STATE OF CALIFORNIA GAVIN NEWSOM, *Governor*

PUBLIC UTILITIES COMMISSION
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SAN FRANCISCO, CA 94102-3298

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TO PARTIES OF RECORD IN RULEMAKING 12-11-005:

This is the proposed decision of Commissioner Clifford Rechtschaffen. 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 January 16, 2020 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/ ANNE E. SIMON__________
Anne E. Simon
Chief Administrative Law Judge

AES:avs

Attachment

Decision **PROPOSED DECISION OF COMMISSIONER RECHTSCHAFFEN**
(Mailed 12/11/2019)

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

SELF-GENERATION INCENTIVE PROGRAM REVISIONS PURSUANT TO SENATE BILL 700 AND OTHER PROGRAM CHANGES

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SELF-GENERATION INCENTIVE PROGRAM REVISIONS PURSUANT TO SENATE BILL 700 AND OTHER PROGRAM CHANGES

Summary

This decision authorizes ratepayer collections of $166 million annually for the years 2020 to 2024 to fund the Self-Generation Incentive Program (SGIP) consistent with the authorization established by Senate Bill 700 (Wiener, 2018). This decision prioritizes allocation of 2020 to 2024 collections in accordance with Assembly Bill 1144 (Friedman, 2019) and to benefit customers impacted by Public Safety Power Shutoff (PSPS)[1] events or located in areas of extreme or elevated wildfire risk. It allocates 2020 to 2024 incentive funds in the following manner:

- Energy storage technologies – 85 percent;
  - Equity resiliency budget— 63 percent;
  - Large-scale systems greater than 10 kilowatt hours—12 percent;
  - Residential systems smaller than or equal to 10 kilowatt hours– seven percent;
  - Residential equity budget – three percent; and,
- Renewable generation technologies – 15 percent.

[1] As described in Resolution ESRB-8 (July 12, 2018), California Public Utilities Code Sections 451 and 399.2(a) give electric utilities authority to shut off electric power in order to protect public safety, referred to as PSPS events. This authority allows a utility to proactively de-energize electric facilities in locations where weather conditions present extremely high risk of wildfires caused by blowing trees, branches, etc. contacting electric infrastructure. During a PSPS event, customers in the de-energized area have no electricity. Resolution ESRB-8 at 4 requires that a utility initiate a PSPS event only when all other options have been exhausted. http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M218/K186/218186823.PDF.

The decision accelerates the effective date for acceptance of applications for small-scale equity resiliency residential projects to no later than March 1, 2020, expands eligibility to include customers subject to two or more discrete PSPS events and defines additional customers as having critical resiliency needs. This decision also accelerates the effective date for implementation of the greenhouse gas emission reduction requirements for new small-scale residential systems, adopted in D.19-08-001, to no later than March 1, 2020.

In addition, this decision:

- Increases the base renewable generation technology incentive to two dollars per watt with no step-down;
- Adopts resiliency incentive adders for general market large-scale energy storage and renewable generation technologies;
- Modifies the duration incentive step-down structure for general market energy storage projects;
- Eliminates the adjustment for the federal investment tax credit for equipment purchased after December 31, 2021;
- Creates two new residential energy storage incentive steps that decrease by five cents per watt-hour ($0.05/Wh);
- Authorizes SGIP program administrators to submit advice letters to transfer funds between energy storage and generation incentive budgets subsequent to December 31, 2023; and
- Specifies additional information and permitting requirements for general market energy storage and renewable generation systems intended to support customer resiliency.

This decision approves administrative budgets for Southern California Gas Company and the Center for Sustainable Energy of seven and 10 percent respectively, using 2020 to 2024 funds. It directs Pacific Gas and Electric Company and Southern California Edison Company to utilize accumulated unspent administrative funds remaining for the same purpose.

This proceeding remains open.

1. Background

The California Public Utilities Commission (Commission) established the Self-Generation Incentive Program (SGIP) in 2001 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 to reduce peak energy demand. Since 2001, the Legislature has refined and extended the SGIP several times.[2]

In 2018, Senate Bill (SB) 700 (Wiener, 2018) was adopted by the legislature and signed into law. The resulting Public Utilities Code § 379.6(a)(2) authorizes the Commission to extend annual ratepayer collections for the SGIP from December 31, 2019 to December 31, 2024 by up to $166 million annually and to extend administration of the program from January 1, 2021 to January 1, 2026.[3] SB 700 requires the Commission to return to ratepayers any unreserved incentive funds remaining as of January 1, 2026.

AB 1144 (Friedman, 2019) requires the Commission to allocate at least 10 percent of annual SGIP ratepayer collections for the 2020 calendar year for the installation of energy storage and other distributed energy resources for

[2] Notably, AB 1685 (Leno, 2003), AB 2778 (Lieber, 2006) and SB 412 (Kehoe, 2009) collectively shifted SGIP's focus from peak demand reduction towards reducing criteria pollutants and greenhouse gas (GHG) emissions. SB 861 and AB 1478 authorized SGIP collections through 2019 and administration through 2020 and required a number of other changes. AB 1637 (Low, 2016) authorized the Commission to double annual collections through 2019 as compared to calendar year 2008.

[3] Hereafter, all code section references are to the Public Utilities Code unless otherwise noted.

customers that operate critical facilities or critical infrastructure serving communities in High Fire Threat Districts (HFTDs) to support resiliency during de-energization events. AB 1144 requires the Commission, when allocating these funds, to prioritize projects for eligible customers meeting certain criteria and to evaluate these SGIP projects against these criteria no later than December 31, 2022.[4]

In addition, § 379.6 directs the Commission to undertake the following regarding the SGIP:

1. Increase deployment of distributed generation and energy storage systems to facilitate the integration of those resources into the electrical grid, improve efficiency and reliability of the distribution and transmission system, and reduce emissions of greenhouse gases, peak demand, and ratepayer costs (§ 379.6(a)(1));
2. Ensure an equitable distribution of the costs and benefits of the program (§ 379.6(a)(1));
3. Ensure that SGIP program costs are not collected from customers participating in the California Alternate Rates for Energy program (§ 379.6(k));
4. Ensure that distributed generation resources are made available in the program for all ratepayers (§ 379.6(i));
5. Consider the relative amount and 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));
6. Evaluate the success of the SGIP based on the amount of GHG emission and criteria pollutant reductions, the amount of energy reductions measured in energy value, the amount of customer peak demand reductions, the

[4] Section 379.9(b). Section 6.4 of this decision discusses these criteria.

capacity factor,[5] and the value to the electrical transmission and distribution system measured in avoided costs of transmission and distribution upgrades and replacement (§ 379.6(l)); and

7. Limit eligibility to SGIP generation technology incentives as of January 1, 2020 to only technologies using 100 percent renewable fuels (§ 379.6(m)).

An April 15, 2019 *Assigned Commissioner's Ruling Seeking Comment on Implementation of Senate Bill 700 and Other Program Modifications* (April Ruling) requested party feedback on questions to guide implementation of SB 700 and to consider other program modifications.[6] The April Ruling solicited party input on the future direction of the SGIP in a wide range of areas. A number of parties filed opening and reply comments.[7]

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[5] Defined in § 379.6(l) as the ratio of the electricity generated by the distributed energy resource generation projects receiving incentives from the program to the electricity capable of being produced by these projects.

[6] *Assigned Commissioner's Ruling Seeking Comment on Implementation of Senate Bill 700 and Other Program Modifications,* April 15, 2019.

[7] On May 30, 2019, 18 parties filed comments in response to the ruling, including San Jose Clean Energy Authority, Sonoma Clean Power Authority, Peninsula Clean Energy Authority and Silicon Valley Clean Energy Authority, (collectively, Joint Community Choice Aggregators, or Joint CCAs), California Solar and Storage Association (CALSSA), the Center for Sustainable Energy (CSE), the California Clean Distributed Generation Coalition (CCDC), GRID Alternatives and California Housing Partnership Corporation (GRID/CHPC), Southern California Edison Company (SCE), California Energy Storage Alliance (CESA), Sunrun Inc. (Sunrun), Sierra Club and Natural Resources Defense Council (SC/NRDC), Pacific Gas and Electric Company (PG&E), Southern California Gas Company (SoCalGas), the California Public Advocates' Office (Cal Advocates), and the National Fuel Cell Research Center (NFCRC), Bloom Energy, Doosan Fuel Cell America (Doosan) and FuelCell Energy (collectively Joint Fuel Cell Parties or JFCP). On July 12, 2019, SC/NRDC, the CCDC, PG&E, CSE, San Diego Gas & Electric Company (SDG&E), Tesla, GRID, SCE, CESA, CALSSA, A.O. Smith, SoCalGas, Sunrun and the JFCP filed reply comments. Marin Clean Energy filed reply comments on June 14, 2019.

Decision (D.) 19-08-001 *Approving Greenhouse Gas Emission Reduction Requirements for The Self Generation Incentive Program Storage Budget* (GHG Decision) addresses the requirements of SB 700 that energy storage systems receiving SGIP incentives reduce GHG emissions. D.19-09-027 *Establishing A Self-Generation Incentive Program Equity Resiliency Budget, Modifying Existing Equity Budget Incentives, Approving Carry-Over Of Accumulated Unspent Funds, And Approving $10 Million To Support The San Joaquin Valley Disadvantaged Community Pilot Projects* (Equity Resiliency Decision) addresses issues identified in the April Ruling pertaining to the SGIP equity budget and implementing components of AB 1144. The Equity Resiliency Decision modifies equity budget program requirements and establishes a $100 million equity resiliency budget targeting vulnerable customers and customers operating critical facilities or critical infrastructure that are located in Tier 3 and Tier 2 HFTDs.

This decision addresses the remaining requirements of SB 700 and AB 1144 and adopts additional program modifications to improve the ability of the SGIP to meet its goals.

2. Issues Before the Commission

The issues to be determined in this decision are the following:

1. The amount of ratepayer collections for the SGIP for the years 2020 to 2024;
2. The allocation of newly collected funds across eligible SGIP technologies and customer sectors;
3. Program and incentive modifications to improve the ability of SGIP to meet its goals and to provide resiliency services to customers impacted by Public Safety Power Shutoff (PSPS) or other outage events; and,
4. Modifications to administrative budget allocations and requirements.

3. 2020 to 2024 Ratepayer Collections

D.17-04-017 authorized new SGIP ratepayer collections of $166 million annually for the years 2017 through 2019. The April Ruling requested party comment on the following questions:

- What criteria should the Commission use to determine ratepayer collection levels for years 2020-2024?
- Based on your proposed criteria, should the Commission authorize further collections for SGIP? If so, at what level, and in which years?
- Should the Commission authorize the carry-over of accumulated SGIP funds at the end of 2019 for subsequent years? If so, should the Commission reduce the annual collection in 2020 by the amount carried over?

The central criteria to determine new ratepayer collections for the years 2020 through 2024 are the achievements of the SGIP against adopted goals and whether the Commission finds that the SGIP program can continue to usefully advance these goals. This decision also prioritizes allocation of incentive funds to customers most impacted by PSPS events or located in areas of extreme or elevated wildfire risk.

D.16-06-055 adopts three co-equal SGIP program goals and two principles for program design, consistent with statute. These are:

1. Environmental benefits: the reduction of GHG emissions and criteria pollutants and the limitation of other environmental impacts, such as water usage;
2. Grid support: the reduction or shift of peak demand, improved efficiency and reliability of the transmission and distribution system, lowered grid infrastructure costs, the provision of ancillary services, and ensuring the reliability of customer distributed energy resources;
3. Market transformation: supporting technologies with the potential to thrive in future years without rebates;

4. Maximizing ratepayer value; and
5. Providing for equitable distribution of benefits among customer classes.

In comments, parties representing the energy storage industry, environmental organizations, and CSE support extending the current level of annual collections by authorizing $166 million in annual collections for the 2020 to 2024 period. These parties suggest that further investment is needed to continue to develop the energy storage market, particularly energy storage installation businesses that must invest significant resources to develop the technical expertise necessary to thrive in this industry. Parties also cite the important role of storage in integrating solar energy into the grid, and the fact that energy storage resources support increased resiliency to de-energization events during times of increased wildfire risk.

Parties opposing the full $166 million in annual collections for the 2020 to 2024 period authorized in SB 700 include Cal Advocates, PG&E, SoCalGas and SDG&E. These parties argue that SGIP's GHG emissions reduction performance remains unproven and that program administrators (PAs) have significant accumulated unused funds. Cal Advocates argues that authorizing the collection of additional funds for storage technologies is not warranted at this time because SGIP storage technologies have not yet been shown to reduce GHG emissions. SCE recommends the Commission reconsider the collections authorized in SB 700 in two years.

