse any additional funds authorized for program year 2016 until further ordered by the Commission.

3. Other Program Rules

3.1. Net Energy Metering Provisions

In their comments on the Staff Proposal, Fuel Cell Energy notes that Fuel Cell Net Energy Metering is set to expire at the end of 2016. This tariff enables fuel cells up to 1 MW to receive credit for on-site generation, and exempts them from Departing Load Charges.

We recognize that rate structures such as Net Energy Metering are of significant importance to ensuring the viability of DER projects that may participate in SGIP. We will not address this tariff structure in this Decision, but consider it appropriate to evaluate at some future point in R.12-11-005 or any successor rulemaking.

3.2. Application Fee

The Application fee was instituted in D.11-09-015 to ensure that customers are adequately invested in the success of the project at its onset. However, given the amount of applications received as compared with available funds we find that the existing fee is not sufficient. PG&E, Green Charge Networks, and CESA argue that the idea of an application fee has merit, but that it should be increased

beyond the current 1%. We will adopt a 5% application fee, due at the time of submission. The intent of this increased fee is to ensure that applications submitted represent projects which have undergone adequate due diligence.

3.3. Establish Lottery to Award Reservations

Historically, SGIP Program Administrators have evaluated applications and granted conditional reservations on a first-come-first-served basis. The intent of this process is to provide for equitable treatment of applicants and to avoid favoritism. However, due to an increasingly over-subscribed program where funds have been fully allocated within minutes, the Staff Proposal recommended a continuous program with dollar-based steps, similar to CSI.

Most parties support the idea of continuous declines. In their comments, PG&E advocates for a lottery system with solicitations held several times a year. Foundation Windpower supports the idea of a lottery, as does Green Charge Networks.

We direct the program administrators to develop a detailed methodology for applying a lottery system in the event that applications for a given step and budget exceed the funds available. The intent of this lottery is to randomly select recipients from their respective "buckets" submitted on the same day such that applicants who submit several minutes or hours ahead of others will have no advantage as long as their application is received on the same calendar day. These buckets shall be delineated according to the project categories outlined in this decision.

Additionally, we direct the program administrators to develop criteria, which shall also be applied to the above situation, based on the Program Goals of Grid Support and GHG Reduction. These criteria will score project applications and ensure that those projects that provide relatively more Grid Support and

GHG Reduction have priority access to rebates. Included in this criteria should be whether the project participates in a program (like demand response or critical peak pricing) that supports grid reliability or operates in concert with renewable generation to enhance GHG reductions, and may include other criteria such as fast-ramping ability.

The program administrators shall conduct a workshop within 60 days of the effective date of this decision to discuss the structure of the lottery mechanism and the project scoring criteria. The program administrators' proposal shall be included in the final advice letter with suggested revisions to the SGIP Handbook to implement the requirements of this decision.

3.4. Minimum Customer Investment Provision

D.11-09-015 implemented a requirement that host customers bear at least 40% of the cost of a project receiving SGIP incentives. Therefore the total incentive support from SGIP or SGIP in combination with other grant programs such as the federal Investment Tax Credit was limited to a maximum of 60%. The intent was two-fold: to prevent California ratepayers from paying an undue amount to support a given project and to ensure that participants had sufficient financial interest in the project being completed. In their comments on the Staff Proposal, Tesla argues that this provision creates an incentive for developers to err on the high side when reporting costs to ensure that they receive the full SGIP incentive. According to Tesla, this results in higher costs for utility ratepayers and does not encourage efficiency in driving down costs. Given the reduced incentive levels and increased application fee discusses herein, we find that this requirement that customers bear at least 40% of the total project cost is no longer necessary.

4. Petitions for Modification

4.1. Distributed Wind Energy Association's Petition for Modification

Distributed Wind Energy Association (DWEA) submitted a Petition for Modification of Decision 11-09-015, which makes two requests:

1. Increase incentives for small wind with an adder of $1.75/W for the first 10 kW and $1.00/W for the next 20 kW of capacity.
2. Exempt the adder for turbines up to 30 kW from the SGIP incentive limit as share of project cost.[34]

The SGIP program administrators filed a joint response opposing DWEA's petition.[35] ORA[36] submitted a late-filed response, permitted by the assigned ALJ, arguing that while it was premature to grant the relief requested, the Commission should develop a fuller record in R.12-11-005 on whether the higher incentives requested by DWEA could help drive down costs for the small wind industry.[37]

In their joint response to the Petition, SCE, SoCalGas, PG&E, and CSE argue that the Commission should deny the petition as it was not filed within one year of D.11-09-015, is not supported by facts on the record, and because the proposed exemption of the adder from the SGIP incentive limit is inconsistent

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[34] Petition of Distributed Wind Energy Association (DWEA) to Modify Decision 11-09-015. January 23, 2013, (filed in R.10-05-004). DWEA also filed an "Amended" petition to modify on July 26, 2013. There is no provision for such a filing in the Commission's Rules of Practice and Procedure, and we do not consider it.

[35] Joint Response of SCE , PG&E , SoCalGas, and California Center for Sustainable Energy to the DWEA Petition to Modify Decision 11-09-015 (February 22, 2013).

[36] At the time of filing, ORA was known as the Division of Ratepayer Advocates.

