

## SGIP 1<sup>st</sup> Quarterly Workshop of 2023

March 24, 2023



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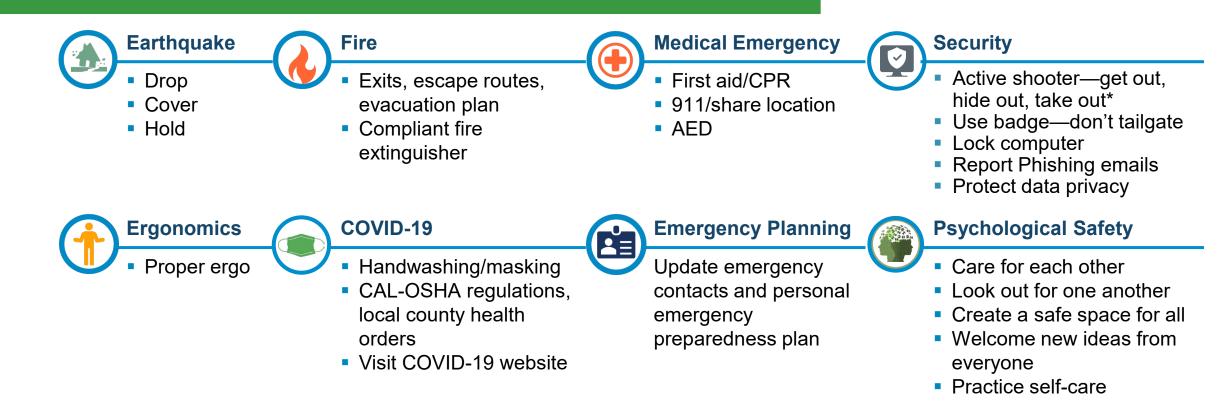
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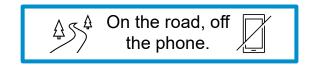




## Safety and Security











- Welcome and Introductions (PG&E) 9:05 9:10
- Program Metrics (PG&E) 9:10 9:20
- Regulatory Updates (SCE) 9:20 9:30
- SGIP Handbook Streamlining (CSE) 9:30 9:45
- General Q&A 9:45 10:15
- Break 10:15 10:30
- Measurement & Evaluation (Verdant) 10:30 11:00
- AB209 Discussion (CPUC) 11:00 11:30
- Lunch 11:30 12:00
- AB209 Discussion Cont. (CPUC) 12:00 12:30
- Q&A 12:30 1:00

## Introduction



## **PROGRAM ADMINISTRATORS**

#### SCE:

- Jim Stevenson
- Vicky Velazquez

#### SoCalGas:

- Jason Legner
- Adrian Martinez
- Sandi Linares-Plimpton
- Laura Diaz
- Ashley Pezikian
- Jan Santos

#### CSE:

- Vanessa Melvin-Gunn
- Melissa Cintron
- Shalene Watanabe-O'Toole
- Dema Tzamaras

#### PG&E:

- Brian Bishop
- Ron Moreno
- Ozzy Guzman
- Jacklin Campos-Perez









## Introduction (continued)



#### **AESC (Technical)**

- Dara Salour
- Stephanie Raya

#### **Energy Solutions (Database)**

- Kelsey Albers
- Alejandro Prieto

#### **Energy Division (CPUC)**

- Gabriel Petlin
- Fang Yu Hu
- Justin Galle









## **Teams Meeting**



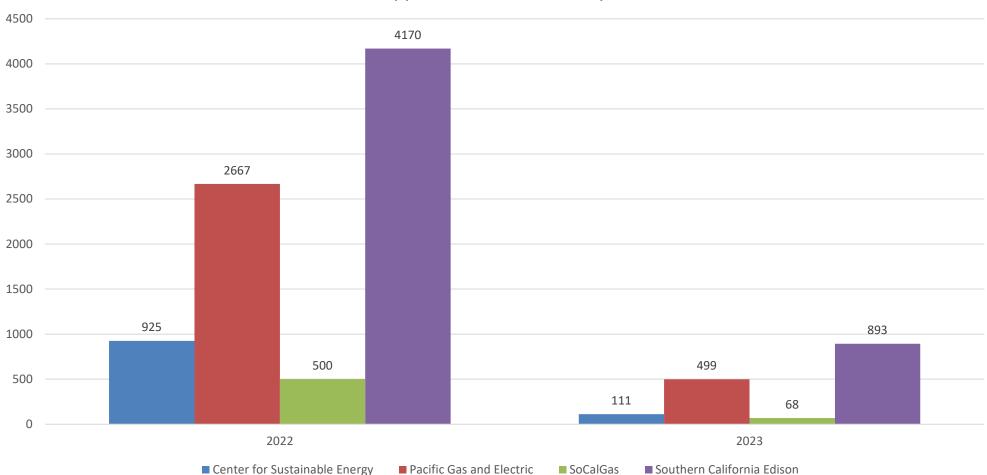
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## **Program Metrics**