We direct PG&E, SCE, SoCalGas and SDG&E to annually collect $166 million from their customers from 2020 through 2024 for the SGIP. As we affirmed in D.17-04-017, the Commission continues to see value in SGIP and expects this value to continue through 2025.[8] Energy storage offers customers the resiliency benefits of delivering electricity during PSPS events.[9] SGIP equity resiliency and equity budget incentives allow low-income and vulnerable customers and disadvantaged communities the opportunity to access benefits that would otherwise be unavailable to them due to the relatively high cost of the installed technology. In addition, energy storage systems receiving SGIP incentives support integration of renewable energy into the grid.

SGIP also plays a central role in nurturing developer and installer networks for on-site behind-the-meter energy storage. These networks will support continued growth in California's energy storage market when the SGIP ends. As observed by CSE, "SGIP incentives provide…support so that manufacturers, developers and system operators of distributed resources can gain crucial experience without undertaking insurmountable risk."[10]

Authorizing new annual ratepayer collections of $166 million between 2020 and 2024 allows the Commission to prioritize allocation of new SGIP funds to customers most impacted by PSPS events, supports market transformation, maximizes ratepayer value, ensures the continued provision of grid services and provides for the equitable distribution of benefits.

We disagree with Cal Advocates and the investor-owned utilities (IOUs) that either no or only limited ratepayer collections should be authorized at this time. Although this would reduce ratepayer impacts in the short term, SB 700 requires the return of unreserved SGIP incentive funds to ratepayers as of

[8] SB 700 extends administration of incentive applications through January 1, 2026.

[9] By resiliency benefits, we mean here the opportunity for customers to have some amount of electricity when the grid shuts down.

[10] CSE, Comments on April Ruling, May 30, 2019 at 2.

January 1, 2026. This mitigates the risk of over-collecting. In addition, waiting two to three years to authorize additional collections as suggested by SCE creates unnecessary uncertainty regarding the stability of SGIP funding, which is particularly important for large-scale projects that have longer planning horizons.

We also do not agree with Cal Advocates that continuing existing levels of ratepayer collections are not justified because of SGIP technologies' GHG emissions performance. After an extensive technical working group process, the Commission in the GHG Decision revised SGIP energy storage guidelines to meet the statutory requirement that SGIP storage systems reduce GHG emissions. The rules will soon go into effect, so it is premature to reach the conclusion put forth by Cal Advocates. As provided for in the GHG Decision, if subsequent impact evaluations show that SGIP GHG emission reductions goals have not been met, the Commission will revisit our adopted GHG requirements.

D.17-04-017 continues the methodology used in D.14-12-033 to divide annual SGIP collections amongst PG&E, SCE, SDG&E and SoCalGas based on the proportionate share of energy efficiency funding adopted by the Commission in D.06-12-033 and D.06-01-024. We find no need to change the existing process, which works well. Accordingly, annual SGIP collections for the years 2020 to 2024 shall be allocated as follows:[11]

[11] Note that Table 1 reflects the total funding authorized 2020-2024, including administrative budget allocations using 2020 – 2024 collections.

Table 1: Authorized Annual SGIP Ratepayer Collections, 2020-2024

Program Administrator	Percent[12]	Annual Collection (in $ millions)	Total Collection (in $ millions)
PG&E	44	$73.04	$365.2
SCE	34	$56.44	$282.2
SDG&E	13	$21.58	$107.9
SoCalGas	9	$14.94	$74.7
Total	100	$166	$830

The Equity Resiliency Decision authorizes the carry-over of approximately $471 million in accumulated unspent SGIP funds at the end of 2019 for subsequent years, with approximately $70 million of this for administrative budgets. In line with our reasoning above, we do not reduce annual collections between 2020 and 2024 by the amount of funds carried over. However, Section 3 considers accumulated unused funds in the context of allocating funds across eligible SGIP technology and administrative budgets for the 2020 to 2024 period.

3.1. Cost Allocation Across Customer Classes

D.16-06-055 directs PG&E, SCE, SoCalGas and SDG&E to file Tier 3 advice letters to implement § 379.6(a)(1), which requires the Commission to ensure an equitable distribution of the costs and benefits of SGIP.[13] Resolution E-4926, adopted April 26, 2018, directs PG&E, SCE, SoCalGas and SDG&E to allocate SGIP costs on the basis of the actual benefits resulting from the disbursement of SGIP incentives over the previous three years in PA service territories and to update this allocation annually, on a rolling basis, to account for changes in

[12] D.06-01-024 at 7 (Table 2) first adopted these PA contribution ratios for the California Solar Initiative; D.06-12-003 at 32-33 adopted them for the SGIP.

[13] D.16-06-055, Ordering Paragraph 4.

eligibility and market factors until the program sunsets and unless extended.[14] As mentioned earlier, § 379.6(a)(2) requires the return to ratepayers of any unreserved SGIP incentive funds remaining as of January 1, 2026.

The customer cost allocation method directed in Resolution E-4926 has worked well to ensure the equitable distribution of the costs and benefits of the SGIP as required in § 379.6(a)(1) and we see no reason to modify this approach. SGIP PAs are also correctly implementing § 379.6(k) via the Public Purpose Program charge.

We direct PG&E, SCE, SoCalGas and SDG&E to each submit a Tier 1 Budget advice letter summarizing the 2020 to 2024 ratepayer collections approved here no later than 90 days after Commission adoption of this decision. PG&E, SCE, SoCalGas and SDG&E shall include in their Budget advice letters an updated cost allocation across customer classes, based on the actual benefits resulting from the disbursement of SGIP incentives over the previous three years in its service territories. PG&E, SCE, SoCalGas and SDG&E shall continue to allocate costs on a rolling basis annually to account for changes in eligibility and market factors, until the program sunsets. In addition, PG&E, SCE, SoCalGas and SDG&E shall indicate in their Budget advice letters, and their next available rate proceedings, their commitment to return to ratepayers all unreserved SGIP incentive funds remaining as of January 1, 2026.

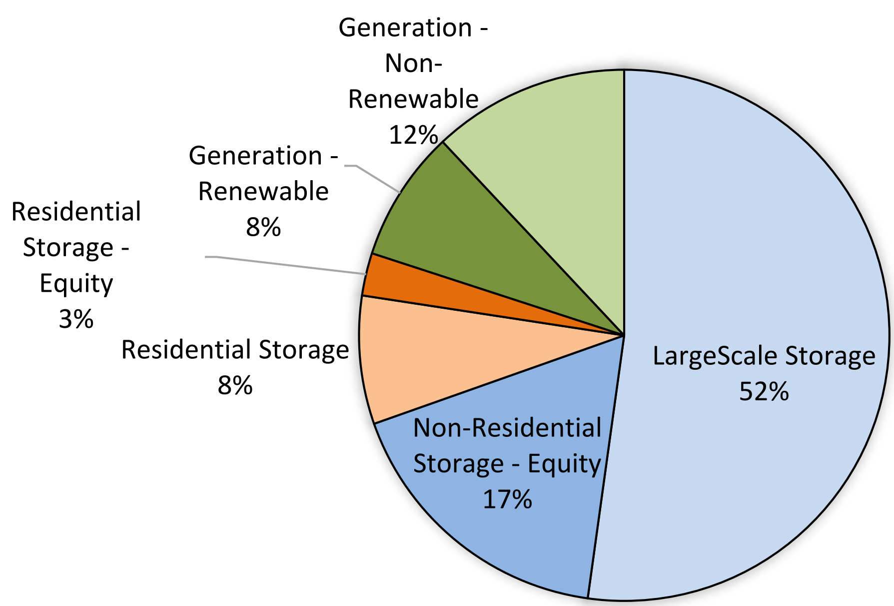
4. Distribution of SB 700 Funding

D.16-06-055, D.17-04-017 and D.17-10-004 established SGIP funding allocations across eligible technologies and customer sectors. D.16-06-055 and D.17-04-017 collectively allocated 80 percent of the total 2017-2019 SGIP budget

[14] *See* Resolution E-4926 at http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M213/K658/213658920.PDF.

for storage technologies and 20 percent for generation technologies. D.17-04-017 allocated 10 percent of the 2017 - 2019 storage budget to residential projects equal to or smaller than 10 kilowatts (kW) and D.17-10-004 reserved funds for equity budget customers within the residential and large-scale storage budgets. Figure 1 summarizes the current allocation of SGIP funds.[15]

Figure 1: Current SGIP Funding Allocations



The April Ruling requested party comment on whether the Commission should modify the budget allocation between storage and generation projects and between residential and non-residential storage projects for funds collected in 2020-2024.

Section 379.6(h)(2) requires the Commission to consider the following when allocating program funds between eligible technologies:

- The relative amount and cost of GHG emission reductions;

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[15] *See* also April Ruling.

- Peak demand reductions;
- System reliability benefits; and
- Other measurable factors.

Based on statutory requirements, the Commission's adopted SGIP goals, and party comments, our primary considerations to determine SGIP budget allocations for the 2020 – 2024 period are: (1) the performance of eligible technologies in advancing SGIP goals to date and their anticipated future performance; (2) anticipated future need and demand for eligible technologies; and, (3) maximizing ratepayer value to provide community benefits.

4.1. Renewable Generation Technologies

In comments, parties were split on whether allocations to generation technologies should decrease or increase. SC/NRDC state that directed biogas projects do not produce incremental renewable energy benefits and represent a windfall for gas companies. These parties recommend the Commission eliminate directed biogas projects as an eligible SGIP technology and allocate just three percent of new collections to renewable generation projects that use on-site biofuels. Sunrun and CESA oppose further budget allocations to generation technologies based on lack of demand. These parties observe that generation technologies comprised less than one percent of total SGIP reservations in 2018.

CSE, CCDC and JFCP recommend increasing the budget allocation for generation technologies and reducing the allocation for energy storage technologies. These parties' rationale is that biofuel projects need larger incentives to encourage developers to bring new projects online and to transform the market so that all fuel cell and combined heat and power (CHP) technologies become 100 percent renewable in the future. They state that the primary driver of low participation in the generation budget in recent years has been the high cost and limited availability of renewable fuels. We discuss this issue more in Section 4.2. SCE and CALSSA recommend retaining the current energy storage and generation budget allocations.

The *2016-2017 SGIP Incentive Program Impact Evaluation* (2016-2017 Report) found that generation technologies reduced GHG emissions during 2016-2017. It found that on-site biogas projects reduced GHG emissions the most and found similar results for reduction of criteria pollutants. In addition, the 2016-2017 Report attributes nearly half of all peak demand reduction from SGIP projects to electric-only fuel cells, while energy storage technologies achieved just one-tenth of that amount.[16] The 2016-2017 SGIP Report did not assess system reliability benefits.

The 2017 *SGIP Advanced Energy Storage Impact Evaluation* (2017 Storage Report) found that large-scale and residential SGIP projects increased GHG emissions.[17] However, the recent GHG Decision extensively modified SGIP GHG emission reduction requirements to address this problem.

On balance, we find that a 15 percent allocation of 2020 to 2024 collections to renewable generation projects is reasonable. A 15 percent allocation balances the slow uptake of generation incentives in recent years with a relatively strong GHG performance by these technologies and future promise of growth. In addition, these technologies may be able to provide resiliency benefits in areas most affected by PSPS events. A 15 percent allocation results in nearly $129 million in renewable generation technology incentive funds over the coming five-year period, should stimulate developer interest, and should allow

[16] 2016-2017 SGIP Report at ES-4, Figure 6-10 at 6-12 and Figure 6-6 at 6-7.

[17] GHG Decision at 5.

for a significant number of projects. Section 5.2 increases renewable generation technology incentive levels with the same aim.

4.2. Energy Storage Technologies

The Equity Resiliency Decision reallocated accumulated unspent generation incentive funds to establish a $100 million equity resiliency budget but did not establish allocations for either the equity resiliency or the equity budget using 2020 to 2024 ratepayer collections.

The 2019 SGIP Energy Storage Market Assessment and Cost Effectiveness Report (2019 Report) released December 9, 2019 provides information on current market conditions and key drivers of the cost-effectiveness of energy storage over time. However, the findings in the 2019 report lend themselves to multiple interpretations about the likely future cost-effectiveness and market transformation potential of residential and large-scale storage systems. While the 2019 Report provides insight into the current and potential future state of energy storage, we find here that the key factors in determining the 2020 to 2024 storage budget allocations are anticipated customer need, demand, and community benefits. The greatest immediate need is for the SGIP to support the ability of customers with critical resiliency needs to install on-site storage or renewable generation and, in this way, to provide community benefits.