[37] The Division of Ratepayer Advocates' Response to DWEA Petition to Modify Decision 11-09015 (February 28, 2013).

with Commission policy. The program administrators point out that DWEA's petition mentions the unexpected elimination of the Energy Commission's Emerging Renewable Program (which offered much larger incentives for small wind systems than SGIP) by the Legislature on June 28, 2013 as the reason for DWEA's request to provide an adder for small wind systems in SGIP. As the program administrators explain, DWEA could have timely filed its petition at any time between June 28, 2013 and September 8, 2013.

We agree with the program administrators that DWEA failed to provide adequate justification for filing its petition for modification more than one year after the effective date of D.11-09-015. DWEA's petition should be denied.

4.2. Pressure Reduction Turbines

RightCycle submitted a Petition for Modification of D.11-09-015 to allow pressure reduction turbines to be eligible for the same biogas adder which is available to other generators that directly or indirectly use fuel. RightCycle argues, "It is technically correct that the PRT itself does not require fuel, but any heat or pressure production system that includes a PRT does indeed require fuel. And in the case of many entities wishing to install PRTs, biogas could be used to create the required pressure if biogas use is incentivized appropriately."

ORA does not oppose this argument or the RightCycle Petition. ORA does note that Energy Division should evaluate the budgetary impact of adopting this adder for pressure reduction turbines to ensure that available incentives for other renewable/emerging technologies are not negatively impacted.

SCE is also not opposed to the Petition, though they recommend that the Commission evaluate if PRT with biogas is consistent with SGIP technology eligibility requirements and is a cost-effective (in terms of a TRC basis) means to reduce GHGs.

According to the 2015 SGIP Cost-Effectiveness Study, Pressure Reduction Turbines show very high cost-effectiveness from a societal perspective.[38]

We hereby grant this Petition.

4.3. PowerTree's Petition for Modification

Powertree Energy Services Inc. (Powertree) develops combined solar PV, storage, and electric vehicle charging projects at multi-unit dwellings. On February 5, 2016, Powertree filed and served a petition for modification of D.15-06-002 (Powertree Petition), a decision that granted a request from the SGIP program administrators to allow projects receiving conditional reservations up to three six-month extensions for SGIP to complete all construction before losing the SGIP incentive.[39] In its petition, Powertree states that it submitted 68 SGIP applications to fund the stationary storage portion of its projects in September 2012.[40] According to Powertree, of the 68 applications originally submitted, 58 remain active.[41] Powertree requests that Commission "direct the program administrators to grant extensions of project completion deadlines until incentive claim payments are made where the [program administrator] deems the cause of delay in meeting deadlines to be unavoidable interconnection issues."[42]

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[38] Itron, *2015 Self-Generation Incentive Program Cost-Effectiveness Study, Final Report*, October 2015, available at http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=7889.

[39] Petition of Powertree Energy Services, Inc. for Modification of Decision 15-06-002 to Provide an Extension of the Reservation Expiration Dates for Certain Projects Participating in the Self-Generation Incentive Program, February 5, 2016.

[40] Powertree Petition at 6.

[41] Powertree Petition at 3.

[42] Powertree Petition at 1.

Although the program administrators granted a third six-month extension to Powertree's projects in August 2015, Powertree asserts that numerous delays in interconnection and project implementation have been beyond its control. Powertree notes that given the complexity of its projects, there have been numerous delays due to attempts to resolve disputes concerning metering configurations and the extent of service upgrades needed to provide power to the premises safely and reliably.

In addition to its petition, Powertree also filed a motion for expedited consideration, shortened comment period, and an interim stay of the reservation expiration dates on February 5, 2016 (Powertree Motion).[43] In the motion, Powertree requests that the comment period be limited to six business days, that reply comments be due two days after the deadline for comments, and that the expiration of the pending applications be stayed "until such time as Powertree and PG&E complete the interconnection process and PG&E approves completed SGIP claims."[44]

PG&E responded to the petition and the motion on February 19, 2016.[45] PG&E requests that the Commission deny the petition for modification. PG&E notes that since Powertree applied for SGIP incentives, PG&E has reserved

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[43] Motion of Powertree Energy Services, Inc. for *Expedited Consideration of and Shortened Comment Period for Petition for Modification of Decision 15-06-002 to Provide an Extension of the Reservation Expiration Dates for Certain Projects Participating in the Self-Generation Incentive Program and Interim Stay of Reservation Expiration Dates*, February 5, 2016.

[44] Powertree Motion at 3.

[45] PG&E's *Response to the Petition for Modification of Decision 15-06-002 of Powertree Energy Services Seeking an Open-Ended Extension of SGIP Deadlines, and Its Motion for Expedited Consideration of the Petition to Modify* (February 19, 2016).

incentives for 392 storage applications, of which 221 have been completed.[46] PG&E argues that it is important for deadlines to be enforced to ensure that projects in the queue are high quality projects that are likely to succeed.

On February 29, 2016, the other SGIP program administrators (SoCalGas, SCE, and CSE) submitted a joint response to Powertree's petition. These SGIP program administrators also oppose Powertree's petition. The program administrators note that with demand for SGIP incentives far surpassing available funding, indefinitely reserving the funds for Powertree's applications prevents them from funding additional projects.

On February, 29 2016 President Picker, the assigned commissioner, issued a ruling granting Powertree's request for an interim stay on the expiration of Powertree's applications but denying Powertree's motions for a shortened comment period and expedited consideration.