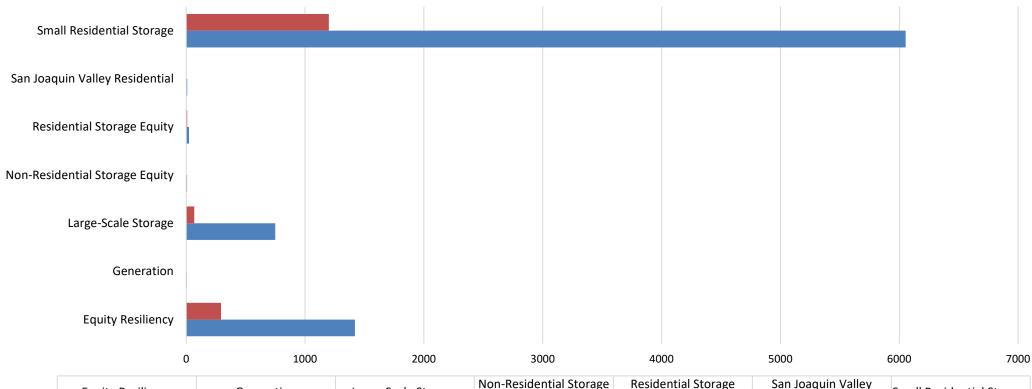


#### Number of Applications Submitted by PA and Year

Does not included cancellations and waitlist projects



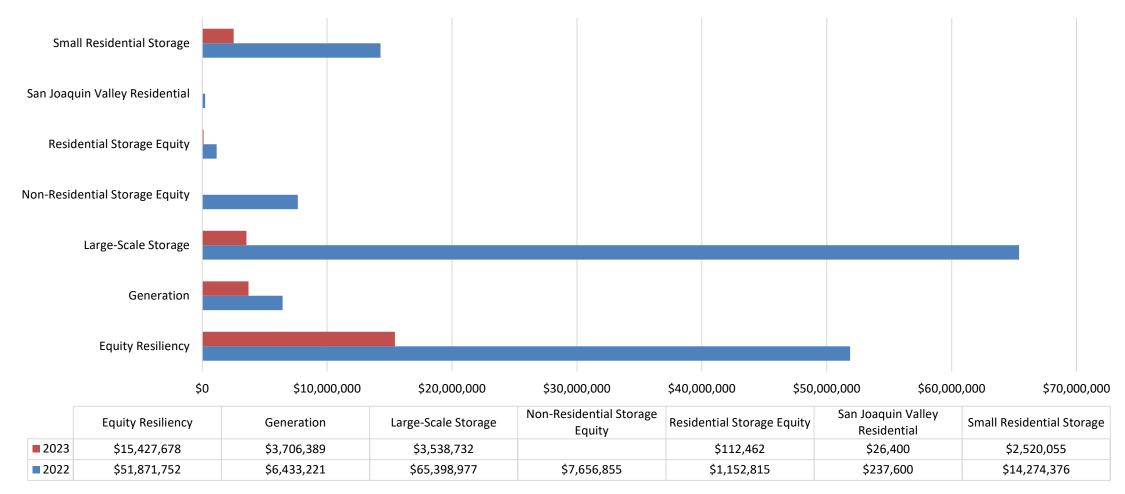
#### Number of Applications by Budget Category and Year



	Equity Resiliency	Generation	Large-Scale Storage	Non-Residential Storage Equity	Residential Storage Equity	San Joaquin Valley Residential	Small Residential Storage
2023	293	1	68		9	1	1200
2022	1420	4	749	8	23	9	6053