For purposes of the equity resiliency budget, the Equity Resiliency Decision defines residential customers with critical resiliency needs as customers residing in a Tier 3 or Tier 2 HFTD and one of the following: (1) eligible for the equity budget; (2) eligible for the medical baseline program, as defined in D.86087, 80 CPUC 182: or, (3) a customer that has notified their utility of serious illness or condition that could become life-threatening if electricity is disconnected, as defined in D.12-03-054.[18] The Equity Resiliency Decision defines non-residential customers with critical resiliency needs as those located in a Tier 3 or Tier 2 HFTD that that provide critical facilities to a community located in a Tier 3 or Tier 2 HFTD and eligible for the equity budget. The Equity Resiliency Decision also defines customers living in Tier 3 or Tier 2 HFTDs that have reached an "incentives reserved" stage in two ratepayer-funded low-income solar programs as eligible for the equity resiliency budget.[19]

We allocate 63 percent of 2020 to 2024 ratepayer collections for SGIP incentives to the equity resiliency budget. A 63 percent allocation to the equity resiliency budget prioritizes customers with the greatest immediate need for on-site storage and advances the Commission's SGIP goals. An equity resiliency budget allocation of 63 percent will help establish developer networks that can continue to serve such communities when the SGIP program sunsets. As explained later, this decision also expands eligibility for the equity resiliency budget by adding customers whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives (*see* Section 6.2.1).

We also allocate three percent of 2020 to 2024 collections to the "regular" equity budget, a level sufficient to maintain funding for this budget category at approximately three percent of the total 2019-2024 SGIP budget. This allocation

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[18] Equity Resiliency Decision (D.19-09-027) at A1.

[19] Equity Resiliency Decision (D.19-09-027) at A2. For purposes of SGIP equity resiliency budget eligibility, the Equity Resiliency Decision defines the eligible ratepayer-funded low-income solar programs as the Single Family Affordable Solar Homes (SASH) and SASH for disadvantaged communities (DAC-SASH) programs.

will ensure that the opportunity for SGIP participation by low income residential customers is maintained over time.

We do not authorize any funding from 2020 to 2024 collections for the large-scale storage equity budget at this time. Although the Equity Resiliency Decision significantly increased incentives levels to eligible equity budget customers, we do not yet have data indicating how much demand will increase as a result. In the event of increased customer demand for large-scale storage equity budget, section 8 authorizes additional fund shifting authority for SGIP PAs to respond to observed market demand.

We reduce funding allocations to general market large-scale storage systems to 12 percent of 2020 to 2024 collections allocated to incentives, down from the current 52 percent. Combined with the approximately $217 million and $53 million in accumulated, unspent large-scale storage general market and equity budget funds, large-scale energy storage projects have access to approximately $368 million in project incentives through 2025. This significant amount of funding is sufficient to encourage developer investment.

We decrease the existing residential storage budget allocation of eight percent only slightly to seven percent. As discussed in Section 5.1.2, this decision adopts a new incentive level for Step 6 small residential storage projects of 20 cents per watt-hour ($0.20/Wh). At this incentive rate, a median 13.2 kWh, two-hour residential storage system would receive a $2,640 incentive or about 20 percent of the median $13,500 cost of a residential system. Our adopted 2020 to 2024 residential storage budget allocation provides for a total budget of approximately $60 million for the 2020 to 2025 period and incentive funds for approximately 30,000 new residential systems across Step 6 and Step 7.[20]

There is high demand for residential SGIP incentives currently.[21] Thus, a seven percent residential budget allocation using 2020 to 2024 incentive funds balances evidence of significant, ongoing customer demand for general market residential storage systems with other priorities.

We do not establish a specific 2020 to 2024 budget allocation for heat pump water heaters (HPWH) at this time. The Equity Resiliency Decision approved a HPWH budget of $4 million for equity budget customers and Commission staff and PAs will hold a workshop in 2020 to explore policies to facilitate participation of this technology in the SGIP. The Commission may revisit the question of future, dedicated HPWH budget allocations subsequent to the workshop and related processes. We also note that, as in the past, thermal energy storage systems remain eligible for all categories of energy storage incentives, if they meet other applicable requirements.

4.3. Administrative Budgets

4.3.1. Accumulated Unused Funds

Currently, seven percent of the SGIP budget for each PA is set aside for program administration, including general administration, marketing, education and outreach (ME&O) and evaluation, monitoring and verification (EM&V)

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[20] As of late November 2019, nearly 7,300 small residential storage systems have received SGIP incentives. https://www.selfgenca.com/documents/reports/statewide_projects (accessed November 26, 2019).

[21] As of late November 2019, Step 5 of all PAs' residential storage budgets are fully reserved and over 1,380 customers are waitlisted for incentives. https://www.selfgenca.com/documents/reports/statewide_projects (accessed November 26, 2019).

costs.[22] However, administrative funds collected annually through 2024 must cover administrative costs incurred for up to eight years past the date the last SGIP application will be accepted— January 1, 2026. PA administrative costs incurred past January 1, 2026 include EM&V activities, maintenance of the SGIP application database, and the distribution of performance-based incentives for five years following the installation of systems receiving incentives in late 2025. In addition, EM&V for any given year can take up to 18 months and the Equity Resiliency Decision directed a range of ME&O activities using administrative budget funds.[23]

Table 2 below shows PA administrative budgets, estimated annual administrative expenditures averaged over the past three years, and the estimated amount of unused funds accumulated in administrative budgets since the program's inception. The estimated amount of unused funds is based on collections and spending reported prior to November 23, 2019, but some expenditures may not yet be reported.[24] Thus, actual values for available funds are likely lower.

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[22] D.17-04-017 at 3.

[23] D. 19-09-027 at 128.

[24] PAs report administrative and incentive costs regularly to Energy Solutions, the third-party contractor that manages the SGIP database and public reporting of SGIP statistics. *See* SelfGenCA.com.

Table 2: PA Administrative Annual Collections, Annual Spend, and Unused Funds

Program Administrator	Annual Admin Collections for 2017-2019	Est. Annual Admin Spend (Averaged Over 2016-2018)[25]	Est. Unused Admin Funds Accumulated to Date[26]
PG&E	$5,040,000	$2,980,000	$26,708,673
SCE	$3,920,000	$2,330,000	$31,589,564
CSE	$1,540,000	$1,440,000	$2,561,400
SoCalGas	$1,120,000	$977,000	$7,573,622
Statewide	**$11,620,000**	**$7,727,000**	**$68,433,259**

As of December 2019, PG&E and SCE have over $26 million and $31 million, respectively, in their administrative budgets, primarily because these PAs rarely spend their full, allocated annual administrative budget. Conversely, CSE and SoCalGas are closer to exceeding their current administrative allocations. CSE has expressed concern that its annual seven percent administrative allocation is insufficient to cover administrative costs that are fixed regardless of the volume of incentives processed.

4.3.2. Program Administrator Allocations

The April 2019 Scoping Ruling asked parties the following questions:

1. How should the Commission address the large existing balances in PG&E and SCE's administrative budgets? Should the Commission direct PG&E and SCE to transfer administrative funds to their incentive budgets, cover future administrative expenditures using the existing balances and lower future ratepayer collections accordingly, or a different option?
2. What other modifications, if any, should the Commission implement to ensure CSE and SoCalGas collect sufficient

[25] Source: PA estimates provided to Energy Division staff by January 23, 2019.

[26] Source: PA Budget Details (Internal Only), SelfGenCA.com (accessed November 24, 2019).

funds to cover administrative costs through 2032 without unduly burdening ratepayers?

3. D.14-12-033 granted the PAs authorization to shift funding *from* administrative *to* incentive budgets via advice letter, with the caveat that sufficient funding must remain in the administrative budget to pay for any program evaluations or other reports required by the Commission or Energy Division.[27] Should the Commission authorize the PAs to shift funding from incentive to administrative budgets via advice letter and, if so what criteria should the Commission use to evaluate the request?

Regarding the first question, we direct PG&E and SCE to use their remaining accumulated unspent administrative budgets to fund their SGIP administrative costs subsequent to December 31, 2019. Were the Commission to authorize expenditure of seven percent of PG&E and SCE's 2020 through 2024 budget allocations of $365.2 million and $282.2 million respectively (*see* Table 1), this would result in five -year administrative budgets for these PAs of $25.6 million and $19.8 million respectively. Rather than allocating a portion of 2020 to 2024 collections toward PG&E and SCE's administrative costs, these companies should simply use their existing unused administrative funds. This approach is simple, straightforward and maximizes the funds available to ratepayers of these companies for equity resiliency and other SGIP incentives.

In comments, Cal Advocates and PG&E recommend that the Commission direct PG&E to return PG&E's accumulated unspent administrative funds to ratepayers, but we decline to do so. Our approved approach maximizes the value of SGIP to PG&E and SCE ratepayers because it maximizes funding for

[27] D.14-12-033 at 6.

customers in immediate need of SGIP incentives for resiliency purposes while simultaneously advancing the SGIP's statutory goals.

SoCalGas does not request additional administrative budget at this time and shall continue with a seven percent allocation for the 2020-2024 period.

Regarding the second question, we increase CSE's allocation for administrative funds from seven to 10 percent for the 2020-2024 period. CSE should have access to a larger administrative budget to ensure its capacity to process the large volume of residential applications experienced in recent years— twice the volume of the previous 15 years. Unlike the IOU PAs, CSE lacks a large institutional base of resources to leverage towards SGIP administration. The GHG Decision, the Equity Resiliency Decision, and this decision add administrative complexity to the SGIP program and all PAs need sufficient funds to undertake the activities the Commission requires of them.

Table 3 summarizes administrative and incentive budget allocations from the 2020 to 2024 collections for CSE and SoCalGas. Excluding administrative budget allocations, the total statewide SGIP incentive budget available from 2020 to 2024 collections is approximately $814 million.

Table 3: CSE and SoCalGas Administrative and Incentive Budgets

	Total 2020 – 2024 Allocation ($ millions)	Administrative Allocation ($ millions)	Incentive Allocation ($ millions)
CSE	$107.9	$10.79	$97.11
SoCalGas	$74.7	$5.23	$69.47

4.4. Adopted 2020 to 2024 Budget Allocations

Table 4 summarizes our adopted budget allocations using funds collected during 2020 to 2024 period and presents these alongside remaining accumulated unspent funds as of September 2019.

Table 4: 2020 to 2024 Adopted Allocations and Total Incentives Budgets

	Currently Authorized		**Adopted Allocation of 2020-2024 Collections**		**Total Incentive Funds Available (2019-2025)**	
	Percent[28]	Budget as of September 2019[29] ($ millions)	Percent	Total Amount (2020-2024) ($ millions)	Budget ($ millions)	Percent
Renewable generation	20	$6,760,301	15	$122,097,150	$128,857,451	11
Large-scale storage	52	$216,818,321	12	$97,677,720	$314,496,041	26
Equity- Large Scale	17	$52,852,387	0	$0	$52,852,387	4
Residential storage	8	$3,086,504	7	$56,978,670	$60,065,174	5
Equity-residential	3	$7,231,691	3	$24,419,430	$31,651,121	3
Equity Resiliency		$100,000,000	63	$512,808,030	$612,808,030	50[30]
San Joaquin Valley Pilots		$10,000,000	0	$0	$10,000,000	1
HPWH (Equity)		$4,000,000	0	$0	$4,000,000	
Total	**100**	**$400,749,204**	**100**	**$813,981,000**	**$1,214,730,204**	**100**

PG&E, SCE, SoCalGas and CSE shall submit a Joint Tier 2 Implementation advice letter revising the SGIP handbook to implement the program revisions and budgets adopted in this decision no later than 90 days from adoption of this decision.

5. Program and Incentive Modifications

As of December 2019, all SGIP PAs are in Step 5 for residential storage incentives but insufficient funding remains in this step, so over 1,380 projects have been waitlisted as of December 2019.[31] The reverse is true for large-scale storage technologies and for generation technologies. PG&E is in Step 2 of its

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[28] Authorized in D.16-06-055, D.17-04-017 and D.17-10-004 as discussed above.

[29] Adopted in the Equity Resiliency Decision (D.19-09-027).

[30] The actual amount is 50.45 percent, rounded to 50 percent.

[31] https://www.selfgenca.com/documents/reports/statewide_projects (accessed November 26, 2019).

large-scale storage budget and the other SGIP PAs are in Step 3. In addition, all PAs are in Step 1 of their generation technology budgets.

The April Ruling requested party comment on the reasons for the low participation levels in the generation and large-scale storage budgets asking:

1. What are the main drivers for low participation in the generation and large-scale energy storage budgets beginning in 2017?
2. What program changes should the Commission consider, if any, to increase subscription in the generation and large-scale storage budgets?
3. Are modifications to the incentive levels adopted in D.16-06-055 and D.17-04-017 warranted?
4. Should the Commission adopt additional incentive steps in the storage or generation budgets?
5. Should the Commission continue stepping down storage incentive levels by $0.05/Wh and generation incentive levels by $0.10/Wh?