The assigned Administrative Law Judge granted Powertree's request to file a reply to the responses to the petition filed by PG&E and, jointly, by the other SGIP program administrators. Powertree rebuts some of the statements of fact made by PG&E in its response. Additionally, Powertree points out that while PG&E and the joint SGIP program administrators support their recommendations to deny the petition, in part, based on their concern about withholding the incentives from other SGIP participants, no other party filed a response to the petition.

The petition raises several challenging policy questions, and we are reluctant to create exceptions for one company, particularly exceptions to rules

[46] PG&E Response at 4.

that we approved less than a year ago. However, Powertree's projects incorporate a combination of virtual net energy metering, electric vehicle charging, and stationary storage, and its business strategy includes using on-site storage to participate in wholesale energy and ancillary services markets. The combination of services that Powertree hopes to provide has presented challenges related to metering configurations and the accounting of various streams of retail and wholesale energy transactions. Consequently, we are persuaded that some additional extension is warranted for Powertree's applications. However, we are not comfortable with an open-ended commitment to provide an extensions until "Powertree and PG&E complete the interconnection process and PG&E approves completed SGIP claims" as requested by Powertree.[47] As PG&E notes, many other storage projects have been able to interconnect within the SGIP deadlines, although they lack the complexity of Powertree's projects.

Rather than the indefinite extension requested by Powertree, we will grant Powertree an extension until the end of 2016. Powertree must complete its projects and submit final incentive claim forms by December 30, 2016 or lose its reservations. Because we are concerned about the sluggish progress on these projects to date, we will order PG&E to submit monthly progress reports on the status of the Powertree projects to Energy Division and the assigned Commissioner of R.12-11-005 or a successor proceeding. PG&E shall consult with Energy Division regarding the contents of the progress reports. The first report shall be due July 1, 2016 with subsequent reports due on the first of each

[47] February 5, 2016 Motion of Powertree Energy Services, Inc. at 3.

month or the first business day thereafter. The final report shall be due December 1, 2016.

4.4. Maas Energy's Petition for Modification

Maas Energy Works submitted a Petition for Modification of Decision 15-12-027[48] – which made 50% of the 2016 SGIP funds available for applicants beginning February 23, 2016. This Petition makes three requests:

1) That the Program Administrators and/or Energy Solutions release the following information relating to the Feb 23, 2016 submissions process and applications received: precise time, origin IP address, username, company affiliation of all logins to the portal on February 23, 2016; total number of simultaneous users the portal was configured to accept, and the actual number of users that were online during each minute of the first ten minutes of the application cycle; explanation of why a single entity was able to submit applications before all others.
2) That the Program Administrators and/or Energy Solutions determine the cause of irregularities in the 2016 SGIP application portal.
3) That any Conditional Reservation Letters from the February 23, 2016 application round may be recovered if warranted by irregularities in projects' applications, with funds awarded to the next eligible applicants.

Twelve parties filed comments on April 7, 2016 in response to this Petition.[49] Parties were generally supportive of the Petition, with many taking the opportunity to recommend changes to the SGIP – such as eliminating the first-come, first-serve provision – to prevent inequitable distribution of funds in

[48] D.15-12-027, issued December 17, 2015, available online at: http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M156/K963/156963281.PDF.

[49] FuelCell Energy, Stem, SolarCity, CALSEIA, Green Charge Networks, CSE, PG&E, Foundation Windpower, Commercial Energy, Bloom, SoCalGas, SCE.

the future. SCE and CSE note that the program administrators and the Commission are looking into the results of the February 23, 2016 SGIP program launch and how the application portal worked, beginning with a workshop held on March 21, 2016. PG&E supports releasing additional data. Fuel Cell Energy supports the petition but recommends that the application be re-run, arguing that the application process was deeply flawed. Foundation Windpower supports an investigative process that is shared with stakeholders, and also calls for the results of Feb. 23rd solicitation to be declared invalid. Stem asserts that the Maas Petition should be denied because it fails to meet the Commission's standards for a Petition for Modification and is otherwise procedurally improper.

We agree with Stem that a Petition for Modification is the procedurally improper mechanism to address Maas Energy's requests. According to Rule 16.4 of the Commission's Rules of Practice and Procedure, a Petition for Modification asks the Commission to make changes to an issued decision, must concisely state the justification for the requested relief, and must propose specific wording to carry out all requested modifications to the decision. Rather, Maas Energy's Petition is largely a discussion of its own investigation of the SGIP online application portal and how particular applicants may have been more successful than others in submitting applications quickly. A Petition for Modification is not the appropriate procedural vehicle for starting an investigation into the equity of the SGIP solicitation results. Accordingly, the Petition fails to meet the Commission's standards for a Petition for Modification and is denied.

