



SELF-GENERATION  
INCENTIVE PROGRAM

# SGIP 4<sup>th</sup> Quarterly Workshop of 2024

*December 13, 2024*



# Welcome and Introductions

*Shalene Watanabe – O’Toole, CSE*

# Welcome and Introductions



## PROGRAM ADMINISTRATORS & SUPPORT TEAMS

### SCE:

- Jim Stevenson
- Vicky Velazquez

### SoCalGas:

- Laura Diaz
- Adrian Martinez
- Ashley Pezikian
- Jan Santos

### CSE:

- Shalene Watanabe-O'Toole
- Dema Tzamaras
- Lupe Knox

### PG&E

- Ron Moreno
- Ozzy Guzman
- Jacklin Campos-Perez

### LADWP:

- Christian Kroupa
- Samer Fakhro
- Narek Abcarian
- Stephanie Macoritto
- David Stump
- Eric Escamilla



# Welcome and Introductions



## CONSULTANTS AND ENERGY DIVISION

### AESC (Technical)

- Dara Salour
- Stephanie Raya
- Robert Cobb

### Energy Solutions (Database)

- Kelsey Albers
- Alejandro Prieto
- James Marin

### Energy Division (CPUC)

- Justin Galle
- Gabriel Petlin
- Maya Noesen

### Verdant

- Brian McAuley



# Welcome and Introductions



## 4<sup>th</sup> Quarter SGIP Workshop

- 9:00 **Welcome, Introductions** (*Shalene Watanabe – O’Toole, CSE*)
- 9:05 **Teams Meeting Information** (*Shalene Watanabe – O’Toole, CSE*)
- 9:10 **LADWP Introduction to SGIP** (*Christian Kroupa, LADWP*)
- 9:25 **Program Metrics** (*Jan Santos, SoCalGas*)
- 9:45 **Regulatory Updates** (*Dema Tzamaras, CSE*)
- 10:00 **Virtual Inspections** (*Ron Moreno, PG&E*)
- 10:20 **Demand Response** (*Ron Moreno, PG&E*)
- 10:55 **System Sizing** (*Maya Noesen, Energy Division*)
- 11:30 **4<sup>th</sup> Quarter Workshop Open Q&A**
- 12:00 **Workshop Concludes**



# Teams Meeting Information

*Shalene Watanabe – O'Toole, CSE*

# Teams Meeting Information and Safety Message



## Teams Meeting – General Information/Participation

Function	Teams Icon
Controls	
Mute – <i>Remain muted unless called on</i>	
Raise Your Hand – <i>Wait until you are acknowledged and then unmute yourself to speak.</i>	
Chats - <i>Questions may get a response in the chat by a PA or it may be addressed during the Q&amp;A portion. If you are not a PA and responding to chat questions, please include the name of the company you are representing.</i>	



# LADWP Introduction to SGIP

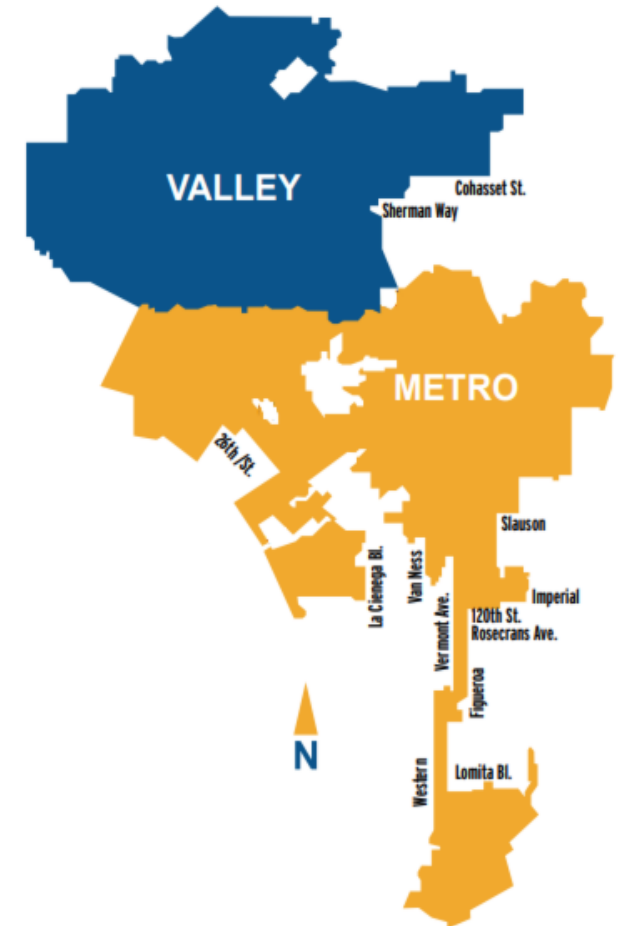
*Christian Kroupa, LADWP*



# LADWP Background



The **Los Angeles Department of Water and Power (LADWP)** provides water and electricity to the city of Los Angeles. It is the largest municipal utility in the United States. LADWP is a city-owned utility, meaning it is managed by the city of Los Angeles, and revenues are used to support city services and infrastructure.



# LADWP BESS Installations

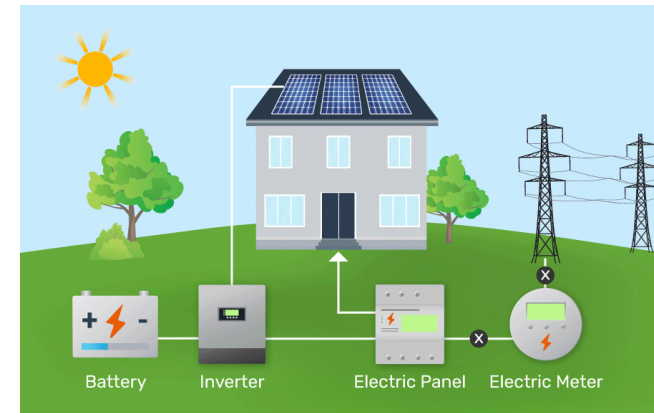


The [Los Angeles 100% Renewable Energy Study](#) indicates that over 2,000 MW of energy storage may be required to meet de-carbonization goals.