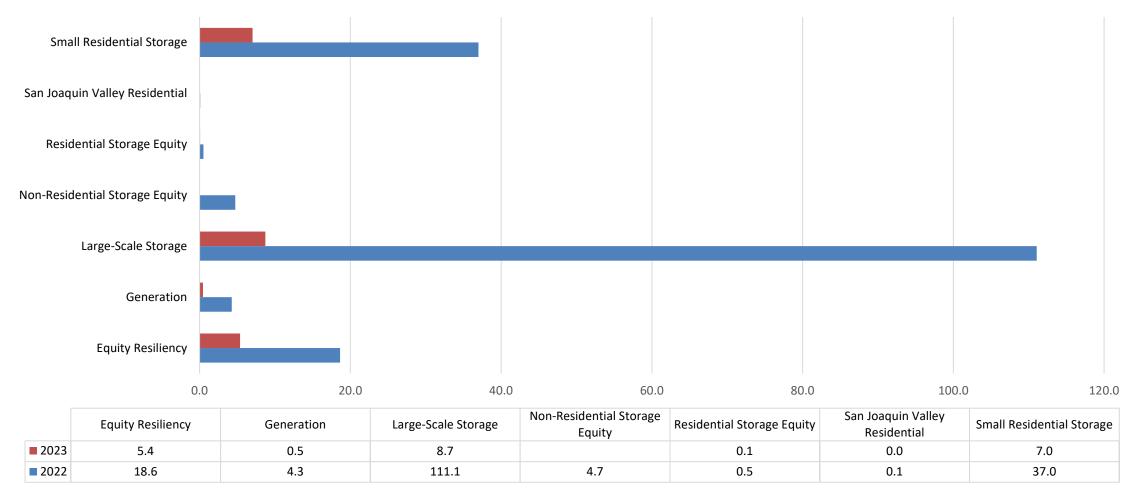


#### Total Incentive Dollars by Budget Category



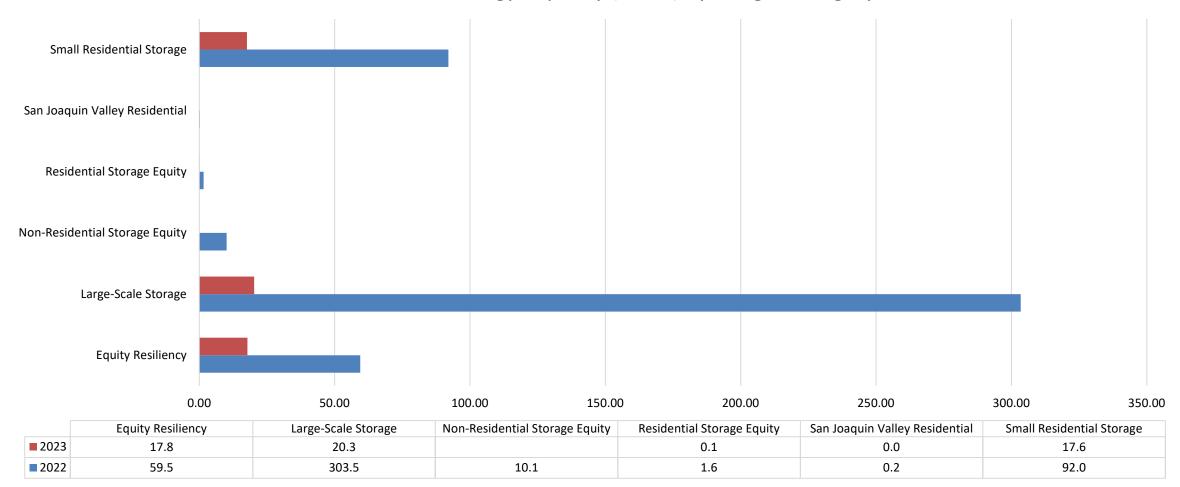


#### Total Rated Capacity (MW) by Budget Category





#### Total Energy Capacity (MWh) by Budget Category



#### Program Metrics As of March 27, 2023

Budget Category	CSE	SCE	SCG	PG&E	
Large-Scale Storage	Step 4	Waitlist	Open	Waitlist	
	\$9,197,823		\$307,975		
Small Residential Storage	Step 7	Step 7	Step 6	Step 7	
	\$389,617	\$4,949,962	\$89,271	\$3,216,863	
Residential Storage Equity	Open	Open	Open	Open	
	\$2,887,472	\$2,808,883	\$1,158,443	\$6,358,539	
Non-Residential Storage Equity	Waitlist	Waitlist	Waitlist	Waitlist	
Equity Resiliency	Waitlist	Waitlist	Open	Waitlist	
			\$232,821		
San Joaquin Valley Residential		Open		Waitlist	
		\$4,642,400			
San Joaquin Valley Non-Residential		Open		Open	
		\$120,000		\$120,000	
Generation	Open	Open	Open	Open	
	\$14,507,136	\$33,792,078	\$11,597,405	\$36,637,015	



#### SCG has reached the 50% Residential Storage Soft Target Cap for Small Residential Step 6

CSE and PG&E have reached the 50% Residential Storage Soft Target Cap for Small Residential Step 7

When additional funding is provided in a given budget category, applications on a waitlist will be awarded funding in the order they were received

https://www.selfgenca.com/home/program\_metrics/

#### **Program Metrics**



## Questions?





## **Regulatory Updates**

## **Regulatory Updates**



#### Petition for Modification for Developers Going out of Business

On May 20, 2022, PG&E filed on behalf of the other SGIP PAs the Petition for Modification for Developers Going out of Business.

- Seeks Modification to Decisions (D.) 11-09-015, D.15-06-002, and D.19-08-001.
- Approximately 270 projects left with no developer currently unable to move forward to completion.
- Petition for Modification seeks to relieve these customers along with future customers who "unexpectedly and permanently lose contact with their developer due to the developer declaring bankruptcy or otherwise going out of business" by granting exceptions to:
  - Extensions
  - Warranty Requirements
  - Ongoing Developer Fleet Compliance Operations

### **Regulatory Updates**



## Questions?



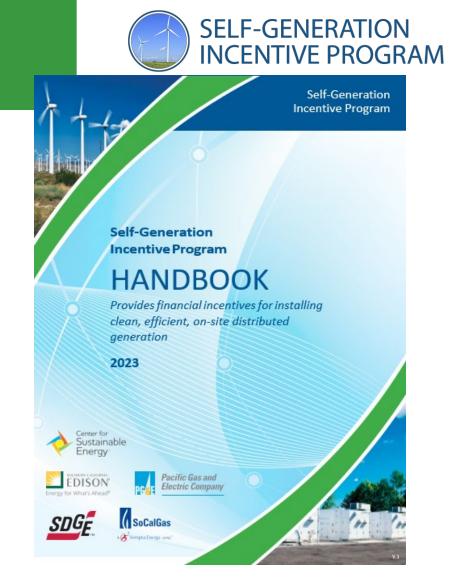


## SGIP Handbook Streamlining

## Handbook Streamlining

#### Overview

- The Program Administrators have been working to streamline the handbook over the past year.
- Improve Handbook readability & comprehension by clarifying policies & eligibility requirements.
- Approaching the end of the streamlining and anticipate releasing the Handbook in Q2.



## Handbook Streamlining

#### Handbook Updates

- Revised Layout of Handbook for Easier Navigation
- Deleted Redundant and Outdated Content
- Consolidated Dense Sections of Text into Tables
- Updated Web Links and Improved Accessibility of Hyperlinks
- Language Changes Within the SGIP Handbook
  - Adjusted Language for Consistency
- Language Additions to the SGIP Handbook
  - New Footnotes
  - Eligibility Clarifications
  - Additional Chapters

Table 5.4.2: Proof of Project Milestone Requirements

	Required Materials (3-Step Projects)
1.	Online Proof of Project Milestone Form (All Projects)
2.	Copy of RFP or equivalent after 90 days (Public Entity Projects Only)
3.	Copy of Executed Contract or Agreement for Installation (All Projects)
	Includes Required Warranty Documentation

SELF-GENERATION INCENTIVE PROGRAM

Program Equipment Requirements Section 5: → Section 4

Residential Equity Resiliency Eligibility Section  $3.1.1.3 \rightarrow 4.1.1.3$ 

## Handbook Streamlining



#### Handbook Updates Cont.

- Handbook Will Include All Recent Updates
  - Nov. 16, 2022 Pressure Reduction Turbine Fuel Requirements
  - Feb. 10, 2023 Capacity Factor Updates for Renewable Fuel Projects
- Notable Updates
  - Added Conversion Table Language for HVAC-Integrated Small Thermal Energy Storage Technologies Providing only a Partial Off-set
  - Streamlined Document Requirements for SCE Territory
    - Eliminating PTO letter at ICF
    - Eliminating Final Inspection Report Requirement