Since comments on the Petition were filed, two relevant events have occurred. First, on April 19, 2016, Energy Division emailed to the service list for R.12-11-005 two memos written by Energy Solutions. The memos included technical analysis by Energy Solutions, the consultant that developed the online

application portal, of the February 23, 2016 SGIP application launch. Second, on May 9, 2016, the Commission received a Motion from Stem seeking to enter into the record a letter which states, "Stem will voluntarily cancel certain of its reservation request applications such that the retained incentives on projects for which Stem is the manufacturer totals 50% of manufacturer concentration limit published on February 29, 2016 ($17,815,431)."[50]

We note that Energy Division's release of Energy Solutions' memos addresses many of the party comments requesting increasing transparency of the functioning of the SGIP online portal. We also note that the Maas Energy Petition and subsequent party comments raised the issue of the equity of the results of the recent SGIP solicitation held February 23, 2016. Given Stem's application withdrawals, the results of that solicitation will be significantly more equitable. As a result, the second two points of the Petition – for program administrators and Energy Solutions to continue their investigation of the launch and to clarify that any conditional reservations may be recovered if warranted and any funds awarded to the next eligible applicant – are moot. We find that it is not necessary for the program administrators or the Commission to undertake any further investigation or action in regards to the February 23, 2016 program opening. We consider this issue resolved, and thus upon Commission approval of this decision, the program administrators should commence processing SGIP applications submitted for the 2016 partial program year.

[50] May 9, 2016 Motion by Stem at 2.

5. Comments on Proposed Decision

The proposed decision of Commissioner Picker in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on _____, and reply comments were filed on _____ by _____.

6. Assignment of Proceeding

Michael Picker is the assigned Commissioner and Regina DeAngelis is the assigned ALJ in this proceeding.

Findings of Fact

1. The Staff Proposal's suggested environmental goals, the reduction of GHGs, the reduction of criteria air pollutants and the limitation of other environmental impacts (such as water usage), meet the necessary statutory requirements while providing an adequate level of specificity for high-level program goals.

2. The Staff Proposal's suggested grid support goals: 1) Reduce or shift peak demand; 2) Improve efficiency (e.g., fewer line losses) and reliability of the distribution and transmission system; 3) Lower grid infrastructure costs; 4) Provide ancillary services; and 5) Ensure customer reliability of DER, meet the necessary statutory requirements and are broadly supported.

3. Market Transformation represents a key goal of this Program, and as such should be maintained, even if it's difficult to quantify. The Staff Proposal's proposed language adequately captures this goal.

4. The Staff Proposal's addressed the statutory requirement of equitable distribution of the costs and benefits of the program and the suggested criteria for design requirement pertaining to this statutory requirement, including,

1) Maximize Rate Payer Value, and 2) Provide Equitable Distribution among Customer Classes, are reasonable.

5. The four primary criteria from the Staff Proposal for participating SGIP technologies are consistent with the statute and reasonable. These include: (1) Lower GHG emissions; (2) Lower or shift peak load to off-peak; (3) Be safe and commercially available; and (4) Reduce criteria air pollutants. Additionally, regarding the safe and commercially available requirement, within one year of adoption, all eligible technologies must be certified for safety by an NRTL. The SGIP Program Administrators may allow a developer to apply for incentives for a device that has not yet received certification from an NRTL if the certification process is underway but funds shall not be disbursed until certification is complete.

6. The Staff Proposal's recommended two additional criteria for participating SGIP technologies are reasonable as "soft" criteria, societal benefits and market transformation. These should be considered but not strictly required. The STRC test should be used unless or until superseded by a uniform societal cost test under consideration in R.14-10-003.

7. The Commission recently adopted a revised GHG standard for SGIP in D.15-11-027 and no changes are made to the outcome in D.15-11-027 regarding GHG standard for SGIP.

8. Regarding the SGIP technology eligibility, as long as a technology meets the performance and reporting standards set forth in D.15-11-027, the technology should be deemed to have met the GHG reduction requirement that this Decision seeks to adopt.

9. No changes are made to the current list of SGIP eligible technologies, with the exception of finding that as long as a technology is certified to emit less than

the first-year emission rate for the program year for which incentives are sought, the technology passes the GHG eligibility screen.

10. The Staff Proposal requirements for biogas and Bloom's proposal to adopt the California Energy Commission's biogas eligibility, which states, that SGIP's biogas eligibility requirements should be modified to match the eligibility requirements of the California Energy Commission's RPS guidelines is reasonable as significant value exists in aligning biogas eligibility requirements between the California Energy Commission and SGIP.

11. On the topic of whether to require all natural gas fueled generation technologies to blend some quantity of zero emission fuel as a pre-condition of participating in the SGIP program, Bloom Energy's proposal represents the most balanced proposal to set a requirement for minimum zero emission fuel blending and is reasonable, with one significant change, which is to set a minimum fuel blending requirement starting in 2017.

12. While Staff Proposal's recommendation to keep electric-only fuel cells out of the Program is not adopted, it is reasonable to significantly weigh of incentives in the budget towards energy storage is justified in light of the program's goals of reducing GHGs, providing grid support and enabling market transformation.

13. Based on the program goal of supporting market transformation, it is reasonable to set aside some minimum quantity of the incentive budget for renewables in the Generation technology category and for energy storage systems that are smaller than 10 kW.

14. Because electric-only fuel cells and natural gas-fired microturbines remain eligible for SGIP, incentive levels must be adopted by the Commission.

15. All natural gas fueled technologies must utilize a minimum quantity of zero emission fuel, with any fuel usage above this minimum subject to a pro-rated incentive adder.

16. The static biogas adder is eliminated from the program and incorporates an incentive design that sets a minimum rebate and allows projects that utilize more biogas to increase the incentive up to the maximum rebate level.

17. The program will discontinuing awarding incentives based on the kW size for energy storage projects and, instead, will now will rely on the quantity of kWh associated with a given energy storage project to determine the incentive that projects receive.