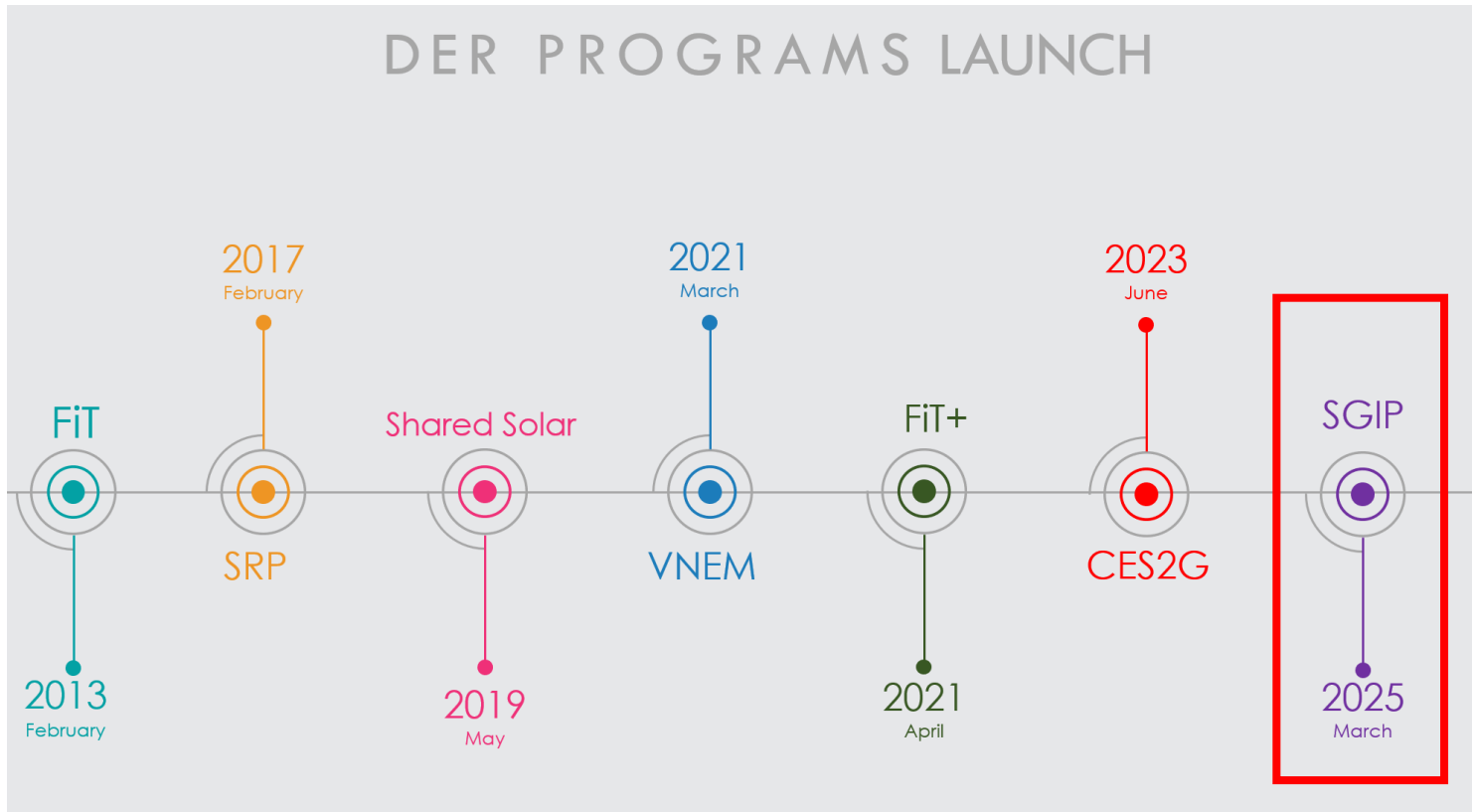
11MW+ of commercial storage installed,  
200MW+ planned



41.8MW of residential storage installed



# LADWP SGIP Launch



LADWP will accept SGIP applications by Spring 2025

Additional information will be released soon

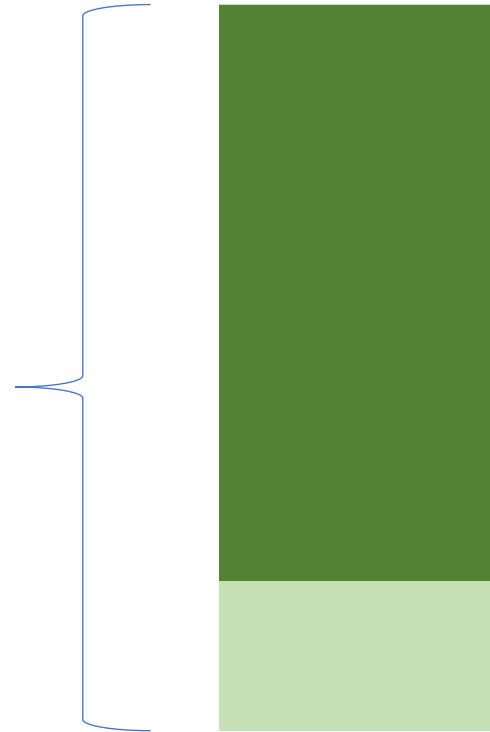
[www.ladwp.com/solar](http://www.ladwp.com/solar)



# LADWP SGIP Incentives



\$32M total  
for LADWP  
Incentives



Remaining for Equity-eligible Customers  
based on lottery system

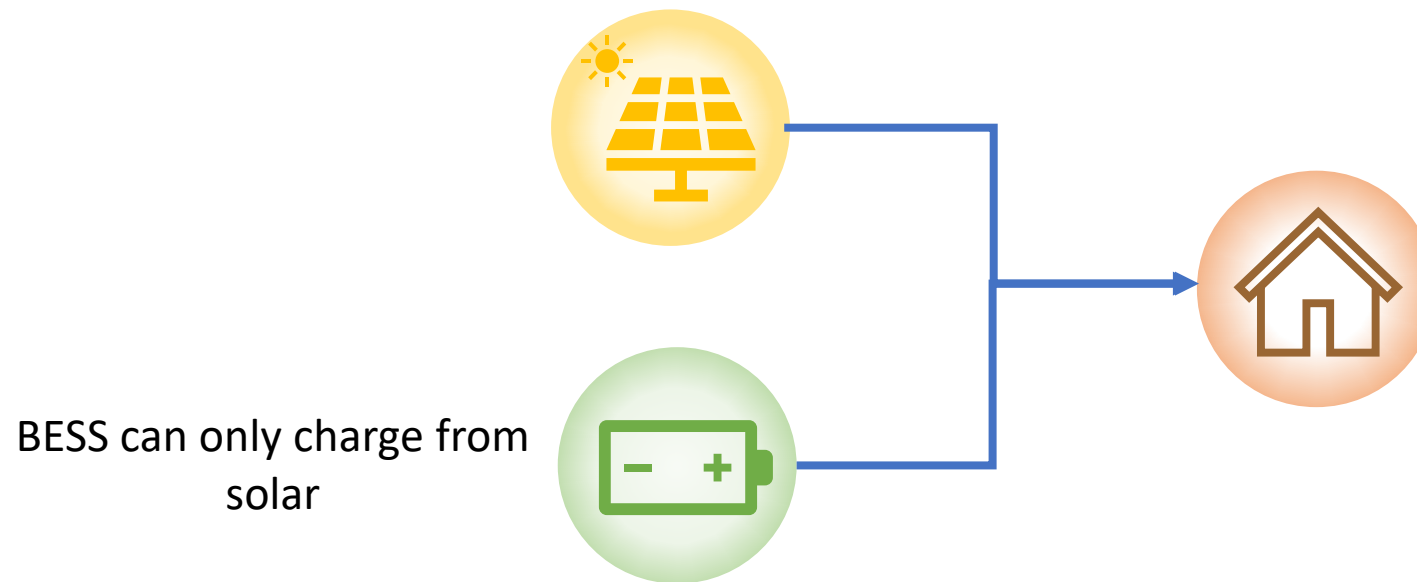
\$640,000 minimum reserved for Tribal  
Customers Only



# LADWP Project Criteria



LADWP customers are eligible for SGIP with Solar +Storage applications if the battery is set to **solar charging mode** where the battery charges only from solar **or solar-self-consumption mode** which uses the battery to store solar generation and discharge stored power only to meet on-site load.