The following sections adopt modifications to program requirements, incentive levels and incentive step-down structures for energy storage and generation technologies and allocate 2020 to 2024 ratepayer collections across incentive steps.

5.1. Energy Storage Technologies

5.1.1. Large-Scale Energy Storage Incentives

The Commission in D.16-06-055 and D.17-04-017 modified large-scale storage technology incentive levels as summarized in Table 5. D.17-04-017 reduces SGIP incentives for large-scale storage projects utilizing the federal

Investment Tax Credit (ITC).[32] Modifications to the current program requirements, incentive levels and/or the incentive structure for large-scale energy storage systems should aim to reduce or eliminate barriers to participation.

Table 5: Current Large-Scale Energy Storage Incentive Structure

	Step 1 ($/Wh)	**Step 2 ($/Wh)**	**Step 3 ($/Wh)**	**Step 4 ($/Wh)**	**Step 5 ($/Wh)**
Large-scale storage	0.50	0.40	0.35	0.30	0.25
Large-scale storage + ITC	0.36	0.29	0.25	0.22	0.18

In comments, CSE and CALSSA identify the major barriers to large-scale storage as long project development lead times, exacerbated by interconnection and application processing delays, and permitting complications. Parties also point to uncertainties regarding new GHG requirements—since updated in the GHG Decision— and how changes in peak hours and demand charges will impact the value proposition of energy storage as barriers to large-scale storage project development. Tesla states that changes in peak hours and demand charges have "had a significant role in reduced demand for storage solutions in the non-residential context" because they have reduced the value of solar production, which has in turn impacted the economics of storage paired with solar.[33] CESA asserts that decreases in SGIP incentives for large-scale storage have outpaced declines in storage system costs, resulting in large-scale storage projects being uneconomic even with incentives.

[32] *See* D.17-04-017, Table 6 (slow adoption) and D.16-06-055 Tables 1 and 2. *See* Statewide Announcement on May 15, 2017 establishing a lower incentive rate for Step 2 Large-Scale Storage https://www.selfgenca.com/home/about/.

[33] Tesla Opening Comments at 3.

Several parties state that the decline of the federal ITC to 10 percent in 2022 will negatively impact the economics of large-scale storage projects and that SGIP incentives should be increased. PG&E recommends against increasing large-scale storage incentives, observing that incentives currently offset about 40 percent of the project cost for a large-scale system and that investor certainty is more important than incentive levels. PG&E and SCE recommend moving to an annual incentive step-down structure rather than the current step-down of incentives based on the volume of demand for incentives. PG&E states that this change would reduce administrative complexity for PAs and add certainty for applicants.

To address a potential barrier in a precautionary manner, we eliminate the ITC adjustment to large-scale general and equity budget storage incentives, effective for equipment purchased after December 31, 2021. We also eliminate the ITC adjustment for large-scale equity resiliency and equity budget storage projects for equipment purchased after December 31, 2021. The SGIP PAs shall add a question about system purchase date to large-scale storage incentive applications. We agree that recently adopted changes in peak hours and demand charges, new GHG requirements and the significant reduction to the ITC may impact the economics of large-scale storage projects but cannot at this time precisely predict how. However, long project lead times mean that the decrease in ITC in the coming years will soon or may already have a chilling effect on large-scale storage project development.[34] Further, we decline to raise incentive

[34] Less than half of SGIP large-scale storage projects approved from 2017 through 2019 used the ITC. However, storage must be paired with solar to receive the ITC, and nearly 70 percent of large-scale SGIP storage projects paired with solar approved during 2017-2019 used the ITC. SGIP Project Database (Internal Only), SelfGenCa.com (accessed November 21, 2019).

levels for large-scale storage technologies, as we do not have enough information to determine that large-scale storage incentives are too low.

We retain the existing large-scale storage incentive structure adopted in D.16-06-055. The current incentive structure supports market transformation by encouraging a competitive application process and this goal outweighs the potential administrative benefits of moving to an annual step-down structure as proposed by PG&E and SCE. The Commission in D.16-06-055 adopted the current step-down structure in specifically to link declining incentive levels with the volume of incentives awarded.

We allocate the nearly $98 million in 2020 to 2024 collections for large-scale storage incentives equally across the existing Step 3 to Step 5 (*see* Table 4). Allocating 2020 to 2024 collections equally across the existing large-scale energy storage incentive steps reasonably integrates new and existing unused funds and provides stability. We direct the SGIP PAs to revise the 20 percent developer caps based on the new total statewide budgets adopted for large-scale storage Step 3 through Step 5.

5.1.2. Residential Energy Storage Incentives

The residential storage incentive structure adopted in D.16-06-055 and D.17-04-017 is summarized in Table 6.[35]

Table 6: Residential Energy Storage Incentive Structure

	Step 1 ($/Wh)	Step 2 ($/Wh)	Step 3 ($/Wh)	Step 4 ($/Wh)	Step 5 ($/Wh)
Residential storage (<=10 kW)	$0.50/Wh	$0.40/Wh	$0.35/Wh	$0.30/Wh	$0.25/Wh

[35] *See* D.17-04-017, Table 6 and D.16-06-055 Tables 1 and 2.

Parties generally support adding additional incentive steps to the residential storage budget, declining at a rate of either $0.05/Wh per step or $0.02/Wh per step. Sunrun recommends not reducing incentive steps below $0.20/Wh, stating that a level below this amount would make residential storage projects uneconomic.

We continue the residential budget's existing $0.05/Wh incentive step-down structure through 2025. In order to maximize the number of customers able to access incentives, we authorize two additional steps, Steps 6-7, and allocate the 2020 to 2024 funds allocated to the residential storage budget equally across these two steps. Our adopted approach continues the $0.05/Wh step-down adopted in D.16-06-055 and continues the equal allocation across residential incentive steps adopted in D.17-04-017. This approach continues a stable structure with a successful track record.

Table 7 summarizes our approved residential storage budget allocation across incentive steps using funds collected from 2020 to 2024.

Table 7: Residential Storage Incentive Step Allocation
(2020 to 2024 Collections)

	Step 6	**Step 7**
Residential storage (<=10 kW)	$0.20/Wh	$0.15/Wh
Budget Allocation ($ millions)	$28.49	$28.49

We do not approve Sunrun's suggested $0.02/Wh incentive step-down rate or a floor of $0.20/Wh for residential incentives because we do not have evidence that an incentive level lower than $0.20/Wh will make residential storage systems uneconomical. Demand for residential SGIP storage incentives has been high in the last year. In addition, the SGIP 2017 Impact Evaluation found that a primary value obtained by residential customers installing storage is the system's ability to provide backup power.[36] This suggests some residential customers remain willing to invest in storage regardless of energy bill savings or payback period.

5.1.3. Equity Resiliency Incentives

Table 8 summarizes equity resiliency and equity budget incentive levels as approved in the Equity Resiliency Decision. The Equity Resiliency Decision did not approve a step-down structure for equity resiliency incentives and we do not adopt one here.

Table 8: Equity Resiliency and Equity Budget Storage Incentive Levels

	Incentives (no step-down)
Equity resiliency incentives	$1.00/Wh
Equity budget incentives	$0.85/Wh

We direct SGIP PAs to allocate the full nearly $513 million equity resiliency budget approved here to the single incentive level approved in the Equity Resiliency Decision.

5.2. Renewable Generation Technologies

D.16-06-055 adopted updated incentive levels for generation technologies, as summarized in Table 9. All PAs are currently in Step 1 for generation technologies.

Table 9: Generation Technology Incentive Levels Adopted in D.16-06-055

	Step 1		Step 2		Step 3	
	Incentive per Watt (W) Capacity	Max. Incentive w/ Biogas Adder	Incentive per W Capacity	Max. Incentive w/ Biogas Adder	Incentive per W Capacity	Max. Incentive w/ Biogas Adder
Wind	$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

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[36] SGIP 2017 Storage Impact Evaluation at 1-24 and 1-27.

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

Section 379.6(m) requires that as of January 1, 2020, generation technologies receiving SGIP incentives must only use renewable fuels. In addition, D.16-06-055 requires all SGIP renewable generation projects to meet the California Energy Commission's renewable portfolio standard requirements.

In comments on the April Ruling, CCDC and JFCP state that the entry into force of § 379.6(m) combined with a limited availability of directed biogas delivered by pipeline has stymied SGIP renewable generation projects. JFCP states that directed biogas for renewable generation projects is uneconomical because the California Low Carbon Fuel Standard and the Federal Renewable Fuel Standard offer large incentives for bio-methane for transportation uses, which has driven up demand and prices. Reflecting this barrier, developers have submitted only 17 valid SGIP renewable generation technology applications since the Commission adopted D.16-06-055.[37]

CCDC and JFCP request that the Commission ameliorate these barriers by increasing incentives for SGIP biofuel generation projects. JFCP states that the SGIP incentive of $3.11/W for on-site CHP fuel cells and directed biogas projects in place prior to D.16-06-055 serves as a benchmark. SoCalGas observes that the SGIP generation technology incentive level of $2.00/W that existed in 2011

[37] SGIP Project Database, SelfGenCa.com (accessed November 21, 2019).

induced substantial participation by renewably fueled generation projects at that time. CSE also supports increasing incentives for renewable generation projects.

Sierra Club/NRDC recommend that the Commission remove directed biogas projects from SGIP eligibility. Sierra Club/NRDC state that tracking and verification systems are not sufficient to ensure that directed biogas projects produce incremental environmental benefits. They also observe that the SGIP 2018 *Self-Generation Incentive Program: Renewable Fuel Use Report No. 27* found that most directed biogas contracts only require the project to use renewable fuels for five years, after which the project operates on 100 percent natural gas.[38]

We modify the incentive levels approved in D.16-06-055 to return incentives for renewable generation projects to $2.00/W with no step-down structure. Renewable generation projects offer value to California's grid and provide reliable GHG emission reductions. Because we have limited information on the incentive level necessary to cover the increased costs of renewable biofuels, we set incentive levels lower than the $3.11/W recommended by the JFCP but approve a significant renewable generation resiliency adder in Section 7.2.2. This approach balances a lower general market incentive level with a higher resiliency incentive adder to encourage developers to prioritize outreach to customers with critical resiliency needs.

As mentioned, § 379.6(m) requires that as of January 1, 2020, generation technologies receiving SGIP incentives must only use renewable fuels. This requirement applies to all new SGIP generation projects on an ongoing basis and

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[38] Sierra Club/NRDC, Opening Comments at 12; 2018 *Self-Generation Incentive Program: Renewable Fuel Use Report No. 27* at 1-6; https://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Utilities_and_Industries/Energy/Energy_Programs/Demand_Side_Management/Customer_Gen_and_Storage/SGIP-RenewableFuel-Rpt27.pdf

for as long as the equipment is used. To enforce this, we continue the current requirement that all renewable generation projects that use directed biogas provide a contract for biogas supplies for a minimum of 10 years, prior to receiving an SGIP incentive. Limiting SGIP renewable generation projects to those with a 10-year contract for biogas supply and operation is a reasonable way to ensure compliance with § 379.6(m)'s requirement that SGIP generation projects only use renewable fuels.[39]

To address the need for tracking and verification systems that ensure that directed biogas projects produce incremental environmental benefits, we direct the SGIP PAs to monitor the directed biogas market and authorize them to submit a Tier 2 advice letter to propose appropriate additional tracking and verification requirements for SGIP directed biogas projects, as needed.[40] The SGIP PAs shall submit an advice letter if, in consultation with Commission staff, they come to believe that existing directed biogas tracking and verification systems are not ensuring incremental environmental benefits.

6. Equity Resiliency Program Updates

6.1. Application Start Date

The Equity Resiliency Decision at Ordering Paragraph (OP) 3 directs the SGIP PAs to begin accepting applications for equity resiliency budget incentives no later than April 1, 2020. The Equity Resiliency Decision at OP 3 also authorizes the SGIP PAs to accept equity resiliency budget applications on January 1, 2020 or any other time prior to April 1, 2020 if the PA implements the

[39] SGIP handbook at 83, https://www.cpuc.ca.gov/sgip/.

[40] Renewable energy credits obtained through the Western Regional Energy Generation Information System for electricity generated may be sufficient to establish environmental benefits.

requirements for new residential customers adopted in the GHG Decision at the same time.[41] The Equity Resiliency Decision at OP 4 authorizes the SGIP PAs to start implementing the requirements of the GHG Decision for new residential customers on January 1, 2020, or any other time prior to April 1, 2020, if they are able to do so.