18. In an effort to support market development in the smaller scale projects within the residential customer class, it is necessary to set a higher incentive level for small scale energy storage projects, below 10 kW in size, relative to larger energy storage projects.

19. Regarding incentive steps and budget allocations per incentive step, the Staff Proposal's step-down design, with specific quantities of incentive budget allocated to specific incentive levels and with incentives declining upon full reservation of the budget at a previous incentive step, is reasonable.

20. For generation technologies, fewer than five incentives steps are reasonable due to the reduced budget allocation to this category.

21. Regarding energy storage, the Staff's proposal of five incentive steps is reasonable.

22. A static dollar amount to reduce incentives between incentive steps is reasonable.

23. An equal split of incentive across each incentive step is reasonable and the most administratively efficient manner to allocate the budget within each incentive category.

24. The Staff's Proposal's recommendations on project size cap and associated rebate levels are not reasonable as increased oversubscription may result.

25. The existing SGIP rules are ambiguous regarding whether these rules apply to energy storage paired with generation, i.e., under the current rules, it is unclear whether paired storage is limited by the lower of or the greater of the customer's load or the paired generator's capacity and this language may contradict D.11-09-015.

26. Staff Proposal's recommendation is reasonable that the SGIP handbook be amended to explicitly state that the system sizing requirements for energy storage paired with generation should be based solely on the customer's previous 12-month annual peak demand.

27. Incorporating a location adder, as recommended by the Staff Proposal, is reasonable and would contribute to the program goals but insufficient information exists now to accomplish this.

28. The Staff Proposal's recommendation to limit the cap on O&M Warranty and/or maintenance contract costs of the claimed project costs to 10% serves ratepayer interest by discouraging project cost inflation. The intent behind this 10% cap on O&M costs remains to ensure accurate data and prevent inflated project costs.

29. The existing PBI structure is retained because, as suggested in the Staff Proposal, the existing structure rewards projects that continue to meet program goals over time.

30. Apart from the fossil-fueled generation technologies that are currently excluded from demand response participation or that may be excluded in the future, it is reasonable to permit projects receiving SGIP funds to provide demand response services.

31. The application of a manufacturer cap is cumbersome and increases uncertainty for project developers who have limited insight into a given manufacturer's progress towards a cap, which limits customers' ability to choose the specific technology that best meets their needs.

32. A 20% developer cap will ensure diversity and prevent any gaming by program participants.

33. The current policy of a state-wide cap for developers is most consistent with the policy goals of the program.

34. To implement new statutory law, the 20% incremental adder to the applicable SGIP incentive rate applies to projects in which the equipment used is manufactured in California, and for equipment to be deemed to be manufactured in California if 50% or more of its value is determined to have been added in a manufacturing process (or processes) located in California.

35. "California supplier" is modified per the Staff Proposal.

36. SGIP participation should be AC/DC agnostic.

37. Controls and wiring components of the DC system should not be eligible for rebates as they are neither generation nor storage.

38. The existing rule that requires SGIP customers, prior to receiving SGIP incentives, to invest in energy efficiency measures identified in the required energy audit within a two-year payback has merit but due to inefficiencies should not be mandatory.

39. The Staff Proposal's recommendation that the SGIP customer's cost of performing the energy audit be limited to a maximum of 5% of the requested incentive payment will avoid unnecessary costs.

40. Regarding energy storage operating requirements for commercial systems, the staff proposal's recommended 260 hour discharge requirement for commercial systems provides a means to ensure grid benefits without prescribing the specific hours the discharges must occur.

41. The existing requirement for residential energy storage systems to dispatch an average of two hours per week for a total of 104 hours per year will promote the development of residential energy storage systems and is not overly strict.

42. The intent of the SGIP is to support DER market by providing incentives for new equipment, not refurbished.

43. Inspections of SGIP system to ensure that they are designed and installed in a manner that ensures grid benefits as well as customer safety have associated costs and can be administratively cumbersome.

44. The existing M&E reports/audits are a useful tool and have yielded important information in the past about the relative administrative processes and financial safeguards in program administrator territories. The Staff Proposal offers the rights balance between reduced administrative burden and safeguarding ratepayer investment.

45. The Staff Proposal recommends that the program administrators hold a workshop to consider whether an M&O program would have value, to flesh out how it would operate, and publish a workshop would be advantageous to the program.

46. Regarding new applications, based on the number of 2016 applications in the SGIP queue, it is reasonable to direct program administrators to no longer accept Renewable/Emerging Technologies Level 2 applications, effective immediately.

47. Fuel Cell Net Energy Metering are of significant importance to ensuring the viability of DER projects that may participate in SGIP and are set to expire at the end of 2016, which is a tariff that enables fuel cells up to 1 MW to receive credit for on-site generation, and exempts such fuel cells from Departing Load Charges.

48. The existing application fee of 1% is not sufficient to ensure that customers are adequately invested in the ultimate success of the proposed project and a higher fee, such as 5%, may encourage increased due diligence prior to filing an application.

49. In an effort to treat all applicants equitably, Program Administrators have in the past evaluated applications and granted conditional reservations on a first-come-first-served basis but due to an increasingly over-subscribed program where program funds are fully allocated within minutes, the Staff Proposal recommends a continuous program with dollar-based steps, similar to CSI. A lottery system or even a scoring system is also an option for addressing this matter.