## Handbook Streamlining- Timeline



#### **Program Administrators are Performing Final Reviews**

Action Items	Projected Completion Date
CSE Sent Advice Letter and Handbook 1 <sup>st</sup> Regulatory Review	March 2 <sup>nd</sup> , 2023
Program Administrator & Regulatory Feedback Due	March 17 <sup>th</sup> , 2023
Additional Program Administrator & Regulatory Reviews	March 21 <sup>st</sup> – April 5 <sup>th</sup> ,2023
Final PA & Regulatory Edits Due	April 7 <sup>th</sup> , 2023
Anticipated Advice Letter Filing Date	April 12 <sup>th</sup> , 2023

## SGIP Handbook Streamlining



## Questions?

## SGIP MEASUREMENT AND EVALUATION

March 2023 SGIP Quarterly Workshop



#### **PRESENTATION OBJECTIVES**

- » Introduce Verdant Associates team and project partners
- » Review approved M&E/research activities for calendar year 2023 and how they affect SGIP participants
- » Preview how data collected through M&E efforts are used



# VERDANT

#### ☆ ☆ **†** GRIDWORKS





SGIP 2021 – 2023 Measurement and Evaluation 26

#### **OVERVIEW OF RESEARCH ACTIVITIES**



Renewable Fuel Use Reports



Program Administrator Performance Assessments and Process Evaluation



Annual Impact Evaluation Reports



## SGIP PARTICIPANT M&E REQUIREMENTS

7.4 Measurement and Evaluation Activities

As a condition of receiving incentive payments under the SGIP, System Owners and Host Customers agree to provide full access to Site and system equipment to participate in M&E activities as required by the CPUC...

... M&E activities include installation of metering equipment and transfer of data from installed system monitoring equipment...

Performance data from specific projects will remain confidential.



## **SGIP M&E IN PRACTICE**

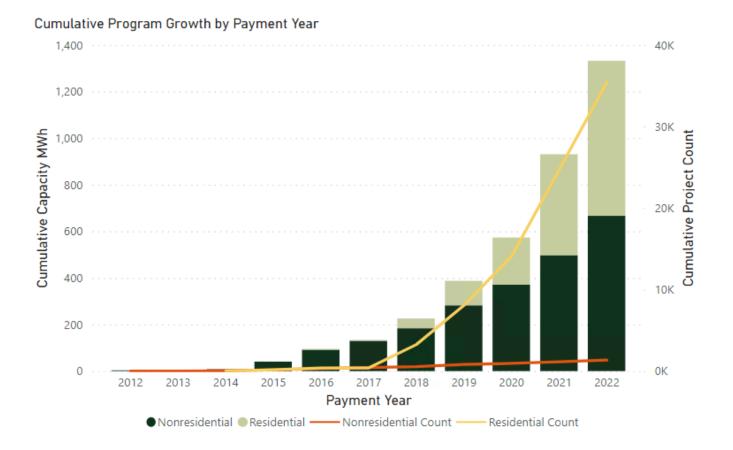
What to expect from Verdant

- » Metered data requests
  - Storage charge/discharge, PV generation, consumption
  - Demand response enrollment
  - Generator output, fuel consumption
- » Web surveys, telephone interviews
- » Installation of electrical or thermal metering



#### **Program Participation**

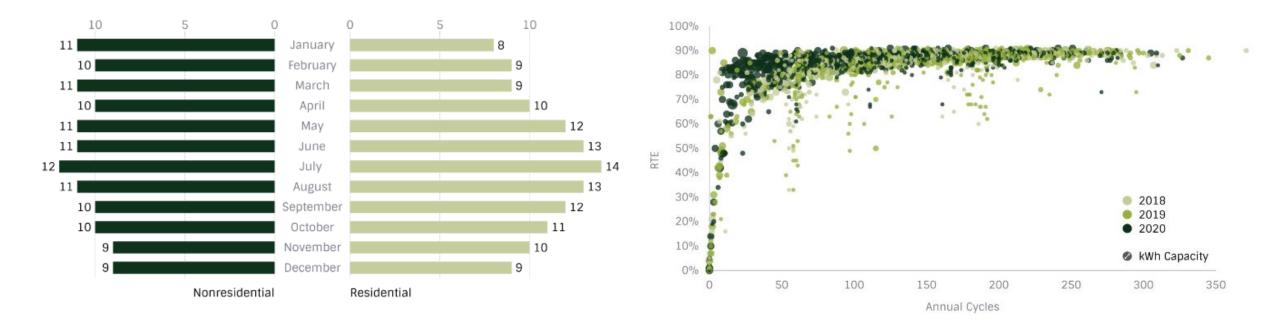
- » Program Count
  - 1,355 nonresidential
  - 35,426 residential
- » Program Capacity
  - 667 MWh nonresidential
  - 666 MWh residential
- » PV Attachment
  - Non-res 34%
  - Residential 97%