In view of the changed circumstances resulting from the October 2019 PSPS events, we direct the SGIP PAs to begin accepting equity resiliency applications for small-scale residential (*i.e.* less than or equal to 10 kW) projects no later than March 1, 2020. We also accelerate the effective date for launch of the GHG requirements approved in the GHG Decision for new small-scale residential SGIP projects to no later than March 1, 2020. The scale and scope of PSPS events of late 2019 warrant accelerating these launch timelines to help eligible customers install on-site batteries as soon as possible prior to the 2020 critical wildfire season. The PAs are able to accelerate the timeframe to accept small-scale residential equity resiliency budget applications and the effective date for GHG requirements for small-scale residential systems and should do so to support customers with critical resiliency needs.

6.2. Eligibility Criteria

The Commission in the Equity Resiliency Decision defined customers with critical resiliency needs and approved such customers as eligible for the equity resiliency budget. The Equity Resiliency Decision defines residential customers with critical resiliency needs as customers residing in a Tier 3 or Tier 2 HFTD and one of the following: (1) eligible for the equity budget; (2) eligible for the medical baseline program, as defined in D.86087, 80 CPUC 182; or (3), a customer that has

[41] Equity Resiliency Decision, OP 3.

notified their utility of serious illness or condition that could become life-threatening if electricity is disconnected, as defined in D.12-03-054. The Equity Resiliency Decision defines non-residential customers with critical resiliency needs as those located in a Tier 3 or Tier 2 HFTD that provide critical facilities or critical infrastructure to a community located in a Tier 3 or Tier 2 HFTD that is eligible for the equity budget. The Equity Resiliency Decision also approves customers living in Tier 3 or Tier 2 HFTDs that have incentives reserved in the SASH or DAC-SASH low-income solar programs as eligible for the equity resiliency budget.

6.2.1. Customers De-energized During PSPS Events

In comments on the April Ruling, many parties urged the Commission to grant customers eligibility for the equity resiliency budget if they are based in "PSPS zones." The Equity Resiliency Decision did not approve this approach based on a lack of information, stating that PSPS zones "have not yet been clearly defined nor reviewed by the Commission."[42]

PSPS events in 2019 impacted over a million PG&E customers in unprecedented large-scale shut-offs of power.[43] The broad geographic area in which electric meters were de-energized during the events gave the Commission a better sense of the potential impacts of PSPS events outside Tier 3 or Tier 2 HFTDs. This new information justifies updating the eligibility criteria for the SGIP equity resiliency budget to better include customers most impacted by

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[42] Equity Resiliency Decision at 23.

[43] *See* http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M317/K701/317701325.PDFe *Order Instituting Investigation on the Commission's Own Motion on the Late 2019 Public Safety Power Shutoff Events* at http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M319/K527/319527577.PDF

PSPS events. In addition, on October 14, 2019, Commission President Marybel Batjer outlined steps to minimize the size and magnitude of future PSPS events.[44]

We update the equity resiliency budget eligibility criteria adopted in the Equity Resiliency Decision to include any customer whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives that meets the other equity resiliency budget eligibility criteria. We update the equity resiliency budget eligibility criteria to the following:

> Residential customers with critical resiliency needs— defined as customers residing in a Tier 3 or Tier 2 HFTD <u>or whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives</u> and one of the following: (1) eligible for the equity budget; (2) eligible for the medical baseline program, as defined in D.86087, 80 CPUC 182; or (3), a customer that has notified their utility of serious illness or condition that could become life-threatening if electricity is disconnected, as defined in D.12-03-054.
>
> Non-residential customers with critical resiliency needs—defined as customers that provide critical facilities or critical infrastructure to a community eligible for the equity budget and located in a Tier 3 or Tier 2 HFTD <u>or whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives</u>.
>
> Customers living in Tier 3 or Tier 2 HFTD <u>or whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives</u> who have incentives reserved in the SASH or DAC-SASH low-income solar program.

[44] http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M317/K701/317701325.PDF

Expanding eligibility criteria for the equity resiliency budget to include customers whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives will help customers most at risk of having their electricity shut-off during PSPS events install on-site batteries prior to the 2020 critical wildfire season. In addition, limiting eligible customers to those whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives helps target the larger incentive funds to those customers most likely to be impacted by PSPS events in the future. The Commission has the authority to revise the eligibility criteria for the equity resiliency budget and should do so to be as responsive as possible to customers' needs for backup power during PSPS events. [45]

As indicated in the Equity Resiliency Decision, the Commission has not yet defined PSPS zones and this decision does not take this step. However, the IOUs have lists of customers whose electricity has been shut off during two or more discrete PSPS events and can further refine these lists as necessary.[46] We understand that the approach adopted in this decision is a rough approximation and not a perfect indicator, but this method can be quickly implemented and is the best means available to identify customers most likely to be subject to PSPS events until better information becomes available. We will work toward developing a more refined method of identifying customers likely to have their

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[45] *See Opening Remarks of CPUC President Batjer* at the Emergency Meeting Called for October 18, 2019 and the *Governor's Letter to the CPUC*, sent October 14, 2019 at https://www.cpuc.ca.gov/deenergization/.

[46] *See Order Instituting Investigation on the Commission's Own Motion on the Late 2019 Public Safety Power Shutoff Events* at http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M319/K527/319527577.PDF.

electricity turned off during PSPS events in the future. Once identified, we will replace the criteria adopted in this decision with an updated approach.

Until such time as we update our approach, IOU parties to this proceeding shall utilize lists of customer meters whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives when determining customer eligibility for equity resiliency incentives and shall further refine these lists to improve their accuracy as needed. In addition, we direct SDG&E and SCE to actively cooperate with CSE and SoCalGas respectively to support the timely validation of customer eligibility for the equity resiliency budget, including providing detailed information regarding customers subject to discrete PSPS events. We also direct SoCalGas to actively collaborate with the Los Angeles Department of Water and Power to identify customers whose electricity was turned off during two or more discrete PSPS events prior to applying SGIP incentives.

6.2.2. Additional Customers with Critical Resiliency Needs

This section adds several types of customers to the list of those with critical resiliency needs adopted in the Equity Resiliency Decision.[47]

The October 2019 PSPS events revealed the centrality of grocery stores, corner stores, markets and supermarkets (jointly "markets") to customers' ability to withstand PSPS events. The PSPS events also highlighted the risk borne by

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See also *PSPS Rollup Spreadsheet* at https://www.cpuc.ca.gov/deenergization/ and https://www.cpuc.ca.gov/uploadedFiles/CPUCWebsite/Content/News_Room/NewsUpdates/2019/De-energization%20Event%20History%20Thru%2019%20NOV%2019%20(as%20of%2022%20NOV%2019).xlsx

[47] *See* D.19-09-027 at A-3 through A-4.

rural residents that source water from wells using electric pumps.[48] Currently, markets are not designated as critical facilities in the Equity Resiliency Decision nor are households with electric pumps explicitly eligible for the equity resiliency budget.

We add markets to the list of non-residential customers providing critical facilities or infrastructure adopted in the Equity Resiliency Decision, if the market is a small business that has average annual gross receipts of $15 million or less over the last three tax years. This is the same definition of "small business" adopted in D.17-01-004 to establish eligibility criteria for equity budget incentives. Adopting this definition here ensures that equity resiliency funds are directed to smaller businesses that lack the financial means to independently install on-site storage.[49] Designating markets as critical facilities for SGIP purposes supports residents of impacted communities to purchase necessities during PSPS events and, in some cases, to find an air-conditioned space.

We also define households relying on electric pump wells for water supplies residing in Tier 3 or Tier 2 HFTDs, or whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives as customers with critical resiliency needs and eligible for the equity resiliency budget incentives. Defining such customers as having critical resiliency needs helps address their drinking water, sanitation and fire response needs during a PSPS or other power outage event.

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[48] Letter from Matt Kingsley, Member, Rural County Representatives of California to Honorable Benjamin Hueso, Chair, Senate Energy, Utilities and Communications Committee, November 5, 2019 (copied to CPUC Commissioners), at: https://www.rcrcnet.org/barbed-wire-november-08-2019#story-2

[49] *See* Decision 17-01-004, Conclusion of Law #9.

We define two additional types of customers as having critical resiliency needs. These are Independent Living Centers and Food Banks. During the October 2019 PSPS events, Independent Living Centers served as ad hoc PSPS centers for individuals living with disabilities, providing mobile backup services and support services.[50] 29 U.S. Code § 796a defines a Center for Independent Living as a consumer-controlled, community-based, cross-disability, nonresidential private nonprofit agency for individuals with significant disabilities (regardless of age or income) that— (a) is designed and operated within a local community by individuals with disabilities; and (b) provides an array of independent living services, including, at a minimum, independent living core services as defined in 29 U.S. Code § 705(17).

Food Banks are essential sources of food for lower-income families during PSPS events or wildfires.[51] 7 U.S. Code § 7501 defines a Food Bank as a public or charitable institution that maintains an established operation involving the provision of food or edible commodities, or the products of food or edible commodities, to food pantries, soup kitchens, hunger relief centers, or other food or feeding centers that, as an integral part of their normal activities, provide meals or food to feed need persons on a regular basis. It is reasonable to add Independent Living Centers and Food Banks as defined by federal statute to the list of non-residential customers with critical resiliency needs, and we do so here.

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[50] *See* PG&E Emergency Preparedness Resource Page for Individuals with Access and Functional Needs at https://www.pge.com/en_US/safety/emergency-preparedness/natural-disaster/wildfires/independent-living-centers.page (accessed November 26, 2019).

[51] *See* California Health and Human Services Agency PSPS Resource Guide at https://www.chhs.ca.gov/blog/2019/10/25/public-safety-power-shutoffs-resource-guide/ (accessed November 26, 2019).

7. Program Modifications to Support Resiliency Amongst General Market Customers

The April Ruling asked parties to comment on a series of questions relating to the value of storage for resiliency purposes during PSPS or other types of outages. The April Ruling asked:

1. Should the Commission seek to promote SGIP projects that provide resiliency benefits to customers and/or communities facing risks of a wildfire, wildfire-related de-energization events, or other adverse event?
2. Should the Commission adopt a "resiliency adder" to existing incentives for storage and/or generation projects that provide resiliency benefits to customers and/or communities to help address wildfire, wildfire-related de-energization event, or other risks? If so, what should be the eligibility criteria?
3. Should projects receiving a resiliency adder be required to demonstrate or attest that they will provide resiliency benefits?
4. Should the Commission modify the existing SGIP incentive structure to facilitate storage projects that have a discharge duration that exceeds two hours?

7.1. Defining Non-Residential Customers with Critical Resiliency Needs

As discussed above, the Equity Resiliency Decision defines customers with critical resiliency needs that are eligible for the equity resiliency budget. Section 6.2 expands equity resiliency budget eligibility to include customers subject to PSPS events, markets, foodbanks, independent living centers, and customers relying on electric-pump wells for water supply. It is reasonable to similarly define general market non-residential customers with critical resiliency needs and to offer them a resiliency incentive adder, with the exception that we do not adopt an "equity" requirement for the general market resiliency adder.

We define general market non-residential customers with critical resiliency needs as those customers that provide critical facilities or infrastructure to one or more communities in a Tier 3 or Tier 2 HFTD or a community with customers whose electricity was shut off during two or more discrete PSPS events. We clarify that if a non-residential customer with critical resiliency needs provides critical facilities or infrastructure to at least one community eligible for the equity budget, that non-residential customer is eligible for equity resiliency budget incentives. Reflecting the Equity Resiliency Decision as modified in Section 6.2, non-residential general market customers with critical resiliency needs include the following:

> Police stations; fire stations; emergency response providers as defined in D.19-05-042; emergency operations centers; 911 call centers, also referred to as Public Safety Answering Points; medical facilities including hospitals, skilled nursing facilities, nursing homes, blood banks, health care facilities, dialysis centers and hospice facilities; public and private gas, electric, water, wastewater or flood control facilities; jails and prisons; locations designated by the IOUs to provide assistance during PSPS events; cooling centers designated by state or local governments; ~~and,~~ homeless shelters supported by federal, state, or local governments; grocery stores, corner stores, markets and supermarkets that have average annual gross receipts of $15 million or less, over the last three tax years; independent living centers; and, food banks.

7.2. General Market Resiliency Adder

In comments on the April Ruling, most parties supported a $0.15/Wh incentive adder for SGIP storage projects intended to enhance customers' ability to withstand PSPS and similar outages. The Equity Resiliency Decision adopted a $1.00/Wh incentive for the equity resiliency budget to address the barrier of lack of capital or financing faced by such customers. It approved access to the same incentive level for non-residential customers that serve equity budget-eligible communities at extreme or elevated risk of wildfire through the provision of critical facilities or infrastructure.