50. The SGIP requirement that host customers bare at least 40% of the total project cost is no longer necessary.

51. RightCycle filed a Petition for Modification of D.11-09-015 to allow pressure reduction turbines to be eligible for the same biogas adder which is available to other generators that directly or indirectly use fuel.

52. Powertree filed a petition for modification of D.15-06-002, a decision that granted a request from the SGIP program administrators to allow projects receiving conditional reservations up to three six-month extensions for SGIP to complete all construction before losing the SGIP incentive.

53. The combination of services that Powertree hopes to provide has presented challenges related to metering configurations and the accounting of various streams of retail and wholesale energy transactions and, as such, some additional extension is warranted for Powertree's SGIP applications - until the end of 2016. Powertree must complete its projects and submit final incentive claim forms by December 30, 2016 or lose its reservations.

54. Maas Energy Works filed a Petition for Modification of D.15-12-027, a decision which made 50% of the 2016 SGIP funds available for applicants beginning February 23, 2016.

Conclusions of Law

1. The Staff Proposals environmental goals, the reduction of GHGs, the reduction of criteria air pollutants and the limitation of other environmental impacts (such as water usage), are adopted going forward.

2. The Staff Proposal's suggested grid support goals are adopted.

3. The Staff Proposal's goal and related language pertaining to Market Transformation is adopted.

4. The Staff's Proposal suggested criteria for design requirements pertaining to the statutory requirement of equitable distribution of the costs and benefits of the program, including, 1) Maximize Rate Payer Value and 2) Provide Equitable Distribution among Customer Classes, are adopted.

5. The utilities should file Tier 3 advice letters within 60 days of the effective date of this decision with proposals to reallocate the collection of revenues to

fund SGIP among customer classes to effectuate the statutory requirement to equitably distribute the costs of SGIP among customer classes.

6. The four criteria from the Staff Proposal and as reflected in statute for participating SGIP technologies are adopted.

7. The additional criteria suggested in the Staff Proposal for participating SGIP technologies, societal benefit and market transformation, are adopted as so-called "soft" criteria.

8. The current list of SGIP eligible technologies, with the exception of finding that as long as a technology is certified to emit less than the first-year emission rate for the program year for which incentives are sought, the technology passes the GHG eligibility screen, is reasonable and retained.

The Staff Proposal requirements for biogas and Bloom's proposal to adopt the California Energy Commission's biogas eligibility, which states, that SGIP's biogas eligibility requirements should be modified to match the eligibility requirements of the California Energy Commission's RPS guidelines is adopted.

9. The following requirements are adopted for natural gas fueled generation technologies, based on Bloom's proposal, to blend zero emission fuels with one significant change, which is to set a minimum fuel blending requirement starting in 2017.

Table 9: Schedule for adopting a fuel blending requirement:

Program Application Year	% Biogas Requirement
2016	0%
2017	10%
2018	25%
2019	50%
2020	100%

10. Regarding the incentive budget, the Staff Proposal's 75%/25% incentive budget split is adopted.

11. A 15% carve-out from the energy storage budget category for energy storage projects that are 10 kW and smaller is adopted; a 10% carve-out set for renewables in the Generation technology category is adopted.

12. The adopted incentive levels **(capacity rebate levels ($/W) or $/Wh)** are as follows:

Table 10: SGIP Adopted Incentive Levels

Technology	Current Rebate (2015)	Proposed Initial Rebate	Proposed Max Rebate w/ bio gas adder
Generation Technologies			
Wind	$1.07	$0.90	n/a
Waste heat to power	$1.07	$0.60	n/a
Pressure reduction turbine	$1.07	$0.60	$1.20
ICE CHP	$0.44	$0.60	$1.20
Microturbine CHP		$0.60	$1.20
Gas turbine CHP		$0.60	$1.20
Fuel cell CHP		$0.60	$1.20
Fuel cell electric only		$0.60	$1.20
Energy Storage			
Large Scale - >10 kW			
Energy storage	$1.46	$0.50/Wh	n/a
	--		n/a
Small Scale - <=10 kW			
Energy storage	n/a	$0.60/Wh	n/a
	n/a		n/a

13. The Staff Proposal's regarding step-down design for incentive steps and budget allocations per incentive step is adopted.

14. For generation technologies, fewer than five incentive steps are reasonable due to the reduced budget allocation to this category. We adopt three incentive steps for generation technologies.

15. For energy storage five incentive steps is adopted.

16. Rather than relying on the Staff's Proposal regarding rebate step declines, a different initial incentive is adopted that uses a static dollar amount to reduce incentives between incentive steps instead of the percentage approach that has been used by SGIP in the past.

17. An equal split of incentive across each incentive step within each incentive category is adopted.

18. The following incentive rebate step downs ($/W) for Generation Technologies are adopted:

Table 11: Summary of rebate step downs ($/W) for Generation Technologies

	Step 1		Step 2		Step 3	
		Proposed Max Rebate w/biogas adder		Proposed Max Rebate w/biogas adder		Proposed Max Rebate w/biogas adder
Wind[51]	$0.90	n/a	$0.80	n/a	$0.70	n/a
Waste heat to power	$0.60	n/a	$0.50	n/a	$0.40	n/a
Pressure reduction turbine	$0.60	$1.20	$0.50	$1.10	$0.40	$1
ICE CHP	$0.60	$1.20	$0.50	$1.10	$0.40	$1

[51] Note that 10% of the incentives in each step shall be reserved for renewable generation technologies, meaning that natural gas fueled technologies may see their incentives decrease to a lower step while renewable technologies may remain at a higher step if they have not met their 10% carve out.