## LADWP will accept applications under Residential Equity Eligibility Qualifying Pathways

### Single Family Pathway

- Provide documentation demonstrating the host customer household income is 80% of the area median income or less

OR

### Multifamily Pathway

- Multifamily building has at least five rental housing units operating under a deed-restricted low-income housing; and
  1. Located in a disadvantaged community (including Indian Country)

or

  2. The building has 80% of households with incomes at or below 60% of the area median income.

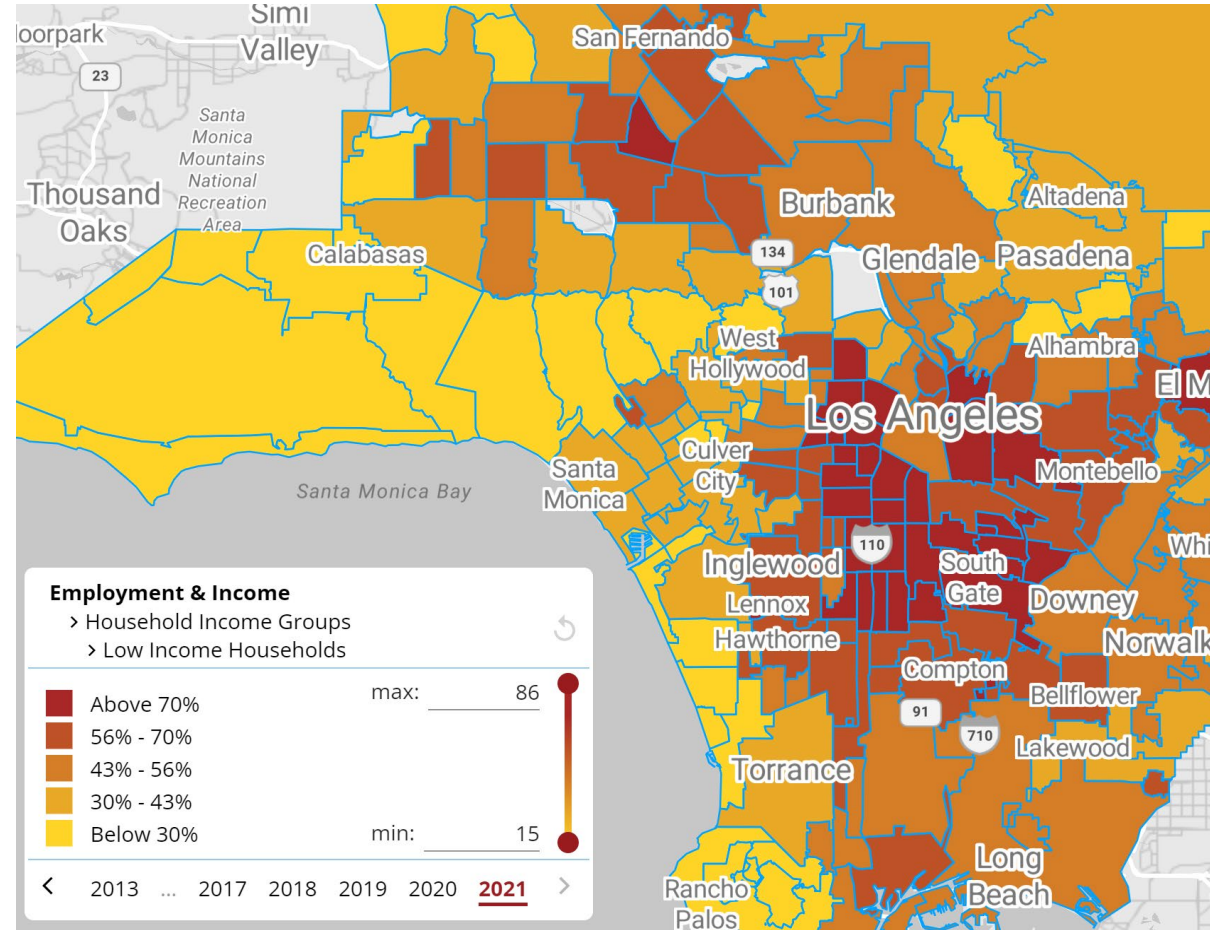
# Low Income Households in Los Angeles



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51% of Los Angeles households qualify for SGIP as of 2021.

The 2024 LA County qualifying income limit for a family of 4 is \$110,950.



[Neighborhood Data for Social Change Platform \(myneighborhooddata.org\)](https://myneighborhooddata.org)

[FY 2024 Income Limits Documentation System -- Summary for Los Angeles County, California \(huduser.gov\)](https://huduser.gov)



# LADWP Introduction to SGIP



Questions?





# Program Metrics

*Jan Santos, SoCalGas*

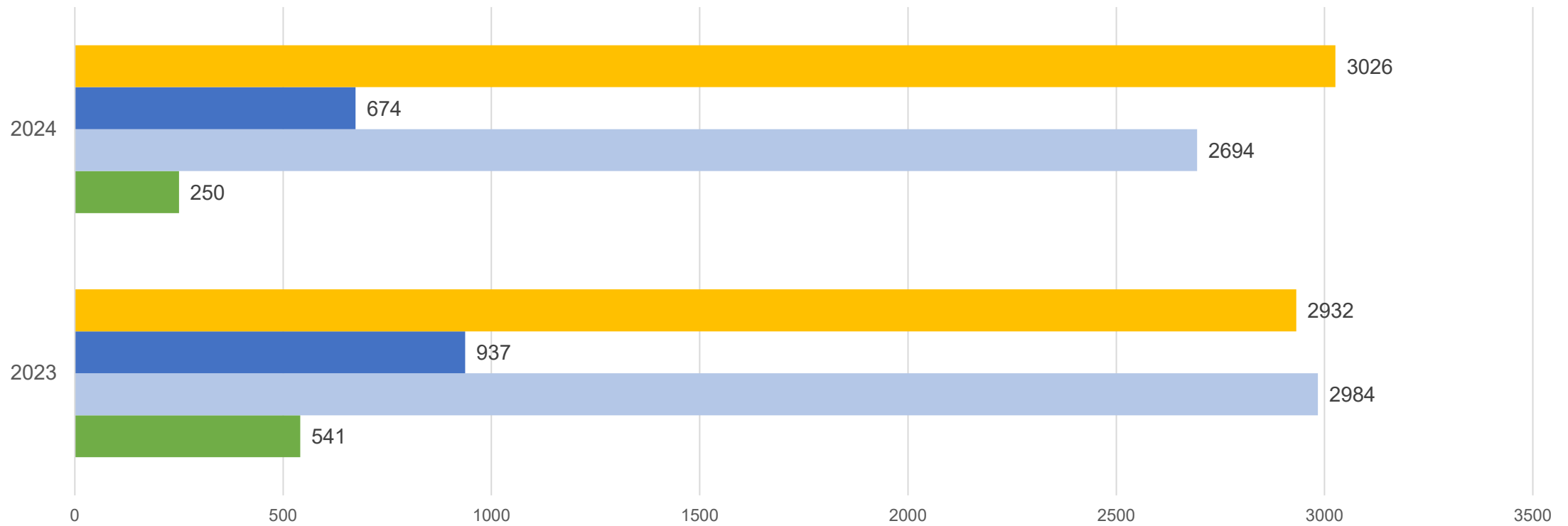
# Program Metrics

Data: 2023 – December 3, 2024



### Number of Applications Submitted per PA per Year

■ Southern California Edison ■ SoCalGas ■ Pacific Gas and Electric ■ Center for Sustainable Energy