#### VERDANT

#### TYPICAL SGIP EVALUATION REPORTING METRICS Utilization Metrics

#### Monthly Discharge Cycles by Sector and Month





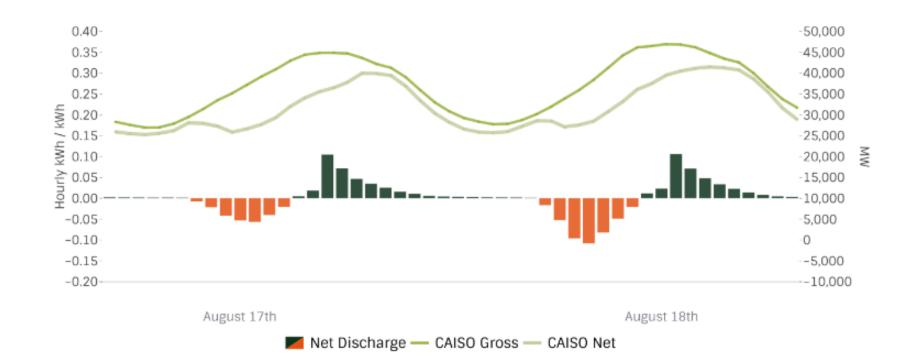
Dispatch Behavior (Nonresidential, with and without PV)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Hour	1	2	3	4	5	6	7	8	9	10	11	12
0	0%	0%	0%	1%	1%	1%	1%	0%	-1%	0%	0%	09
1	0%	0%	0%	1%	2%	2%	1%	0%	0%	0%	0%	09
2	0%	0%	1%	2%	2%	2%	2%	0%	0%	0%	0%	09
3	0%	0%	1%	3%	3%	3%	2%	1%	0%	0%	0%	09
4	1%	1%	2%	4%	4%	4%	3%	2%	1%	0%	1%	19
5	2%	2%	3%	4%	4%	3%	4%	3%	1%	1%	2%	29
6	3%	3%	3%	-1%	-4%	-2%	-1%	0%	0%	1%	2%	29
7	3%	3%	-3%	-8%	-11%	-8%	-8%	-5%	-5%	-4%	-2%	19
8	-3%	-5%	-10%	-15%	-16%	-13%	-12%	-10%	-9%	-8%	-9%	-5%
9	-11%	-12%	-13%	-14%	-14%	-13%	-13%	-11%	-11%	-11%	-13%	-129
10	-15%	-15%	-11%	-9%	-8%	-9%	-10%	-9%	-9%	-10%	-13%	-149
11	-13%	-13%	-7%	-5%	-4%	-6%	-5%	-6%	-5%	-7%	-8%	-119
12	-9%	-7%	-4%	-3%	-2%	-3%	-2%	-3%	-2%	-4%	-4%	-79
13	-4%	-3%	-2%	-2%	-1%	-2%	-1%	-1%	0%	-1%	-1%	-39
14	-1%	-1%	-1%	-1%	-1%	-1%	-1%	0%	0%	0%	0%	-19
15	0%	0%	-1%	0%	-1%	-1%	-1%	-1%	0%	0%	1%	09
16	2%	1%	1%	0%	0%	1%	1%	1%	2%	3%	2%	29
17	4%	4%	3%	3%	2%	1%	2%	4%	3%	4%	3%	39
18	5%	5%	4%	5%	6%	5%	5%	6%	5%	5%	4%	49
19	5%	6%	5%	5%	5%	6%	6%	5%	5%	5%	5%	5%
20	5%	6%	5%	5%	5%	5%	5%	5%	5%	4%	5%	5%
21	4%	5%	3%	3%	3%	3%	2%	2%	2%	2%	4%	4%
22	2%	1%	3%	5%	5%	4%	3%	4%	3%	4%	2%	19
23	3%	3%	1%	1%	1%	1%	1%	0%	-1%	0%	3%	39

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Hour	1	2	3	4	5	6	7	8	9	10	11	12
0	-2%	-2%	-1%	-1%	-1%	-2%	-2%	-2%	-2%	-1%	-2%	-1%
1	-2%	-2%	-1%	-1%	-1%	-1%	-2%	-1%	-1%	-1%	-1%	-1%
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4	-1%	-1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
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6	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	1%
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13	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
14	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	-1%
15	0%	0%	0%	1%	2%	2%	3%	3%	2%	2%	0%	0%
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19	3%	3%	4%	5%	4%	4%	4%	4%	4%	4%	2%	2%
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21	-1%	-1%	-1%	-2%	-2%	-4%	-4%	-4%	-3%	-3%	-1%	-1%
22	-4%	-4%	-2%	-1%	-1%	-1%	-1%	-2%	-2%	-1%	-2%	-2%
23	-2%	-2%	-2%	-2%	-2%	-3%	-3%	-3%	-3%	-3%	0%	-1%



Grid Impacts (Residential)





**Environmental Impacts (Greenhouse Gas)** 





#### **CLOSING REMARKS**

- » SGIP Measurement and Evaluation helps to tell the story of the program's successes and opportunities for improvement
  - Can't do this without support from manufacturers, project developers, and installers
- » Data requests for the impact evaluation report will begin to go out today March 24<sup>th</sup>.

#### Please be on the lookout for upcoming SGIP M&E data requests and support the continued improvement of the SGIP



# THANK YOU



Proceeding No. R.20-05-022



California Public Utilities Commission

# AB 209 Funds Allocated to Self-Generation Incentive Program

March 24, 2023 Justin Galle, Energy Division



# Agenda

AB 209 Funding The Assigned Commissioner's Ruling and Party Comments Potential SGIP Policy Changes Upcoming CPUC Decision Q&A

> the goal of this session is informal stakeholder feedback on potential SGIP policy changes

### **AB 209 Funding**

- September 2022, Governor Newsom approved AB 209, which amends Public Utilities (Pub. Util.) Code Section 379.6 and adds Section 379.10 to guide legislatively appropriated state General Fund monies into solar and storage incentives through the SGIP for California residential customers.
- \$630 million to the Commission starting in Fiscal Year 2023-2024 (July 1, 2023) directed towards funding incentives for eligible low-income residential customers who install either new behind-the-meter solar photovoltaic systems paired with energy storage systems or new energy storage systems.
- Cut from the Governor's January Budget Update: AB 209-authorized \$270 million for incentives for residential customers who install new behind-the-meter energy storage systems (not income restricted, i.e. general market).