Microturbine CHP	$0.60	$1.20	$0.50	$1.10	$0.40	$1
Gas turbine CHP	$0.60	$1.20	$0.50	$1.10	$0.40	$1
Fuel cell CHP	$0.60	$1.20	$0.50	$1.10	$0.40	$1
Fuel cell electric only	$0.60	$1.20	$0.50	$1.10	$0.40	$1

19. The following incentive rebate step downs ($/W) for Energy Storage Technologies are adopted:

Table 12: Summary of rebate step downs ($/W) for Energy Storage Technologies

Large Scale - >10 kW	Step 1	Step 2	Step 3	Step 4	Step 5
Energy storage	$0.50/Wh	$0.45/Wh	$0.40/Wh	$0.35/Wh	$0.30/Wh
Small Scale - <=10 kW[52]	$0.60/Wh	$0.55/Wh	$0.50/Wh	$0.45/Wh	$0.40/Wh

20. The following project size caps and rebate level, which are consistent with those currently in place, are adopted:

Table 13: SGIP Project Size Caps and Rebate Levels

Project size	<1 MW	1-2 MW	2-3 MW
Generation Technologies	100%	50%	25%
Energy Storage Technologies	100%	50%	25%

21. Staff Proposal's recommendation is adopted that the SGIP handbook be amended to explicitly state that the system sizing requirements for energy storage paired with generation should be based solely on the customer's previous 12-month annual peak demand, not the paired capacity.

22. A 10% cap on O&M Warranty and/or maintenance contract costs of the claimed project costs is adopted.

[52] Note that 15% of the incentives in each step shall be reserved for small scale energy storage, meaning that large scale energy storage may see their incentives decrease to a lower step while small scale energy storage may remain at a higher step if they have not met their 15% carve out.

23. Once more detailed information is available – likely through the DRP – evaluating and implementing locational benefits would contribute to program goals. Further research is needed.

24. The existing PBI structure is adopted going forward.

25. Continuing to allow dual participation in SGIP and demand response programs, with certain noted fossil-fuel exceptions, is adopted.

26. The 40% manufacturer cap is removed from the SGIP.

27. A 20% developer cap is adopted, as follow: any single developer/installer (or any combination of affiliated developer/installer under the same majority ownership) is limited 20% of the available funding for a given technology category's total. The SGIP Program Administrators shall not issue conditional reservations to a project using a technology installed by a developer (or combination of affiliated installers/developers under the same majority ownership) that has already received reservations for active projects in a given step such that the total exceeds the percentage allocation for that step. Each reservation application shall include the name and address of the customer; the customer's account number; the name and address of the developer/installer; the name and address of the developer/installer's parent company, defined as an entity with a majority ownership interest in the developer/installer (direct parent and ultimate parent, if applicable); the identity of the owner; and the identity of the host.

28. The current policy of a state-wide cap for developers is most consistent with the policy goals of the program and is retained.

29. The provision of SGIP that provides a 20% incremental adder to the applicable SGIP incentive rate for projects in which the equipment used is manufactured in California is modified consistent with new statutory law.

30. The Staff Proposal modification to the term "California supplier" is adopted.

31. The Staff Proposal's recommendation that the generation and storage components which are part of a given DC micro-grid are eligible for SGIP rebates – albeit with no incremental micro-grid adder, is adopted.

32. The existing rule that requires SGIP customers, prior to receiving SGIP incentives, to invest in energy efficiency measures identified in the required energy audit within a two-year payback is removed from the program.

33. The Staff Proposal's recommendation that the SGIP customer's cost of performing the energy audit be limited to a maximum of 5% of the requested incentive payment is adopted.

34. Regarding energy storage operating requirements, the staff proposal's recommended 260-hour discharge requirement for commercial systems is adopted.

35. The existing requirement for residential energy storage systems to dispatch an average of two hours per week for a total of 104 hours per year is adopted.

36. The SGIP retains the requirement that all technologies receiving incentive support be new.

37. No requirement is adopted today but to solicit more information on this topic, program Administrators will hold a workshop and publish a report including recommendations.

38. The Staff Proposal's recommendations regarding M&E reports/audits are adopted as follows:

1. Within six months, a SGIP M&E Plan should be developed by Energy Division staff in consultation with program

administrators; this mimics the CSI program where M&E was directed by Energy Division, not ALJ ruling.

2. M&E funds be used to evaluate administrative performance every year and fiscal performance every other year; with the first rounds of each being completed within twelve months of this Decision.

3. Publicize the online report covering performance for participants receiving PBI payments, including energy generated (kWh), gross and net GHG emissions, number of charging and discharging events and total amount of energy charged and discharged (for storage), amount and type of fuel consumed, and heat recovered (for CHP).

39. Program administrators will no longer accept Renewable/Emerging Technologies Level 2 applications, effective immediately.

40. The Staff proposal that the program administrators hold a workshop to consider whether an M&O program would have value, to flesh out how it would operate, and publish a workshop is adopted.