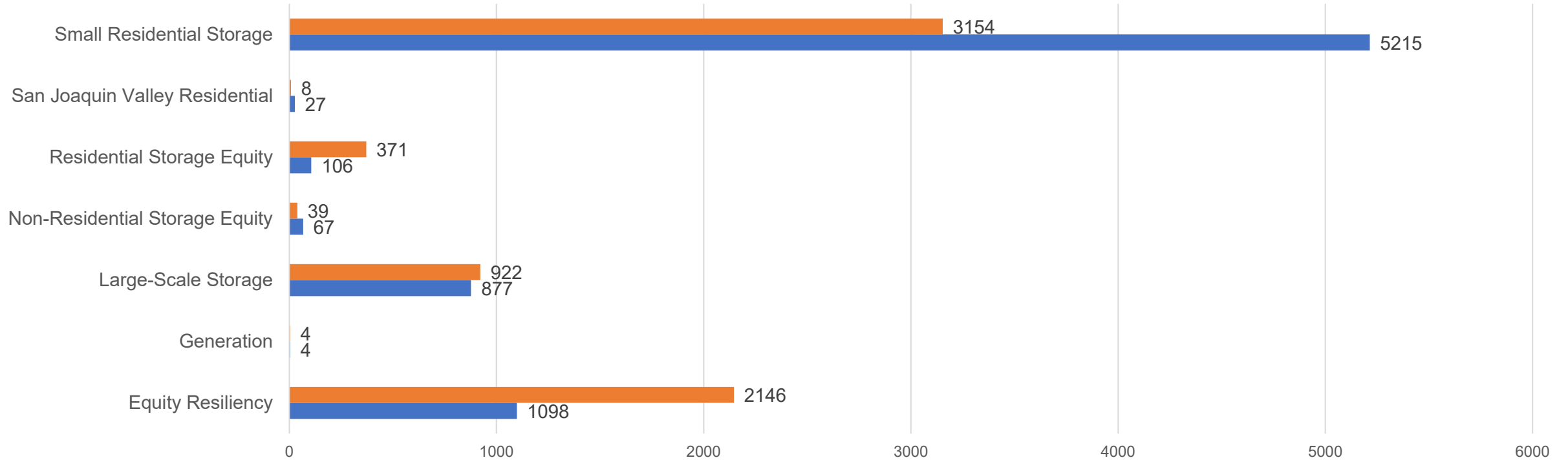
# Program Metrics

Data: 2023 – December 3, 2024



## Number of Applications by Budget Category and Year

2024 2023



# Program Metrics

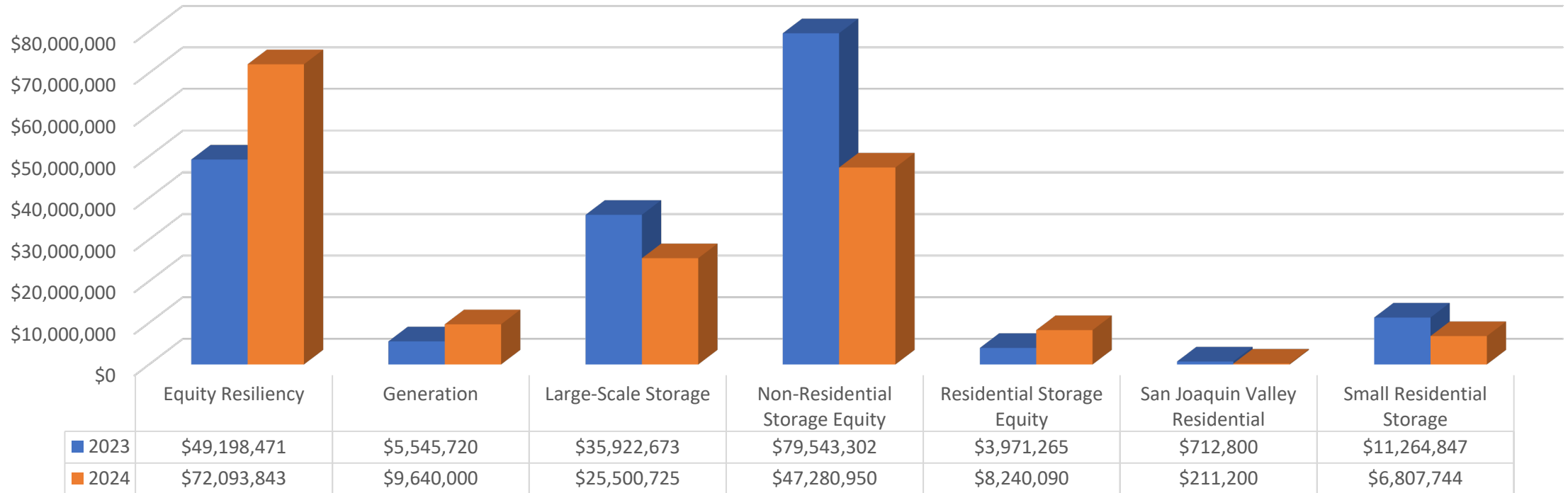
Data: 2023 – December 3, 2024



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## Total Incentive Dollars by Budget Category

■ 2023 ■ 2024



# Program Metrics

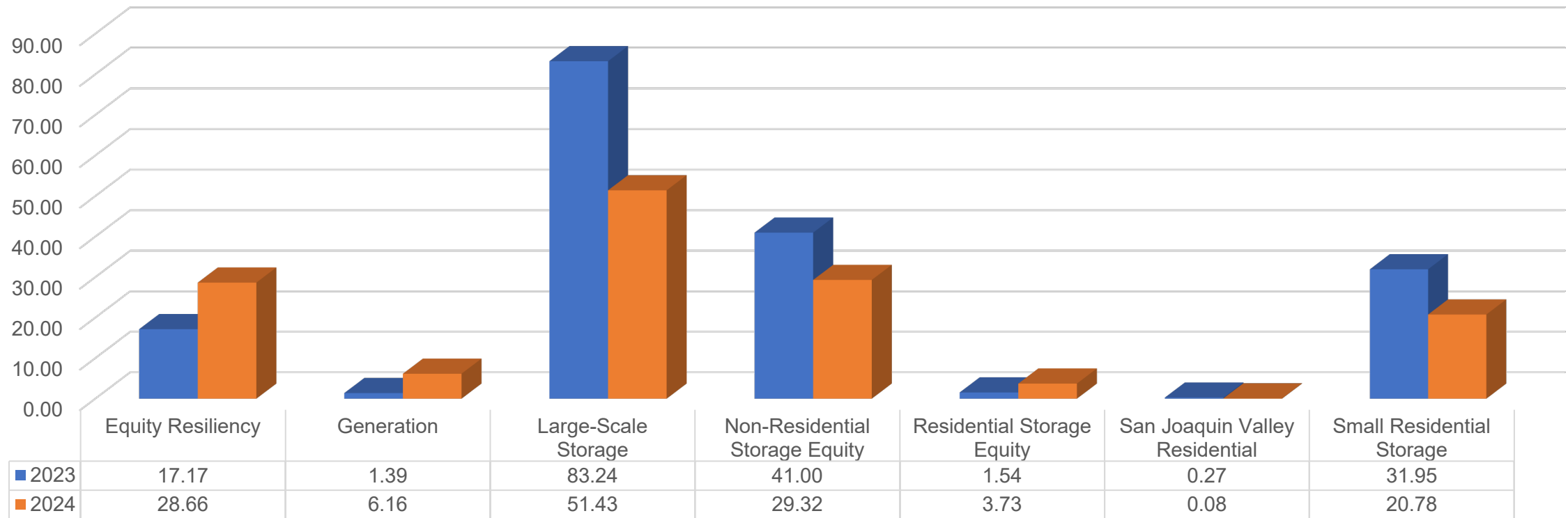
Data: 2023 – December 3, 2024



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## Total Rated Capacity (MW) by Budget Category