### **Context for Low Income AB 209 Funding**

#### Low Participation Level Currently

- 1. **Outreach**: Low percentage of SGIP participants that are deemed low-income (1.7%). Developers are not targeting this sector and/or low-income customers are unaware of the program.
- 2. Solar Pairing: When selling batteries, developers seek out homeowners who already own solar or are planning to have solar installed. Without an existing solar installation batteries are much less valuable to the customer and harder to sell. This is related to access to financing.
- 3. Competition from Other Sectors/Budget Categories: Higher incentive level of the Equity Resiliency Budget (\$1.00/Wh) crowds out interest from developers to seek projects in the Equity Budget (\$0.85/Wh). Participating in Medical Baseline Program is an easier path to eligibility.
- 4. Access to Financing: Majority of projects require the host customer to pay the developer up front and the host customer is given the rebate once the application has been processed.

#### Low Completion Rate

- 1. Onerous Document Requirements: Onerous relative to the Medical Baseline eligibility pathway in the Equity Resiliency Budget, which has been used for more than 60% of the incentives.
  - Currently requires both income verification (i.e., proof that household income is 80 percent or less of area median income) and proof of sales restriction or an equity sharing agreement.

#### SGIP Assigned Commissioner's Ruling Oct 2022: Eight Issue Areas

Ruling directs parties to respond to 38 questions focused on implementing the new AB 209 funding and improving equity outcomes:

- 1. Residential Low-Income Eligibility Criteria Across SGIP Budget Categories
- 2. Paying for Upfront System Costs
- 3. Improving Participation of Tribal Customers
- 4. Equity Resiliency Budget Category
- 5. Incentive levels for General Market Customers
- 6. Operational Requirements for SGIP and AB 209 Projects
- 7. Program Structure for AB 209 Funds
- 8. Other SGIP Program Changes

#### SGIP Assigned Commissioner's Ruling AB 209 funds and other SGIP improvements

- Party Comments submitted by December 2
  - 14 parties submitted comments
- Party Replies submitted by December 16
  - 13 parties submitted reply comments
- Wide range of comments, including suggestions to discuss proposals at a public workshop

### **Overarching questions**

- How should the AB 209 funding be allocated across existing SGIP residential budget categories:
  - Residential Storage Equity
  - Equity Resiliency
  - Small Residential Storage
  - Large Scale Storage
- What administrative tools can the Commission use to streamline the process?
- What other program improvements should be adopted?

### **Questions on Residential Low-Income Eligibility Criteria**

- Financial or non-financial barriers for low-income residential customers wishing to participate in SGIP and barriers for developers to enlist low-income customers?
  - Financial barriers: upfront payment, not being able to cover their out-of-pocket expenses, low home ownership rates.
  - Non-financial barriers: complex documentation requirements, education and outreach, customer trust and technology barriers.
- Potential modifications of SGIP eligibility criteria for low-income residential customers?
  - Parties suggest amending:
    - Low income definition
    - Documentation required, verification, and leveraging external programs
    - Self-Attestations and safeguards or verification
    - Deed restricted or resale restricted residence
- Use a single low-income definition or sliding scale and corresponding incentive levels?
  - Parties suggest not having a sliding scale
- Are changes needed to the non-residential host customer eligibility requirements for Equity and/or Equity Resiliency Budgets?
  - CALSSA and CESA recommend expansion to schools, and facilities facing outages beyond PSPS.

#### **Questions on Incentive Levels for Low-Income Customers**

- What should the incentive level be for AB 209 Low-Income Incentive projects per unit of installed storage capacity?
  - Parties suggested a range from \$1.00 \$1.40/Wh incentive level
- What should the incentive level(s) be for AB 209 Low-Income Incentive projects per unit of installed solar generation capacity?
  - Parties suggested a range from \$2.80 \$4.00/W incentive level
- How might the Inflation Reduction Act of 2022 (H.R. 5376, 117th Cong.) and its financial incentives for solar, energy storage, and other electrification measures be factored into AB 209's low-Income Incentives levels?
  - Parties suggest:
    - Leveraging the IRA funds to ensure SGIP is paying only the net cost
    - Ensuring customers are not double paid, or paid more than then total system cost
- Should additional costs necessary for project installation costs be eligible for SGIP incentives (e.g., panel upgrades, roofing, wiring, etc.)?
  - Panel and wiring upgrades (low-income projects): Implement maximum reimbursement of \$3,500 per project
  - Roof repairs/replacements: Implement maximum reimbursement of \$15,000 per project.

### Questions on Paying for Upfront System Costs

- SGIP customers pay upfront or finance their projects and receive the incentive payment after the system is installed and interconnected. This is a barrier to low-income customer lacking the cash or credit needed to pay the upfront system costs.
- Should the Commission consider allowing entire or partial upfront payments on behalf of the customer prior to installation for energy storage systems, including solar where relevant, for low-income households?
  - What learnings from the PG&E and SCE upfront payments pilots are relevant?
    - Upfront payments caused developers to prioritize pilot projects
  - CALSSA, Joint CCA, PG&E, SCE, and SoCalGas support partial upfront payments.
  - GRID and Cal Advocates support entire upfront payments.
- Are there other program changes that should be considered to mitigate financial barriers and how should the change be implemented?
  - CSE recommends the Commission consider creating a one-step process
  - PG&E recommends the CPUC consider allowing AB 209 SGIP funds to be used for proposals developed in unison with the Commission's Clean Energy Financing Options (CEFO) Order Instituting Rulemaking (OIR), R.20-08-022.