41. The Fuel Cell Net Energy Metering tariff is not addressed in today's decision but will remain a topic for consideration in this rulemaking.

42. A 5%application fee, due at the time the application is submitted, is adopted.

43. Program Administrators will continue to evaluate applications and grant conditional reservations on a first-come-first-served basis but due to an increasingly over-subscribed program where program funds are fully allocated within minutes, review of this method is warranted.

44. DWEA's Petition for Modification of D.11-09-015 is denied.

45. RightCycle's Petition for Modification of D.11-09-015 is granted.

46. Powertree's Petition for Modification of D.15-06-002 is granted, in part.

47. Under the adopted extension for PowerTree, Powertree must complete its projects and submit final incentive claim forms by December 30, 2016 or lose its reservations.

48. Maas Energy Works' Petition for Modification of D.15-12-027 is denied.

O R D E R

IT IS ORDERED that:

1. Within 120 days of the effective date of this decision, the Program Administrators (Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), Southern California Gas Company, and the Center for Sustainable Energy) shall file a Tier 2 advice letter with revision to the Self-Generation Incentive Program incorporating the program changes stipulated in this Decision, set forth below.

    a. Safety certifications outlined in Finding of Fact 4.

    b. Biogas eligibility requirements outlined in Conclusion of Law 8.

    c. Application of pro-rated biogas adder to generation incentives outlined in Conclusion of Law 18.

    d. Application of Biogas blending requirement starting in 2017 outlined in Conclusion of Law 9.

    e. Allocation of budget between generation and energy storage and carve outs for renewable generation and small-scale storage.

    f. Incentive steps outlined in Conclusions of Law 18 and 19.

    g. PG&E, SCE, SDG&E (or the Program Administrators) shall not issue conditional reservations to a project using a technology installed by a developer (or combination of affiliated installers/developers under the same majority ownership) that has already received reservations for active projects in a given

step such that the total exceeds 20% of the allocation for that step statewide.

h. Modification to the California Supplier adder requirements outlined in Conclusions of Law 29.

i. Cap on the energy efficiency audit expense at 5% of the incentive sought and eliminate the requirement to implement energy efficiency measures with a payback period of less than two years.

j. Storage operating requirements.

k. Increased application fee to 5% of incentive sought.

l. Incorporation of lottery system when applications received on a single day, including development of grid support and Green House Gas reduction criteria.

m. Biogas adder eligibility extended to pressure reduction turbines.

2. To facilitate administration of these incentive budget carve-outs, the total amount of incentive carve-outs for renewable Generation technologies and small scale energy storage should be accounted for across all four Programs.

3. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and San Diego Gas & Electric Company shall file cost allocation proposals to implement the statutory requirement of equitable distribution of the costs and benefits of the Self-Generation Incentive Program, in Tier 3 advice letters to be filed no later than 60 days after the effective date of this decision.

4. The Program Administrators (Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and the Center for Sustainable Energy) are directed to develop a recommended implementation plan for the zero emission fuel blending requirements and serve this recommended plan on the Service List of this proceeding within 60 days of the

approval of this Decision. The Program Administrators shall present their proposal at a workshop within 80 days of the approval of this decision.

5. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company (or the Program Administrators) and the Energy Division are authorized to propose modifications - via advice letter and/or resolution - to the rules associated with developer cap.

6. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company (or the Program Administrators) shall hold a workshop and publish a report including recommendations within six months of the effective date of today's decision on a potential sampling protocol for system inspections designed to ensure that each Self-Generation Incentive Program system provides expected grid benefits as well as customer safety.

7. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company (or the Program Administrators) are authorized to file a Tier 2 advice letter proposing changes to the inspections/sampling regime, following the publication of a workshop report.

8. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company (or the Program Administrators) shall host quarterly workshops for participants to ask questions regarding an Marketing & Outreach program, discuss proposed changes, and provide feedback, the first to be occur before the opening of the Self-Generation Incentive Program under the rules adopted by today's decision.

9. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company (or the Program Administrators) shall develop a methodology for applying a lottery system or a scoring system that could be relied upon in the event applications for a given step & budget exceed

the funds available. The program administrators shall conduct a workshop on the mechanics of the lottery and the scoring criteria to give preference to project providing greater grid reliability and/or greenhouse gas reduction benefits within 60 days of the effective date of this decision.

10. The Distributed Wind Energy's Association Petition for Modification of Decision 11-09-015 is denied.

11. RightCycle's Petition for Modification of Decision 11-09-015 is granted.

12. Powertree's Petition for Modification of Decision 15-06-002 is granted, in part.

13. PG&E shall submit monthly progress reports on the status of the Powertree projects to Energy Division and the assigned Commissioner of Rulemaking 12-11-005 or any successor proceeding. PG&E shall consult with Energy Division regarding the contents of the progress reports. The first report shall be due July 1, 2016 with subsequent reports due on the first each month or the first business day thereafter. The final report shall be due December 1, 2016.

14. The Program Administrators shall grant an extension for Powertree to complete construction and submit incentive claim forms until December 31, 2016.

15. The Maas Energy Works Petition for Modification of Decision 15-12-027 is denied.

16. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company (or the Program Administrators) shall develop enhanced measures to detect and enforce program infractions to be included in the Self-Generation Incentive Program Handbook.

17. Rulemaking 12-11-005 remains opens.

This order is effective today.

Dated _____, at San Francisco, California.