■ 2023 ■ 2024



# Program Metrics

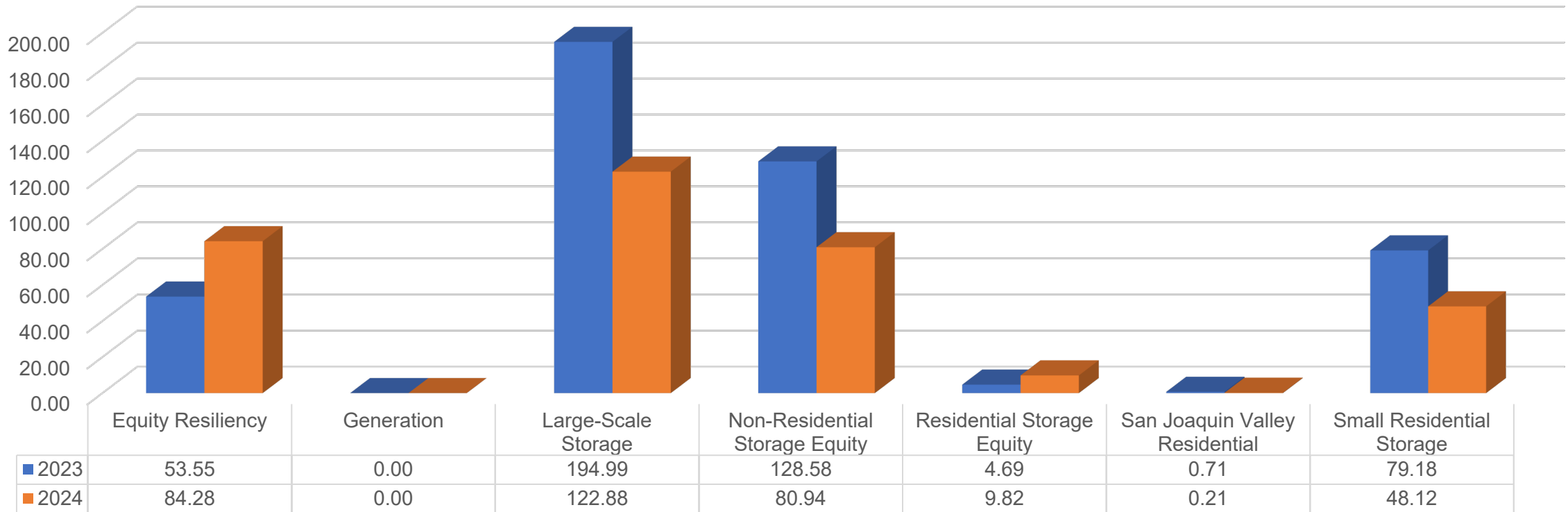
Data: 2023 – December 3, 2024



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## Total Energy Capacity (MWh) by Budget Category

■ 2023 ■ 2024



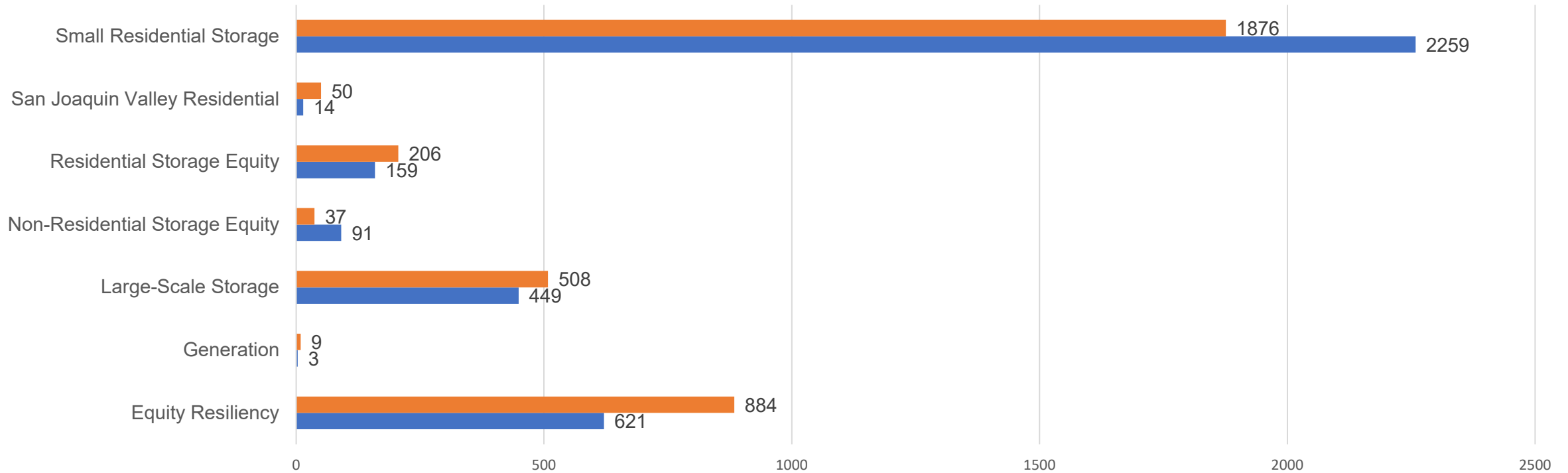
# Program Metrics

Data: 2023 – December 3, 2024



## Cancellations

■ 2024 ■ 2023



# Program Metrics

As of December 3, 2024



## Available Funding and Incentive Step Summary

Budget Category	CSE	SCE	SCG	PG&E
Large Scale Storage	Step 4 Waitlist	Step 5 \$436,940.28	Step 5 Waitlist	Step 5 \$9,248,643.00
Small Residential Storage	Step 7 Waitlist	Step 7 \$1,791,765.90	Step 7 \$1,154,200.01	Step 7 \$3,557,794.49
Residential Storage Equity	Step 5 \$313,203.83	Step 5 \$7,083,412.01	Step 5 \$2,381,602.32	Step 5 \$15,532,844.90
Non-Residential Storage Equity	Step 5 Waitlist	Step 5 \$6,374,836.38	Step 5 \$2,436,538.92	Step 5 \$1,292,235.41
Equity Resiliency	Step 5 Waitlist	Step 5 Waitlist	Step 5 Waitlist	Step 5 Waitlist
San Joaquin Valley Residential		Step 5 \$4,616,000.00		Step 5 \$735,200.00
San Joaquin Valley Non-Residential		Step 5 \$120,000.00		Step 5 Closed
Generation	Step 3 \$1,600,883.63	Step 3 \$35,898,874.79	Step 3 \$12,284,567.73	Step 3 \$18,488,937.88

CSE has reached the 50% Residential Storage Soft Target Cap for Small Residential Step 7

The Equity Resiliency budget is waitlisted across all PA territories.