#### Questions on Improving Participation of Tribal Customers

- What financial or non-financial barriers exist for tribal residential and non-residential customers living on tribal lands and enrolled members of California Tribes who wish to participate in SGIP?
  - Parties noted the application timelines, program eligibility requirements, long-standing distrust of regulatory bodies, the lack of technical assistance, and higher project costs
- Should the Commission consider changing SGIP eligibility criteria and verification methods to increase participation among tribal customers living on tribal lands and enrolled members of California Tribes?
  - Parties suggested expanding the definition to all customers who live on tribal lands and/or customers who have documentation of enrollment in a tribe, but reside outside of California Indian Country.
- Should the Commission consider setting aside a portion of the budget for tribal residential customers living on tribal lands and enrolled members of California Tribes?
  - Parties suggested that PAs be permitted to identify the set-aside value via Advice Letter

# Questions on Operational Requirements for SGIP and AB 209 Projects

- What utility or entity should serve as Program Administer for the additional POU customers that will be served by new AB 209 SGIP funds?
  - Parties proposed: single statewide PA; current SGIP PAs; POU-designated third-party PA
- Should the program rules be the same for IOU and POU customers?
  - Parties agree program rules should be generally consistent among IOU and POU customers
  - Further discussion on the circumstances that may warrant specific differences in rules
- What steps are necessary to ensure that the program is accessible to all customers once the AB 209 funding is available starting July 1, 2023?

#### Upcoming CPUC Decision in R.20-05-012 SGIP Proceeding

- Energy Division is working to provide support to enable a Decision to be adopted prior or as close to July 1st as reasonable, so that funds can be expended after FY 23 begins
  - Proposed Decision will be mailed, with another opportunity for comments and replies
  - Final Decision adopted roughly one month later
  - Schedule and timeline of Decision is made by the Commission and not ED
- There will be a timeline after Decision adoption to update SGIP database, handbook, and other operational changes needed before incentive claim reservation opens
- Exploring how changes can be rolled out for a smooth transition:
  - Trade-offs between sequential roll out vs. all changes at once, which would take longer.
  - e.g. adding solar to the application



#### **CPUC SGIP Staff:**

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- Justin.Galle@cpuc.ca.gov
- FangYu.Hu@cpuc.ca.gov



# **Additional Slides**

### Questions on the Equity Resiliency Budget Category

- Should AB 209 funds be allocated to the Equity Resiliency budget?
- If you propose that the AB 209 funds be allocated to the Equity Resiliency budget, should there be separate budget allocated to low-income residential and/or residential customers and medical baseline customers?
- Should AB 209 General Market funds be allocated to the Equity Resiliency budget for customers who qualify under the non-low-income criteria?

#### Questions on Incentive Levels for General Market Customers

- At what level should the Commission set the AB 209 General Market storage Incentive for the Small Residential budget and for residential projects in the large-scale storage budget?
- What mechanism, if any, would allow renters to receive benefits from the AB 209 General Market Incentives?
- Should additional costs necessary for project installation costs be eligible for SGIP incentives (e.g., panel upgrades, roofing, wiring, etc.)? If so: a. Which costs should be included and why? b. How should these additional costs be accounted for in setting incentive amounts (e.g., incentive adder)?

#### Constraints on SGIP (P.U. Code 379.6)

- Eligibility for incentives under SGIP shall be limited to DERs that the CPUC, in consultation with CARB, will achieve reductions in emissions of GHGs pursuant to the California Global Warming Act of 2006 (b)(1)
- The CPUC shall update the factor for avoided GHG emissions (on or before July 1, 2015) based on GHG emissions from electricity sales in the SGIP PAs' service areas and current estimates of GHG emissions over the useful life of the distributed energy resource including consideration of the effects of the California RPS. (b)(2)
- Minimum system efficiency shall be determined either by calculating electrical and process heat efficiency as set forth in Section 216.6, or by calculating overall electrical efficiency. (d)
- Eligibility for incentives under SGIP shall be limited to DERs that the CPUC determines meets all of the following (e)
  - 1. The distributed energy resource technology shifts onsite energy use to off-peak time periods or reduces demand from the grid by offsetting some or all of the customer's onsite energy load, including, but not limited to, peak electric load.
  - 2. The distributed energy resource technology is commercially available.
  - 3. The distributed energy resource technology safely utilizes the existing transmission and distribution system.
  - 4. The distributed energy resource technology improves air quality by reducing criteria air pollutants.

#### Constraints on SGIP (P.U. Code 379.6) Cont.,

- Recipients of the SGIP funds shall provide relevant data to the CPUC and CARB, upon request, and shall be subject to onsite inspection to verify equipment operation and performance, including capacity, thermal output, and usage to verify criteria air pollutant and GHG emissions performance. (f)
- In administering the SGIP, the CPUC shall determine a capacity factor for each distributed generation system energy resource technology in the program. (g)
- The CPUC shall consider the relative amount and the cost of GHG emissions reductions, peak demand reductions, system reliability benefits, and other measurable factors when allocating program funds between eligible technologies. (h)(1)
- In administering the SGIP, the CPUC shall provide an additional incentive of 20 percent from existing program funds for the installation of eligible distributed generation resources manufactured in California. (j)
- The costs of the program adopted and implemented pursuant to this section shall not be recovered from customers participating in the California Alternate Rates for Energy (CARE) program. (k)
- On and after January 1, 2020, generation technologies using nonrenewable fuels shall not be eligible for incentives under the SGIP. (m)

### About the Self-Generation Incentive Program (SGIP)

- Established in 2001, provides financial incentives for the installation of eligible behindthe-meter (BTM) distributed generation and energy storage technologies that meet all or a portion of a customer's electricity needs
- Over the years, the program focus has transitioned from peak-load reduction to greenhouse gas (GHG) reductions and resiliency as climate change has moved to the forefront of statewide public policy.
- Decision (D.) 17-10-004 established the **SGIP Equity Budget** to provide funding for behind-the-meter storage for **low-income and disadvantaged Californians**.
- D.19-09-027 established the Equity Resiliency Budget to provide critical resiliency needs to Californians living in areas heavily impacted by wildfires who are medically vulnerable, low-income, or disadvantaged.
- D.20-01-021 authorized collection of ratepayer funds totaling \$166 million per year from 2020 to 2024 pursuant to SB 700 (Wiener, 2018). This decision increased the financial incentive budget for **energy storage technologies to 88% of total SGIP funding**.