7.2.1. Large-Scale Storage Technologies

We approve a $0.15/Wh resiliency adder for general market large-scale storage projects for non-residential customers with critical resiliency needs. We do not approve a storage resiliency adder for general market residential customers.

The key consideration in establishing a general market resiliency adder is making on-site storage systems affordable for non-residential customers that provide critical facilities during PSPS events. Our adopted resiliency adder will cover approximately 50 percent of costs for large-scale storage technologies through Step 5. This effectively prioritizes use of SGIP incentives by the communities and businesses negatively impacted by PSPS and other outage events. This adder should encourage developers to focus their outreach on customers eligible for the resiliency adder and we expect that the majority of the general large-scale storage incentive funds will be awarded to projects that qualify for the resiliency adder.

We do not adopt a general market residential resiliency adder. As discussed earlier, there is substantial evidence of demand for residential storage incentives at present. Moreover, while general market residential incentives are still available without any income restrictions, it is appropriate to maintain the focus of the SGIP program on lower-income households that cannot afford storage without significant subsidies. However, to encourage storage developers to target residential customers living in Tier 3 or Tier 2 HFTDs or residential customers whose electricity has been turned off during two or more discrete PSPS events, we adopt a "soft target" that half of the general market residential incentive budget will be used by residential customers that meet these criteria. Adopting a "soft target" for general market residential customers located in areas subject to PSPS events or that live in areas of extreme or elevated fire risk helps ensure that customers most likely to benefit from the resiliency services provided by storage learn about and use SGIP incentives. Commission staff should ensure that subsequent SGIP impact evaluation reports summarize performance in this area.

7.2.2. Renewable Generation Technologies

Section 5.2 adopts a general market generation technology incentive level of $2.00/W. This section considers a generation technology resiliency adder for customers with critical resiliency needs.

In comments on Equity Resiliency Decision, CCDC, JFCP and SoCalGas support significantly increasing incentives for renewable generation projects located in communities eligible for the equity budget or with critical resiliency needs. SoCalGas recommends adopting a base incentive of $4.50/W for equity budget generation projects and a $0.50/W resiliency adder for projects located in communities with critical resiliency needs.[52] SoCalGas notes that a $4.50/W incentive level was adopted in D.09-09-048 to offset the cost of developing a generation project using renewable fuels and that the SGIP awarded 59 renewable generation incentives between 2010 to 2013.[53]

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[52] *See* "Comments on Proposed Decision Establishing a Self-Generation Incentive Program Equity Resiliency Budget, Modifying Existing Equity Budget Incentives, Approving Carry-Over of Accumulated Unspent Funds, and Approving $10 Million to Support the San Joaquin Valley Disadvantaged Community Pilot Projects" filed on August 29, 2019 by SoCalGas; *see* also JFCP and CCDC comments filed the same day.

[53] SGIP Project Database, SelfGenCa.com (accessed November 23, 2019).

We adopt a renewable generation resiliency adder incentive of $2.50/W for renewable generation projects. Combined with the base incentive of $2.00/W, this results in an incentive of $4.50/W for renewable generation projects intended for resiliency purposes. Customers eligible for the equity resiliency budget and general market customers with critical resiliency needs as defined here are eligible for the renewable generation resiliency adder. Reflecting current SGIP policy, customers receiving SGIP renewable generation incentives, either with or without a resiliency adder, may apply for SGIP energy storage incentives up to a limit of $5 million per project.[54]

Renewable generation technologies can provide critical resiliency services to non-residential customers serving their communities during PSPS events. Providing a significant incentive adder for renewable generation projects for customers with critical resiliency needs supports such customers' ability to weather PSPS events and reflects the Commission's desire to prioritize use of SGIP incentives by customers facing wildfire related outages. We do not limit the renewable generation resiliency adder to only equity budget or equity resiliency customers for ease of administration and because this could be too restrictive to achieve the level of participation provided for in our approved budget.

7.3. Additional Information Requirements

The Equity Resiliency Decision adopted additional information submittal requirements for all equity resiliency energy storage projects and all equity budget projects with a longer than two-hour discharge duration.[55] These

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[54] SGIP handbook at 27, available at https://www.selfgenca.com/documents/handbook/2019.

[55] Equity Resiliency Decision (D.19-09-027) at A3-A4.

additional requirements are designed to ensure that projects intended for resiliency purposes are able to island and continue to operate when the distribution system is experiencing an outage.[56]

Specifically, the Equity Resiliency Decision requires developers applying for the equity resiliency incentive or an equity budget project with a longer than two-hour discharge duration to:

1. Provide an estimate of how long a project's fully charged battery will provide electricity for the relevant facility average load during an outage;
2. Indicate whether a project's critical loads can and will be isolated;
3. Provide an estimate of how long the project's fully charged battery will provide electricity to critical uses during an outage;
4. Provide an estimate of how long the project can operate in less-than favorable circumstances, such as if an outage occurs when the battery has been discharged or during the winter (if paired with solar);
5. Summarize information given to the customer about how the customer may best prepare the storage system to provide backup power, in the case of a PSPS event announced in advance;
6. Attest to the truth of the information provided;

[56] *See* the Equity Resiliency Decision (D.19-09-027) at 42. The term "island" and "islanding" as used in Equity Resiliency Decision describe the situation where a behind-the-meter battery system provides electricity to some or all of a customer's loads at that site during a grid outage. In contrast, the IOUs' Rule 21 Tariffs define islanding as "a condition on distribution provider's distribution system in which one or more Generating Facilities deliver power to customers using a portion of distribution provider's distribution system that is electrically isolated from the remainder of distribution provider's distribution system." *See* for example, PG&E's Rule 21 Tariff, Section C, available here: https://www.pge.com/tariffs/assets/pdf/tariffbook/ELEC_RULES_21.pdf

7. Provide an attestation from the customer indicating that he or she received this information prior to signing a contract; and
8. Demonstrate that an Authority Having Jurisdiction has approved plans showing that the system can operate in island mode, has inspected the system after installation and has authorized operation.[57]

As the Commission found in the Equity Resiliency Decision, expanding information submittal requirements for projects applying for resiliency adder incentives ensures that customers installing SGIP projects with the expectation that they will provide resiliency services are basing this on accurate information about both the capabilities and limitations of the system when the grid is down. We require the same safeguards for renewable generation projects applying for resiliency adder incentives to ensure that such systems are capable of islanding during an outage and that customers installing generation systems with the intent to use them during outages are aware of their capabilities and limitations.

The Equity Resiliency Decision required the SGIP PAs to develop standard forms for customer and developer attestations in consultation with the SGIP Technical Working Group, and to notify disability advocates of the opportunity to participate in the discussion. Requiring the same steps for general market energy storage and renewable generation projects applying for a resiliency incentive adder will help ensure that general market customers also benefit from the envisioned protections.

Similarly, the Equity Resiliency Decision reviewed Rule 21 interconnection tariff, national, state, local and SGIP rules and concluded that these are adequate to address the safety risks posed by installing storage systems, including systems

[57] *See* Equity Resiliency Decision (D.19-09-027) at A3-A4.

installed for resiliency purposes, and that there is no evidence that additional safety protocols are needed for SGIP systems using storage for resiliency purposes. As in the Equity Resiliency Decision, we find that Rule 21 interconnection tariffs, national, state, local and SGIP rules are adequate to address the safety risks posed by the installation of general market storage and renewable generation systems for resiliency purposes.

7.4. AB 1144 Requirements

AB 1144 states that the Commission must allocate at least 10 percent of ratepayer funds collected for SGIP in 2020 for storage or eligible distributed generation for customers that operate a critical facility or critical infrastructure serving communities in HFTDs to support resiliency during a de-energization event.[58] This decision authorizes $166 million in annual collections from 2020 to 2024. AB1144 would require a 2020 allocation of $16.6 million to support resiliency. Adopted allocations far exceed this amount. The Equity Resiliency Decision and this decision approve approximately $202.6 million in incentives for the equity resiliency budget in 2020 ($100 million carried over from 2019 and $102.6 million in 2020). In addition, this decision approves over $236 million in 2020 for critical facilities that do not qualify for the equity resiliency budget but that do qualify for the resiliency adder for large-scale storage projects. With respect to incentives for distributed generation, this decision authorizes a resiliency adder for critical facilities that serve communities in HFTDs to support resiliency during a PSPS event. These incentives equal approximately $31.1 million in 2020.

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[58] *See* Public Utilities Code section 379.9(a).

AB 1144 states that in allocating funds collected from ratepayers between 2020 and 2024, the Commission must prioritize funding to projects for eligible customers that do all of the following:

1. Demonstrate a financial need;
2. Operate a critical facility or critical infrastructure serving communities in high fire threat districts during a deenergization event; and
3. Demonstrate coordination with the electrical corporation serving the customer's community, relevant local governments and the California Office of Emergency Services.[59]

The Equity Resiliency Decision and this decision prioritize incentive allocations in accordance with the first two criteria. To address the third criteria, we direct SGIP PAs to include a question regarding the applicant's coordination with their local governments and the Office of Emergency Services in SGIP application materials for non-residential equity resiliency budget projects and projects applying for general market resiliency adder incentives. Projects that notify their local governments that they intend to or have installed on-site storage or renewable generation meet the criterion of demonstrating coordination with their local government and the Office of Emergency Services.

In addition, in accordance with AB 1144, the SGIP evaluation report issued in 2022 shall include an evaluation of the performance and impact of the non-residential projects receiving funding from the equity resiliency budget in 2020, using the factors listed in the statute.[60]

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[59] *See* Public Utilities Code section 379.9(b)(2).

[60] *See* Public Utilities Code Section 379.9(b)(4).

7.5. Duration Step Down Incentive Structure

The Commission adopted a duration step-down incentive structure for storage systems in D.16-06-055 to limit the proportion of incentives claimed by large projects utilizing economies of scale. The Equity Resiliency Decision modified this step-down structure for equity resiliency projects. Table 10 summarizes the current structure.

Table 10: Current Incentive Step Down Structure for Storage Technologies

Energy Storage Duration (per kW)	Percentage of Full Incentive- General Market (adopted in D.16-06-055)	Percent of Full Incentive- Equity & Equity Resiliency Budgets (adopted in Equity Resiliency Decision)
Zero to two hours	100 percent	100 percent
Two to four hours	50 percent	
Four to six hours	25 percent	50 percent
Greater than six hours	0 percent	0 percent

Parties strongly support modifying the general market energy storage incentive step-down structure to support longer duration storage that provides increased backup power for customers during outages.

We approve the incentive step-down structure adopted in the Equity Resiliency Decision for SGIP general market energy storage systems. The rationale provided in the Equity Resiliency Decision to support modifying the incentive step-down structure for equity budget and equity resiliency storage projects applies equally well to general market storage projects. Modifying the step-down in incentives for storage systems with longer than a two-hour discharge provides customers with more system design and configuration options to ensure they are able to meet their specific resiliency needs during PSPS and other outage events.

In addition, as required in Equity Resiliency Decision, all general market SGIP storage projects must meet all GHG emission reduction, cycling and other system and operational requirements adopted by this Commission. The Commission prohibited the use of SGIP incentives for projects intended to be used only or primarily to provide backup power in D.01-03-073. Longer duration SGIP storage projects are well suited to provide resiliency services during PSPS or other outage events but must also provide the grid and GHG emission reduction services required by § 379.6 and this Commission.

8. Incentive Application Processing Targets

In comments, CALSSA and CESA state that long administrative processing times create regulatory uncertainty for SGIP large-scale storage projects. CALSSA observes that average incentive processing times for large-scale and residential storage systems have increased significantly in the last two years. From 2018 through 2019, the average time from developer submission of a large-scale storage project application to incentive reservation was 97 days.[61] These average incentive processing times are not consistent with our goal of providing SGIP incentives to enhance resiliency to PSPS events in time for the next critical fire season.

The Commission directs the PAs to adequately staff the SGIP with sufficient resources to process incentive applications within 45 days of receipt. SGIP PAs shall prioritize processing equity resiliency incentive applications. We direct the SGIP PAs to include in the Tier 2 Implementation advice letter required in this decision a summary of the steps they have and will take to accelerate incentive processing times and other key administrative functions as identified in prior decisions in R.12-11-005 (including the GHG Decision and Equity Resiliency Decision) and previous SGIP rulemakings. We direct the SGIP

[61] SGIP Project Database, SelfGenCa.com (accessed November 21, 2019).

PAs to annually file a notice summarizing their average, fastest and slowest incentive processing times for all technology budget categories to the service list of R.12-11-005. The SGIP PAs shall also annually post this information to the SGIP website (currently www.selfgenca.com).