Waitlisted applications will be awarded funding in the order they were received once funding becomes available.

Visit [www.selfgenca.com/home/program\\_metrics/](http://www.selfgenca.com/home/program_metrics/) for more updated information.



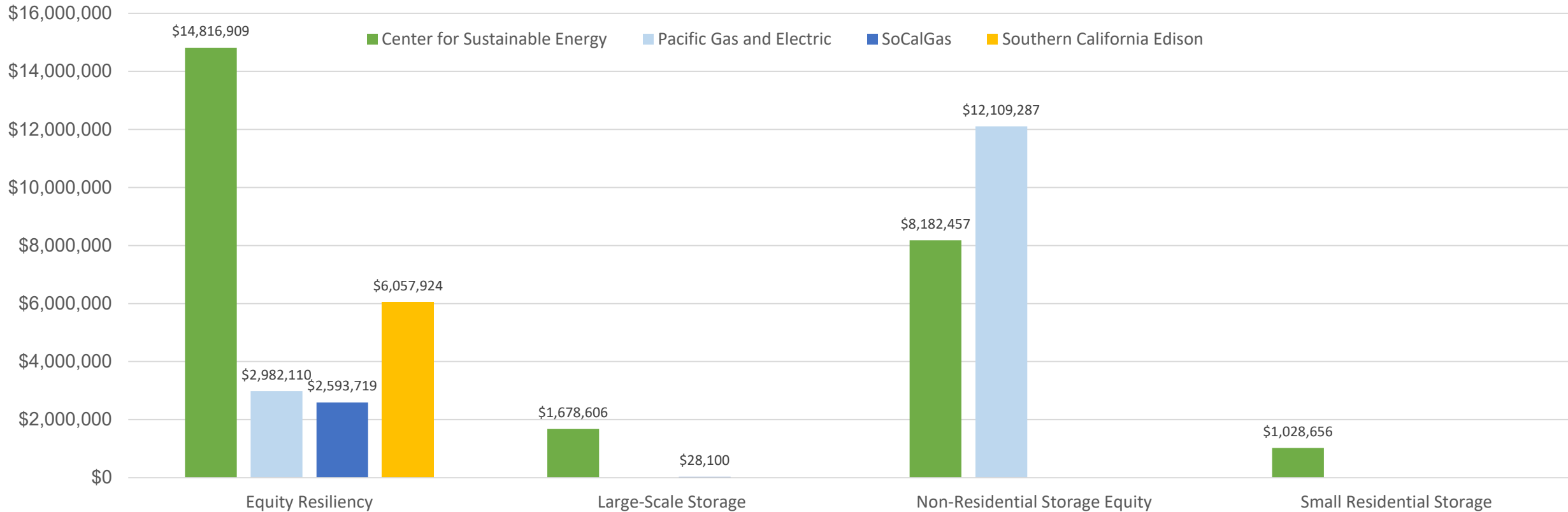


# Program Metrics

Data: December 3, 2024



## Total Incentive Dollars Waitlisted



Waitlist positions can be viewed at [www.selfgenca.com/home/waitlist/](http://www.selfgenca.com/home/waitlist/)



# Program Metrics



Questions?



# Regulatory Updates

*Dema Tzamaras, CSE*

# Regulatory Updates



## Updates

- **Petitions for Modification (PFMs)**
  - *Bloom PFM – Modify export to grid sizing limits*
  - *ENGIE PFM – Modification of methane standard*
- **AB 209 Advice Letters**
  - **Supplemental AL**
    - *AL 5347-E-A filed on 10/16/2024*
  - **IRA Tax Credit Proposal**
    - *AL 6405-G, et al. filed on 11/18/2024*
  - **LADWP AL 1-E**
    - *Disposed on 11/18/2024*
- **Advanced Payment Program (APP)**
  - *Adopted E-5346 Final Resolution*
  - *Forms posted on program website on 11/25/2024*
- **Developer Out of Business T2 AL**
  - *AL 6390-G, et al. (SunPower, Altair, Swell, Altair and Titan) filed on 10/29/2024*
- **Resolution E-5360**
  - *Change Storage System Sizing in the Self-Generation Incentive Program*

# Petitions for Modification (PFMs)



## **Bloom PFM**

- **Topic:** Modify the export to grid sizing limitation to make high-efficiency biogas projects more viable under SGIP
- **Impacted Decision:** D.11-09-015
- **Filed On:** August 30, 2024
- **Current Status:** Pending CPUC Action
  - SCG and CSE, and Bioenergy Association of California (BAC) filed responses in support on 9/30/2024
  - Public Advocates Office (PAO) filed a response on 10/11/2024

## **ENGIE PFM**

- **Topic:** Eliminate the 96% methane rule to allow West County Wastewater Treatment Plan (WWTP) to use biogas generated onsite from wastewater processing to generate onsite cogeneration electricity for onsite use
- **Impacted Decision:** D.21-06-005
- **Filed On:** October 4, 2024
- **Current Status:** Pending CPUC Action
  - BAC and SCG filed responses in support on 11/4/2024
  - PAO filed a response on 11/4/2024



# AB 209 ALs per D.24-03-071



## Supplemental AL 5347-E-A filed on 10/16/2024

- Supplements AL-5347-E submitted on August 5, 2024
- Addresses inspection sampling protocols for paired solar and storage systems
- Establish solar sizing thresholds for load justification under the new Residential Solar and Storage Equity (RSSE) budget
  - Leverage a load justification threshold in lieu of a solar sizing cap
  - Set a threshold of 3 kW, 4 kW, or 5 kW
- **Current Status:** *Under Review*
  - CALSSA submitted a protest on October 28, 2024
  - Joint PAs replied on November 4, 2024

## LADWP AL 1-E

- Established LADWP as an SGIP PA
- **Current Status:** *Disposed on 11/18/2024*

## IRA Tax Credit Proposal (AL 6405-G) filed on 11/18/2024

- Puts forth a proposal to maximize the cost share of the Inflation Reduction Act (IRA) tax credits on SGIP projects
- Summarizes the IRA workshop takeaways
- Proposes the following:
  - Add clarifications and IRA tax resources to the SGIP Handbook, documents and/or program database
  - Update the application process in the database so that residential applications are defaulted to claim the tax credit
  - Host additional workshops to engage stakeholders and provide educational resources
- **Current Status:** *Under Review*
  - CALSSA and Free Energy submitted protests on December 9