### **Program Overview**

- Four Program Administrators
  - PG&E, SCE, SoCalGas, and Center for Sustainable Energy (on behalf of SDG&E)
- More than 1.23 GW of capacity installed across nearly 33,450 projects since 2001
  - Anticipating additional 0.51 GW of capacity from the 14,000 projects currently in progress
- Total Collections for period 2020 2024 is \$813.4 million
  - Energy Storage Technologies receive 88% of funding
    - Equity Resiliency Budget 63%
    - Large-Scale Storage 10%
    - Small Residential Storage 7%
    - Heat Pump Water Heaters 5%
    - Residential Equity 3%
  - Generation Technologies receive 12% of funding (non-renewable fuels not allowed as of 2020)
- Some budgets have an **incentive step structure with incentive levels decreasing** as the budget is spent, others have a **fixed incentive level**
- Ongoing implementation in proceeding R.20-05-012

# Current Available Funds (as of 3/23/23)

	Large Scale Storage	Small Residential Storage	Residential Storage Equity	Non- Residential Storage Equity	Equity Resiliency	Renewable Generation
Total Budget	\$317,624,659.43	\$122,442,530.25	\$40,269,036.80	\$180,126,160.42	\$671,434,941.51	\$132,791,689.28
Pending Reservations	\$26,435,388.99	\$1,378,214.55	\$22,674,892.38	\$37,877,865.25	\$25,839,806.36	\$2,647,284.00
Reserved	\$142,615,388.78	\$16,000,791.08	\$4,152,459.58	\$126,593,505.86	\$331,037,791.42	\$16,605,400.00
PBI In Process	\$35,443,656.52	\$0	\$0	\$3,443,757.79	\$43,545,345.00	\$6,643,829.37
Paid	\$102,583,597.71	\$93,387,374.39	\$172,134.20	\$5,257,239.40	\$264,860,763.27	\$36,258,053.82
Remaining Available	\$10,546,627.43	\$11,676,150.23	\$13,269,550.64	\$6,953,792.12	\$6,151,235.46	\$96,533,635.46

# SGIP Storage Budget Category Descriptions

#### Equity resiliency (ERB) - up to \$1.00/Wh.

- Residential households and nonresidential critical facilities located in Tier 2 and Tier 3 High Fire Threat Districts (HFTDs) or customers experiencing two or more Public Safety Power Shutoff (PSPS) events.
- Secondary criteria include medical baseline, electric well pump, participation in DAC solar programs, low income, critical needs for residential customers

Large-Scale Storage – \$0.50 to \$0.18/Wh. Resiliency adder for qualified nonresidential customers.

• Any residential or nonresidential projects greater than 10 kW. --> currently at ~\$0.20 mostly

Legacy Pre-2017 – prior to current program structure. Incentives were paid per watt.

• Any residential or nonresidential project applying to the program prior to 2017 (mostly standalone nonresidential systems)

#### Nonresidential Storage Equity - \$0.85 / Wh.

• Open to local, state, or tribal government agencies, educational institutions, non-profit organizations or small businesses.

#### Residential Storage Equity - \$0.85 / Wh.

• Open to single-family low-income housing or multi-family low-income housing, regardless of project size.

#### San Joaquin Valley Residential – no set incentive.

• Residential or nonresidential projects located in 11 San Joaquin Valley disadvantaged communities

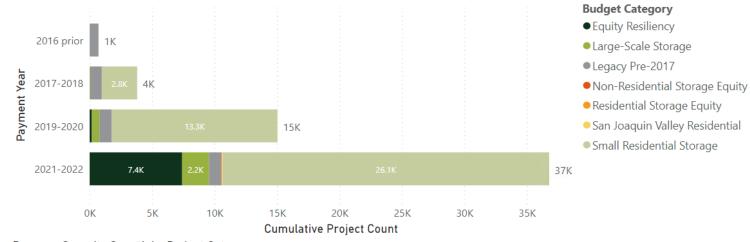
#### Small Residential Storage – \$0.50 to \$0.15 / Wh. --> currently at ~\$0.15 mostly

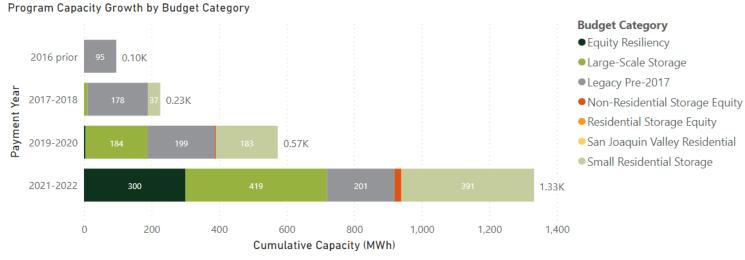
• Any residential project less than or equal to 10 kW.

# SGIP Storage Through 2022 by Budget Category

#### Cumulative Program Growth by Budget Category

- Largely a standalone nonresidential program before 2017
- Significant transition to small (<10 kW) residential projects beginning in 2017
- Creation of Equity Resiliency Budget (ERB) in 2020 leads to a significant increase in projects located in High Fire Threat Districts (HFTDs)
- Large-Scale and Legacy categories greater share of capacity than count b/c of share of large nonresidential
- Four categories represent 99% of program – general market and ERB residential greatest recent share









# Thank You