9. Fund Shifting Authority

D.16-06-055 authorizes SGIP PAs to file advice letters to transfer funds between the residential and non-residential storage budgets.[62] In comments on the April Ruling, CSE requests that the Commission grant SGIP PAs additional advice letter authority to transfer funds between the generation and storage budgets. SCE requests PA authority to shift funds between all technology incentive budget categories. These PAs argue that this authority would maximize the flexibility of PAs to respond to market conditions and help ensure that large amounts of SGIP funds are not constrained in an individual technology budget category with little demand. CSE also requests authority to transfer funds from incentive to administrative budgets.

SGIP budget allocations approved in this decision should remain stable for several years to clearly signal available funding to developers. After that, providing PAs with the flexibility to alter budget allocations in response to market demand increases the effectiveness of the SGIP in its final years. Expressly authorizing SGIP PAs to propose shifting funds between generation and storage budgets and between storage budget sub-categories—in an advice letter subject to Commission review—enhances this effectiveness. The Commission's goal is for SGIP incentive funds to be exhausted by December 31, 2025.

[62] D.16-06-055 at 24.

With these caveats, CSE's and SCE's requests regarding transferring funds between incentive budget categories are reasonable and are granted. We authorize SGIP PAs to submit Tier 2 advice letters to transfer funds between technology incentive budgets after December 31, 2023. An SGIP PA should submit such an advice letter if it has reason to believe based on market conditions that there are likely to be unreserved funds in a given technology budget at the end of 2025 in its service territory. An SGIP PA submitting a fund transfer advice letter should provide a compelling rationale for its proposal.

We do not approve CSE's request for PA authority to submit an advice letter to transfer funds from incentive to administrative budgets. Although our modifications to SGIP create some uncertainty regarding administrative budget requirements, we expect PAs to stay within their administrative budget allocations. We disagree with CSE that the Commission should revisit administrative budget allocations in two years, as this is not necessary and may also encourage excessive administrative cost increases.

10. Comments on Proposed Decision

The proposed decision 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 _________________ by _____________ and reply comments were filed on __________.

11. Assignment of Proceeding

Clifford Rechtschaffen is the assigned Commissioner and Cathleen A. Fogel is the assigned ALJ in this proceeding.

Findings of Fact

New Collections and Budget Allocations

1. Authorizing 2020 to 2024 ratepayer collections of $166 million annually enables prioritization of SGIP funds to the customers most impacted by PSPS events, supports market transformation, maximizes ratepayer value, ensures the continued provision of grid services and provides for the equitable distribution of benefits.

2. The customer cost allocation method approved in Resolution E-4926 ensures the equitable distribution of SGIP costs and benefits as required in § 379.6(a)(1) and SGIP PAs are correctly implementing §379.6(k) via the Public Purpose Program charge.

3. A 15 percent allocation of 2020 to 2024 ratepayer collections for SGIP incentives to renewable generation projects balances limited demand for incentives in recent years with a strong GHG performance, results in nearly $129 million in renewable generation incentive funds through 2025, should stimulate developer interest, and is reasonable.

4. The key criteria to determine allocation of 2020 to 2024 ratepayer funds are anticipated customer demand and need, and community benefits.

5. Allocating 63 percent of 2020 to 2024 funds for SGIP incentives to the equity resiliency budget prioritizes customers with the greatest immediate need for on-site storage, provides community benefits, and advances SGIP's goals.

6. Suspending allocation of new large-scale energy storage equity budget funds until such time as demand increases supports the prioritization of 2020 to 2024 funds to equity resiliency budget customers.

7. Allocating three percent of 2020 to 2024 collections to the residential equity budget supports increased participation in SGIP by low-income customers regardless of where they live.

8. SGIP's general market large-scale and non-residential equity storage budgets had approximately $269 million in accumulated unused funds remaining as of September 2019.

9. Reducing 2020 to 2024 funding allocations for general market large-scale storage technologies to 12 percent of incentive funds results in over $314 million in total available funds for such projects through 2025, with additional funds available in the large-scale energy storage equity budget.

10. Adjusting the residential storage budget allocation to seven percent of 2020 to 2024 collections for incentives results in a total budget of approximately $60 million, provides incentive funds for 31,000 new residential systems and balances ongoing customer demand for general market residential storage systems with other priorities.

<u>Energy Storage Incentives</u>

11. In recent years, 70 percent of SGIP large-scale storage projects paired with solar have used the federal ITC.

12. The current large-scale storage incentive structure supports market transformation and this outweighs the potential administrative benefits of moving to an annual step-down structure.

13. Continuing with the general market residential incentive step-down structure adopted in D.16-06-055 and D.17-04-017 and equally allocating 2020 to 2024 funds across two new incentive steps continues a stable incentive design with a successful track record.

14. Adopting a 50 percent spending "soft target" for general market residential customers located in areas subject to PSPS events or that live in areas of extreme or elevated fire risk helps ensure that customers most likely to benefit from the resiliency services provided by storage learn about and use SGIP incentives.

Renewable Generation Technologies

15. Renewable generation technologies have a solid track record of providing GHG emission reductions.

16. An incentive level of $4.50/W has been shown to successfully stimulate increased adoption of SGIP renewable generation projects.

17. Paired on-site renewable generation and storage projects have the ability to provide continuous backup power for a longer duration than storage projects alone.

18. It is reasonable to approve a renewable generation technology incentive structure that prioritizes SGIP participation by the customers most negatively impacted by PSPS events, which are customers whose electricity has been shut off during two or more discrete PSPS events.

19. Approving a renewable generation technology incentive of $2.00/W with no step-down structure for general market customers and a resiliency adder of $2.50/W for customers with critical resiliency needs encourages developers to prioritize outreach to customers most negatively impacted by PSPS events.

20. Providing a significant incentive adder for renewable generation projects for customers with critical resiliency needs supports such customers' ability to withstand PSPS events and reflects the Commission's desire to prioritize use of SGIP incentives by customers facing wildfire related outages.

21. Section 379.6(m) requires that as of January 1, 2020, generation technologies receiving SGIP incentives must only use renewable fuels.

22. Limiting SGIP generation projects to those with a 10-year contract for biogas supply and operation is a reasonable way to ensure compliance with the statute's requirement that SGIP generation projects only use renewable fuels.

23. Some parties are concerned that existing tracking and verification systems may not ensure that directed biogas projects produce incremental environmental benefits.

Equity Resiliency Budget

24. D.19-09-027 directed SGIP PAs to begin accepting equity resiliency budget applications on April 1, 2020 to coincide with launch of the GHG emission reduction requirements adopted in D.19-09-001.

25. The PSPS events of 2019 warrant accelerating the April 1, 2020 equity resiliency program start date for accepting small-scale residential equity resiliency budget applications to no later than March 1, 2020 to help eligible customers install on-site energy storage prior to the 2020 critical wildfire season.

26. D.19-09-027, OP 4 authorizes the SGIP PAs to start implementing the requirements of D.19-08-001 for new residential customers on January 1, 2020, or any other time prior to April 1, 2020, if they are able to do so.

27. SGIP PAs are capable of accepting small-scale residential equity resiliency budget applications and moving the effective date for the new small-scale residential GHG emission reduction requirements adopted in D.19-08-001 to no later than March 1, 2020.

28. The broad reach of meters de-energized during the 2019 PSPS events has given the Commission a clearer sense of the potential impacts of such events outside of Tier 3 or Tier 2 HFTDs and justifies updating the eligibility criteria for

the equity resiliency budget to better include customers most impacted by PSPS events.

29. Expanding eligibility criteria for the equity resiliency budget to include customers whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives will help customers most at risk of having their electricity shut-off during PSPS events install on-site batteries prior to the 2020 critical wildfire season.

30. Limiting eligible customers to those whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives helps target the larger incentive funds to those customers most likely to be impacted by PSPS events in the future.

31. Identifying customers whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives as customers with critical resiliency needs is rough approximation and not a perfect indicator, but is a method that can be quickly implemented and is the best means available to identify customers most likely to be subject to PSPS events until better information becomes available.

32. The IOUs have lists of customer meters de-energized during PSPS events and can further refine these to improve their accuracy as necessary.

33. The October 2019 PSPS events revealed the centrality of grocery stores, corner stores, markets and supermarkets to customers' capacity to weather PSPS events.

34. Independent Living Centers served as ad hoc PSPS centers for individuals living with disabilities, providing mobile backup services and support services during the October 2019 PSPS events.

35. Food Banks are essential sources of food for lower-income families during PSPS events or wildfires.

36. Designating markets (grocery stores, corner stores, markets and supermarkets), independent living centers, and food banks as critical facilities for SGIP purposes supports communities with critical resiliency needs.

37. Limiting the designation of markets with critical resiliency needs to grocery stores, corner stores, markets and supermarkets with average annual gross receipts of $15 million or less over the last three tax years directs funds to smaller businesses that lack the financial means to install on-site storage without subsidies.

38. The October 2019 PSPS events highlighted challenges for rural residents relying on electric pump wells for water supplies.

39. Defining households relying on electric pump wells for water supplies as customers with critical resiliency needs, if they reside in Tier 2 or Tier 3 HFTDs or if they are customers whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives helps address such customers' critical drinking water, sanitation and fire response needs.

<u>General Market Resiliency Adder</u>

40. Longer duration SGIP storage projects are well suited to provide resiliency services during PSPS or other outage events.

41. Modifying the incentive step-down structure for general market storage systems with longer than a two-hour discharge increases incentives for systems suitable to provide backup power for customers during PSPS and other outage events.

42. Defining general market non-residential customers with critical resiliency needs similarly to non-residential equity resiliency customers, with the exception that there is no equity requirement for a general market resiliency adder, supports such customers' increased SGIP participation.

43. Defining a non-residential customer with critical resiliency needs as eligible for the equity resiliency budget if that customer provides critical facilities to at least one community eligible for the equity resiliency budget helps ensure that the higher equity resiliency incentives are targeted where they are most needed.

44. A resiliency adder of $0.15/Wh intended to cover 50 percent of current large-scale storage costs through Step 5 encourages timely use of SGIP incentives by the communities and businesses most impacted by wildfires and PSPS events.

45. Adopting new information submittal requirements for general market energy storage and renewable generation projects applying for resiliency adder incentives ensures that customers installing such systems with the expectation that they will provide resiliency services are basing this on accurate information about their capabilities and limitations.

46. Rule 21 interconnection tariffs, national, state, local and SGIP rules are adequate to address the safety risks posed by the installation of general market energy storage and renewable generation systems for resiliency purposes.

47. AB 1144 requires the Commission to allocate at least $16.6 million of SGIP funds collected in 2020 to projects meeting the criteria identified in Public Utilities Code Section 379.9(b).

48. The Commission is making available a total of $202.6 million in equity resiliency budget incentives in 2020.

49. Requiring projects applying for resiliency incentives to notify their local governments that they intend to or have installed on-site storage is a reasonable way to meet the criterion of demonstrating coordination with local government and the California Office of Emergency Services required in AB 1144.

Administrative Budgets and Requirements

50. As of December 2019, PG&E and SCE have over $26 million and $31 million, respectively, in accumulated unused SGIP administrative budgets.

51. CSE lacks a large institutional base of resources to leverage towards SGIP administration and authorizing a larger administrative budget for this PA ensures its continued capacity to process the large volume of residential applications experienced in recent years and to manage SGIP administrative functions through 2033.

52. Average SGIP PA incentive processing times for large-scale and residential storage systems were 97 days in 2018 and 2019, which not is consistent with the Commission's goal of providing SGIP incentives to enhance resiliency to PSPS events in time for the next critical fire season.

Fund Shifting Authority

53. SGIP budget allocations approved in this decision should remain stable through 2023 but providing PAs with the flexibility to propose fund shifting after that in response to market demand increases SGIP's effectiveness in its final years.

Conclusions of Law

1. The Commission should direct PG&E, SCE, SoCalGas and SDG&E to annually collect $166 million from their customers from 2020 through 2024 for the SGIP and should use the methodology adopted in D.17-04-017 to determine individual utility collections.

2. The Commission should direct PG&E, SCE, SoCalGas and SDG&E to submit Tier 1 Budget advice letters implementing 2020 to 2024 ratepayer collections no later than 90 days after Commission adoption of this decision and to include an updated cost allocation proposal across customer classes based on the approach approved in Resolution E-4926.

3. The Commission should allocate 2020 to 2024 ratepayer collections for SGIP incentives as follows: 15 percent for renewable generation technologies, 63 percent for the equity resiliency budget, 12 percent for the general market large-scale storage budget, seven percent for the general market residential budget, and three percent for the residential equity budget.

4. To address a potential barrier, the Commission should eliminate the federal ITC adjustment to incentives for equipment purchased after December 31, 2021.