# Regulatory Updates - Summary



## AB 209 ACTIVE REGULATORY FILINGS STATUS

REGULATORY ITEMS	SUBMITTED	STATUS
<b>Implementing Certain Programmatic Changes T1 AL</b> (CSE Advice 152-E; SCE Advice 5312-E; SoCalGas 6317-G; PG&E Advice 4917-G/7289-E)	June 4	Suspended
<b>Advanced Payment Program T2 AL</b> (PG&E Advice 4924-G/7301-E; CSE Advice 154-E; SCE Advice 5320-E; SoCalGas Advice 6323-G)	June 20	Approved
<b>Opening AB 209 T2 AL</b> (SCE Advice 5347-3; CSE Advice 157-E; SoCalGas Advice 6350-G; PG&E Advice 4952-G/7345-E)	August 5 Supplemental submitted October 16	Suspended
<b>IRA Tax Credit Proposal AL</b> (SoCalGas Advice 6405-G; PG&E Advice 5000-G/7436-E; SCE Advice 5423-E; CSE Advice 161-E)	November 18	Pending



# Developer Advanced Payment Program (APP)



- Energy Division issued Final Resolution E-5346 on September 26, 2024 which approves the establishment of an Advanced Payment Program for the new Residential Solar and Storage Equity (RSSE) budget
- As of November 25, 2024, the Advance Payment Program eligibility forms are available for download on the SelfGenCA website
  - Developer Enrollment Form
  - Developer and Host Customer Agreement
- Email completed Developer Enrollment Forms to [SelfGeneration@socalgas.com](mailto:SelfGeneration@socalgas.com)





# Developers Out of Business



## Request for Relief Pursuant to Decision 23-04-045

(SoCalGas Advice 6390-G; PG&E Advice 4990-G/7417-E; SCE Advice 5396-E; CSE Advice 160-E)

- Filed on 11/18/2024
- Grants relief to customers of the following developers that have gone out of business:
  - Swell Energy
  - Altair Solar Inc.
  - SunPower Corp.
  - Titan Solar Power CA Inc.
- **Current Status: *Approved***

**Projects Impacted Statewide by Developer Closures**

Developer Name	PA(s) Impacted	Total Active Projects	Notification of Business Closure
Swell Energy	SoCalGas, PG&E, SCE, CSE	501	August 2024
Altair Solar Inc.	SCE, CSE	2	September 2024
SunPower Corp.	SoCalGas, PG&E, SCE, CSE	839	August 2024
Titan Solar Power CA, Inc.	PG&E, SCE	8	June 2024



# Resolution E-5360



## Timeline

- On November 14, 2024, the Energy Division issued draft Resolution E-5360 to Change Storage System Sizing in the Self-Generation Incentive Program
- 30 days of public review
  - Parties of records can file comments on the proposed decision by December 4<sup>th</sup>
  - Reply Comments due December 9<sup>th</sup>
  - Proposed Decision will be heard and voted on at a Commission Business Meeting on December 19<sup>th</sup>

## Contents

- Changes SGIP system sizing approach from kW to kWh
- Replaces the 10 kW load justification threshold with a 15 kWh
- Load used for sizing justification for projects above the threshold is no longer peak demand over the past 12 months
  - Paired: Average daily excess solar generation in a summer calendar month
  - Standalone: Average daily energy consumption during the 4-9PM peak demand window during a summer calendar month
- Institutes a 30-kWh incentive cap for all residential equity budgets
- Requires the PAs to:
  - File a joint Tier 1 AL within 15 days of the Resolution
  - Develop and publish a simple spreadsheet tool for load justification
  - Hold one or more educational webinars to walk Developers through the new load justification process



# Regulatory Updates



Questions?



# Virtual Inspections

*Ron Moreno, PG&E*

# Virtual Inspections



Developers may opt for a Virtual Inspection once they are in a 1:15 sampling rate. If a developer wants to know their sampling rate, a developer should contact their Program Administrator.

In order to complete a Virtual Inspection, it must contain the following information:

1. A continuous video of the project site, battery, and other electrical equipment; and
2. Individual geotagged photos of the project site, battery, and other electrical equipment associated with the energy storage system

The following information must be included in all virtual Post-Installation Inspections:

- a. Continuous video to include street view of the house or building with the address number clearly visible.
- b. Continuous video to include overall layout of the system. If the entire system is not in one place, the video and photographs must capture the overall layout of each subsystem, followed by the close-up shots of each piece of equipment in that subsystem.
- c. Continuous Video along with Geotagged still photo of Nameplate confirming make and model of the battery.

# Virtual Inspections cont.



- D. Continuous Video along with Geotagged still photo of Nameplate confirming make and model of the inverter (if applicable). Continuous video along with Geotagged still photo of serial number for battery.
- E. Continuous video along with Geotagged still photo of serial number for inverter (if applicable).
- F. Continuous video along with Geotagged still photo of equipment display panels showing power, energy, or battery/inverter charge status readings for battery.
- G. Continuous video along with Geotagged still photo of equipment display panels showing power and/or energy for solar PV (if applicable).
- H. Continuous video along with Geotagged still photo to include exterior view of all the electrical panels (e.g., the subpanel, backup loads panel, protected loads panel, and main service panel) and a view of the inside of each panel.
- I. Continuous video along with Geotagged still photo of Utility Smart Meter with the meter ID number clearly visible.

More information about Virtual Inspections can be found here:

[https://www.selfgenca.com/documents/field\\_inspection/energy\\_storage/protocol](https://www.selfgenca.com/documents/field_inspection/energy_storage/protocol)

# Virtual Inspections



Questions?



# Demand Response

*Ron Moreno, PG&E*



# Demand Response



## What is Demand Response?

The CPUC broadly defines demand response as *reductions, increases, or shifts in electricity consumption by customers in response to their economic signals or reliability signals*. Economic signals come in the form of electricity prices or financial incentives, whereas reliability signals appear as alerts when the electric grid is under stress and vulnerable to high prices. Demand response programs aim to respond to these signals and maximize ratepayer benefit.

## Demand Response and SGIP

Per the AB209 decision, the CPUC ordered that for all new applications, the customer must enroll in a Demand Response program, where the load-drop comes from the battery.

- POU customer are exempt from this requirement, unless the POU has a Demand Response program that qualifies for SGIP.

# Demand Response cont.



## List of Qualified DR Programs for Meeting SGIP Requirement

<b>PA (IOU)</b>	<b>Program Name Eligible Customers</b>	<b>Eligible Customers</b>
PG&E	Capacity Bidding Program (CBP)	Residential, Commercial, Industrial, Agricultural
PG&E	Peak Day Pricing	Commercial, Industrial, Agricultural
PG&E	SmartRate	Residential
SCE	Capacity Bidding Program (CBP)	Residential, Commercial, Industrial, Agricultural
SCE	Critical Peak Pricing (CPP)	Residential, Commercial, Industrial, Agricultural
SDG&E	Capacity Bidding Program (CBP)	Commercial, Industrial, Agricultural
SDG&E	Critical Peak Pricing (CPP)	Commercial, Industrial, Agricultural
SDG&E	Time-of-Use Plus Pricing Plan	Residential, Commercial

# Demand Response



Questions?



# System Sizing

Maya Noesen, Energy Division



California Public  
Utilities Commission



# System Sizing

Disclaimer: The slides on System Sizing were prepared by California Public Utilities Commission (CPUC) staff. They do not necessarily represent the views of the CPUC, its Commissioners, or the State of California. The Draft Resolution discussed has not been approved or disapproved by the CPUC, nor has the CPUC passed upon the accuracy or adequacy of the information in it.





# System Sizing

## Discussion on System Sizing at the Q3 Workshop

**Decision 24-03-071** Authorizes the SGIP PAs to submit a Tier 2 Advice Letter with a proposal to update energy storage system sizing requirements to:

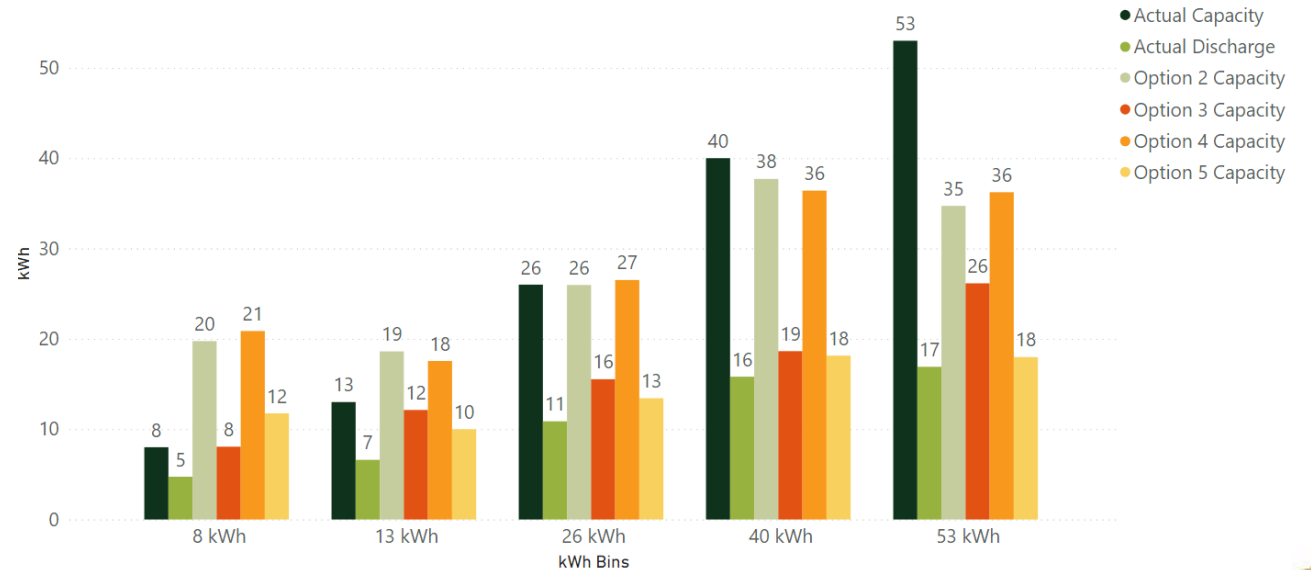
- Transition storage system sizing rules to kWh to match the incentive structure of \$/kWh
- Reasonably right-size systems to customer energy use and future electrification
- Incorporate an overall incentive cap for projects

### Sizing Concepts Presented by Verdant:

- Option 1 – Size to PV Generation  
(not realistic)
- Option 2 – Size to Consumption
- Option 3 – Size to PV minus consumption
- Option 4- Size for self-consumption
- Option 5 – Size for on-peak discharge

### Sizing Option Submitted by Tesla at Q3 Workshop:

- 30 kWh with no load justification





# System Sizing

## Draft Resolution E-5360 on Storage System Sizing in SGIP

- Draft Resolution intends to
  - Incentivize storage right-sized for customer bill reduction, peak demand reduction, and critical resiliency needs.
  - Spread SGIP funds to more projects.

<b>Current Practice in SGIP</b>	<b>Draft Resolution E-5360</b>
10 kW Load Justification Threshold	15 kWh Load Justification Threshold
Above 10 kW size to peak kW demand in past 12 months	For residential only: Above 15 kWh size <ul style="list-style-type: none"> <li>- Paired with solar to average daily excess solar generation in a summer calendar month</li> <li>- Standalone storage to average daily energy consumption during 4-9pm during a summer calendar month</li> </ul>
No Incentive Cap	30 kWh incentive cap for single family projects in residential equity budgets including RSSE, ERB, and San Joaquin Valley Residential





# System Sizing

## [Draft Resolution E-5360](#) on Storage System Sizing in SGIP – **Implementation**

- SGIP applications will be paused once the resolution is approved and will reopen within 15 days once the resolution changes are implemented in a Tier 1 Advice Letter.
- SGIP PAs shall develop a simple spreadsheet or tool for developers to use for the new residential load justification methodology.
- SGIP PAs are directed to hold a public webinar to present the new storage sizing process and tool before the RSSE budget opens.







# System Sizing – Stakeholder Comments

Draft Resolution E-5360	Major Comments on Draft Resolution
15 kWh Load Justification threshold	<ul style="list-style-type: none"> <li>• Increase to 20-30 kWh to support whole home backup.</li> <li>• Apply new load justification threshold only to residential.</li> </ul>
<p>For residential only: Above 15 kWh size</p> <ul style="list-style-type: none"> <li>• Paired with solar to average daily excess solar generation in a summer calendar month</li> <li>• Standalone storage to average daily energy consumption during 4-9pm during a summer calendar month</li> </ul>	<ul style="list-style-type: none"> <li>• Size all systems to average daily consumption in a summer month.</li> <li>• Size all systems to self-consumption in a winter or summer month.</li> <li>• All low-income projects be exempt from load justification.</li> <li>• Make no change to current load justification process.</li> </ul>
30 kWh incentive cap for single family projects in residential equity budgets including RSSE, ERB, and San Joaquin Valley Residential	<ul style="list-style-type: none"> <li>• Most were supportive of the cap.</li> <li>• Cap be removed or applied to all budgets.</li> </ul>
15 day implementation deadline	<ul style="list-style-type: none"> <li>• Extend timeline to 60 days.</li> <li>• Have no timeline.</li> </ul>





# System Sizing – Stakeholder Comments

## [Draft Resolution E-5360](#) on Storage System Sizing in SGIP – **Comments**

- Commission clarify if the changes should apply to currently waitlisted projects.
- Set the threshold between the Small Residential Storage and Large-Scale Storage budgets at 15 kWh or 30 kWh.
- On Resiliency Modular Oversizing:
  - Apply to RSSE.
  - Remove from the ERB and Resiliency Adder.
  - Have a 5 kWh resiliency buffer on top of the justified load for all equity projects.

ED staff are working to incorporate comments and reply comments into the draft agenda resolution for the **December 19<sup>th</sup> CPUC Voting Meeting**





# System Sizing

Questions?



# 4th Quarter Workshop Q&A

*Shalene Watanabe – O'Toole, CSE*

# Thank You for joining us today.

## Program Administrator Contact Information

Southern California Edison Co. (SCE): [sgipgroup@sce.com](mailto:sgipgroup@sce.com)

Pacific Gas & Electric (PG&E): [selfgen@pge.com](mailto:selfgen@pge.com)

Southern California Gas Co. (SoCalGas): [selfgeneration@socalgas.com](mailto:selfgeneration@socalgas.com)

Center for Sustainable Energy (CSE): [sgip@energycenter.org](mailto:sgip@energycenter.org)

Los Angeles Department of Water and Power (LADWP): [sgip@ladwp.com](mailto:sgip@ladwp.com)