5. The Commission should retain the existing SGIP large-scale storage incentive step-down structure and should allocate 2020 to 2024 collections for this budget equally across existing incentive Steps 3 to 5.

6. The Commission should direct the SGIP PAs to adjust the 20 percent developer cap based on the new adopted statewide large-scale storage budgets in Steps 3 to 5.

7. The Commission should direct the SGIP PAs to establish a \$0.15/Wh resiliency adder for large-scale storage projects limited to general market customers with critical resiliency needs as defined in this decision.

8. The Commission should direct the SGIP PAs to establish a renewable generation incentive level of \$2.00/W with no step-down structure for general market customers and a renewable generation resiliency incentive adder of \$2.50/W for customers with critical resiliency needs as defined in this decision.

9. The Commission should direct the SGIP PAs to establish two new residential storage incentive steps and to allocate the 2020 to 2024 residential storage budget equally across these two steps.

10. The Commission should direct the SGIP PAs to adopt a "soft target" that half of the general market residential incentive budget will be used by residential customers living in Tier 3 or Tier 2 HFTDs or residential customers whose electricity has been turned off during two or more discrete PSPS events.

11. The Commission should continue the current requirement for 100 percent directed biogas projects to obtain a 10-year contract for biogas supply prior to receiving an SGIP incentive.

12. The Commission should require all SGIP biogas projects to use renewable fuels as long as the project is in operation.

13. The Commission should authorize SGIP PAs to submit a Tier 2 advice letter to propose additional tracking and verification requirements for SGIP projects using directed biogas if, in consultation with Commission staff, the PAs believe that existing requirements are not ensuring incremental environmental benefits.

14. The Commission should require the SGIP PAs to begin accepting small-scale residential equity resiliency budget applications no later than March 1, 2020.

15. The Commission should accelerate the effective date for GHG requirements for new small-scale residential projects to no later than March 1, 2020.

16. The Commission should direct SGIP PAs to expand the eligibility criteria for the equity resiliency budget adopted in D.19-09-027.

17. The Commission should direct the SGIP PAs to expand the definition of customers with critical resiliency needs to include: (a) any customer whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives; and, if located in Tier 3 or Tier 2 HFTD or if a customer whose electricity was shut off during two or more discrete PSPS events prior to the date of application, (b) grocery stores, corner stores, markets and supermarkets with average annual gross receipts of $15 million or less over the last three tax years, (c) independent living centers, (d) food banks, and, (e) households relying on electric pump wells for their water supplies.

18. The Commission should direct IOU parties to this proceeding to utilize lists of customers whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives when determining eligibility for equity resiliency incentives and to refine these lists to improve their accuracy, as needed.

19. The Commission should direct SDG&E and SCE to actively cooperate with CSE and SoCalGas respectively to support the timely validation of customer eligibility for the equity resiliency budget including providing detailed information regarding customers subject to PSPS events.

20. The Commission should require general market SGIP storage projects using resiliency adder incentives to meet the GHG emission reduction, cycling and other system, information and operational requirements adopted in D.19-08-001 and in D.19-09-027.

21. The Commission should direct SGIP PAs to include a question regarding the applicant's coordination with their local governments and the California Office of Emergency Services in SGIP application forms for the equity resiliency budget and resiliency adder incentives.

22. The Commission should require the SGIP impact evaluation report issued in 2022 to include an evaluation of the performance and impact of the non-residential projects receiving funding from the equity resiliency budget in 2020, using the factors listed in § 379.9(b)(4).

23. The Commission should direct PG&E and SCE to utilize their remaining accumulated unspent administrative budgets to fund SGIP administrative costs subsequent to December 31, 2019.

24. The Commission should direct SoCalGas and CSE to allocate seven and 10 percent, respectively, of their share of funds collected from 2020 to 2024 for administrative purposes.

25. The Commission should direct the PAs to adequately staff the SGIP with sufficient resources to process incentive applications within 45 days of receipt and to annually file a summary of their average, fastest and slowest incentive processing times.

26. The Commission should authorize SGIP PAs to submit Tier 2 advice letters to transfer funds between technology incentive budgets after December 31, 2023 and should direct a PA to submit an advice letter if it has reason to believe that there are likely to be unreserved funds in a technology budget in its service territory at the end of 2025.

O R D E R

IT IS ORDERED that:

1. Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), Southern California Gas Company (SoCalGas) and San Diego Gas and Electric Company (SDG&E) shall annually collect $166 million from 2020 through 2024 to fund the Self-Generation Incentive Program, allocated as follows:

Program Administrator	Percent	Annual Collection (in $ millions)	Total Collection (in $ millions)
PG&E	44	$73.04	$365.2
SCE	34	$56.44	$282.2
SDG&E	13	$21.58	$107.9
SoCalGas	9	$14.94	$74.7
Total	100	$166	$830

2. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and San Diego Gas and Electric Company shall each:

(a) Submit a Tier 1 Budget advice letter implementing the 2020 to 2024 ratepayer collections approved here no later than 90 days from Commission adoption of this decision;

(b) Include in these an updated cost allocation proposal across customer classes based on the actual benefits resulting from the disbursement of Self-Generation Incentive Program (SGIP) incentives over the previous three years in their service territories;

(c) Allocate costs on a rolling basis annually to account for changes in eligibility and market factors, until the program sunsets; and

(d) Indicate in the Tier 1 Budget advice letter, and their next available rate proceeding, their commitment to return to ratepayers all unreserved SGIP incentive funds remaining as of January 1, 2026.

3. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy shall submit a Joint Tier 2 Implementation advice letter no later than 90 days from adoption of this decision modifying the Self-Generation Incentive Program handbook to implement the program and budget modifications adopted in this decision.

4. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy shall allocate 2020 to 2024 ratepayer collections for the Self-Generation Incentive Program as follows:

	Incentive Budget Allocations for 2020- 2024 Collections	
	Percent	**Amount ($ millions)**
Renewable generation	15	$122
Large-scale storage (greater than 10 kilowatts)	12	$98
Residential storage	7	$57
Residential equity	3	$24
Equity resiliency	63	$513
Total	**100**	**$814**

5. Southern California Gas Company and the Center for Sustainable Energy shall allocate seven and 10 percent of their total 2020 to 2024 collections, or $5.2 million and $10.8 million respectively, to their Self-Generation Incentive Program administrative budgets.

6. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy shall eliminate the federal tax credit incentive adjustment for large-scale general and equity budget storage incentives for equipment purchased after December 31, 2021.

7. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy shall allocate the $98 million in 2020 to 2024 collections for large-scale storage incentives equally across existing incentive Steps 3 through 5 and shall adjust the 20 percent developer cap based on the new statewide budgets in these incentive Steps 3 to 5.

8. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy shall create two general market residential incentive steps, Step 6 and Step 7, with a five cent decrease in incentives per watt-hour between steps and shall equally allocate the $57 million in 2020 to 2024 collections for residential storage incentives to these steps.

9. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy shall adopt a "soft target" that half of the general market residential incentive budget will be used by residential customers living in Tier 3 or Tier 2 High Fire Threat Districts or residential customers whose electricity has been turned off during two or more discrete Public Safety Power Shutoff events.

10. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy shall allocate the full $513 million budget approved for the equity resiliency budget from 2020 to 2024 collections to the single equity resiliency incentive level approved in Decision 19-09-027.

11. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy shall modify the generation technology incentive levels approved in Decision 16-06-055 to establish a base incentive level of two dollars per watt ($2.00/W) with no step-down and shall, if needed and at the direction of Commission staff, submit a Tier 2 advice letter to propose additional tracking and verification requirements for Self-Generation Incentive Program projects using directed biogas to ensure incremental environmental benefits.

12. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy shall ensure that all renewable generation projects that use directed biogas provide a contract for biogas supplies for a minimum of 10 years prior to receiving Self-Generation Incentive Program incentives.

13. All new renewable generation projects receiving incentive funds from the Self-Generation Incentive Program must use only renewable fuels on an ongoing basis and for as long as the equipment is in use.

14. We direct Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company, and the Center for Sustainable Energy to launch the greenhouse gas emission reduction requirements adopted in Decision 19-08-001 for new small-scale residential Self-Generation Incentive Program projects less than or equal to 10 kilowatts to no later than March 1, 2020.

15. We direct Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy to begin accepting applications for small-scale residential equity resiliency budget projects of less than or equal to 10 kilowatts no later than March 1, 2020.

16. We define the following as customers with critical resiliency needs that are eligible to apply for equity resiliency and general market resiliency adder incentives: (a) customers whose electricity was shut off during two or more discrete Public Safety Power Shutoff (PSPS) events prior to the date of application for Self-Generation Incentive Program (SGIP) incentives; and, if located in Tier 2 or Tier 3 High Fire Threat District or a customer whose electricity was shut off during two or more discrete PSPS events prior to the date of application for SGIP incentives, (b) customer meters directly serving grocery

stores, corner stores, markets and supermarkets, if the customer has average annual gross receipts of $15 million or less, over the last three tax years, (c) independent living centers, (d) food banks, and, (e) households that rely on electric-pump wells for their water supply.

17. Pacific Gas and Electric Company and Southern California Edison Company shall use lists of customers whose electricity was shut off during two or more discrete Public Safety Power Shutoff (PSPS) events prior to the date of application for Self-Generation Incentive Program (SGIP) to determine customer eligibility for SGIP equity resiliency and general market resiliency adder incentives, and shall refine these lists to improve their accuracy as needed.

18. San Diego Gas and Electric Company (SDG&E) and Southern California Edison (SCE) shall actively collaborate with the Center for Sustainable Energy and Southern California Gas Company, respectively, to support the timely validation of customer eligibility for the equity resiliency budget, including providing detailed information regarding SDG&E and SCE customers whose electricity was shut off during two or more discrete Public Safety Power Shutoff events.

19. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy shall modify the Self-Generation Incentive Program general market storage incentive step-down structure as follows:

Energy Storage Duration (per kW)	**Percentage of Full Incentive- General Market**
Zero to two hours	100 percent
Two to four hours	100 percent
Four to six hours	25 percent
Greater than six hours	0 percent

20. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy shall establish a resiliency incentive adder for general market projects of 15 cents per watt-hour ($0.15/Wh) for large-scale storage projects and two dollars and 50 cents per watt ($2.50/W) for renewable generation projects and shall grant eligibility for these incentives to general market customers with critical resiliency needs as defined in this decision.

21. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy (collectively Self-Generation Incentive Program administrators or SGIP PAs) shall require developers applying for a general market energy storage or a renewable generation resiliency incentive adder and all general market energy storage projects with a longer than two-hour discharge duration to:

(a) Provide an estimate of how long a project's fully charged battery— or renewable generation system— will provide electricity for the relevant facility average load during an outage;

(b) Indicate whether a project's critical loads can and will be isolated;

(c) Provide an estimate of how long a project's fully charged battery—or renewable generation system— will provide electricity to critical uses during an outage;

(d) Provide an estimate of how long the project can operate in less-than-favorable circumstances, such as if an outage occurs when an energy storage system has been discharged or during the winter (for systems paired with solar), or while experiencing similar challenges for renewable generation systems;

(e) Summarize information given to the customer about how the customer may best prepare an energy storage system to provide backup power— or, ensure operation of a renewable generation system— in the case of a Public Safety Power Shutoff event announced in advance;

(f) Attest to the truth of the information provided;

(g) Provide an attestation from the customer indicating that he or she received this information prior to signing a contract; and

(h) Demonstrate that an Authority Having Jurisdiction has approved plans showing that the system can operate in island mode, has inspected the system after installation, and has authorized operation.

22. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy shall include in their equity resiliency budget and resiliency adder incentive application forms a question regarding the applicant's coordination with their local government and the California Office of Emergency Services and shall accept projects that notify their local governments that they intend to or have installed on-site storage as meeting this criterion.

23. Commission staff shall ensure that the Self-Generation Incentive Program impact evaluation report issued in 2022 includes an evaluation of the performance and impact of the non-residential projects receiving funding from the equity resiliency budget in 2020, using the factors listed in § 379.9(b)(4).

24. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy shall adopt a soft target to achieve an average incentive application processing time of 45 days or less, shall annually file a summary notice of their average, fastest and slowest incentive application processing times for all technology budget categories to the service list of Rulemaking 12-11-005, and shall annually post the

same information on the Self-Generation Incentive Program website (currently www.selfgenca.com).

25. Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and the Center for Sustainable Energy (collectively Self-Generation Incentive Program administrators or SGIP PAs) are authorized to submit a Tier 2 advice letter to transfer funds between technology incentive budgets subsequent to December 31, 2023 if the SGIP PA believes that there are likely to be unreserved funds in that budget as of December 31, 2025.

26. Rulemaking 12-11-005 remains open.

This order is effective today.

Dated ____________________________, at San Francisco, California.