Self-Generation Incentive Program (SGIP)

Quarterly Workshop

Friday, February 9, 2018
Center for Sustainable Energy, San Diego, CA

Hosted by Pacific Gas & Electric Company (PG&E), SoCalGas, Southern California Edison (SCE), and Center for Sustainable Energy (CSE)
Introductions

**SoCalGas:** Rosie Magana, Laura Crump, Adrian Martinez

**CSE:** Rebecca Feuerlicht, Andi Woodall, Joe Bick, Alejandra Belalcazar

**SCE:** Jim Stevenson, Vicky Velazquez

**PG&E:** Brian Bishop, Ron Moreno

**AESC:** Dara Salour

**Energy Solutions:** Andrea Vas, Jason Huffine
Morning Agenda (9:00 AM – 12:00 PM)

• Welcome and Introduction
• SGIP Program Update
• SGIP Developers and Homeowners
• GHG Signal Working Group Update
• Inspection Process and Discharge Data
• Satisfactory Program Documentation
• Stakeholder Q&A
Afternoon Agenda (1:00 PM – 3:00 PM)

- SGIP Walk-through and Application Process
- Project Q&A
Housekeeping

- Webinar recording
- Webinar Attendees and Questions
- Parking
- Restrooms
- Breakroom and Office Suite
- Garbage, recycling
- Beverages
SGIP Program Updates
Program Adoption Data: 2017 and 2018 Application Volume

Since Start of 2017 Program Opening: 4443 Applications

- Generation 9
  - Large-Scale Storage 855
  - Small Residential Storage 3,579

Of the 9 Generation Projects:
- 5 - Wind Turbine Projects
- 3 - Onsite Biogas
- 1 – Pressure Reduction Turbine
- 0 – Directed Biogas
Program Adoption Data: 2017 and 2018 Application Capacity

Total 2017 and 2018 Application Capacity (MW): 200.6MW

- **Small Storage**: 22.4MW
- **Large Storage**: 169.4MW
- **Generation**: 8.77MW
Program Adoption Data: 2017 and 2018 Application Incentives

Total 2017 and 2018 Application Incentives ($): 153,864,749

- Large Storage: $126,680,689
- Generation: $6,711,450
- Small Storage: $20,472,610

Total Application Incentives: $153,864,749
### Small Residential Storage Budget as of 2/8/2018

<table>
<thead>
<tr>
<th></th>
<th>CSE</th>
<th>SCE</th>
<th>SoCalGas</th>
<th>PG&amp;E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step Status</td>
<td>Will Open 2/26/2018</td>
<td>Open</td>
<td>Open</td>
<td>Open</td>
</tr>
<tr>
<td>Active Step</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Days in Step</td>
<td>-18</td>
<td>248</td>
<td>248</td>
<td>248</td>
</tr>
<tr>
<td>Allocated Funds</td>
<td>$0</td>
<td>$4,110,440</td>
<td>$1,073,859</td>
<td>$4,995,402</td>
</tr>
<tr>
<td>Available Funds</td>
<td>$1,524,000</td>
<td>$936,932</td>
<td>$449,672</td>
<td>$1,217,332</td>
</tr>
</tbody>
</table>

https://www.selfgenca.com/home/program_metrics/
## Self-Generation Incentive Program (SGIP)

### Large-Scale Storage Budget as of 2/8/2018

<table>
<thead>
<tr>
<th></th>
<th>CSE</th>
<th>SCE</th>
<th>SoCalGas</th>
<th>PG&amp;E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step Status</td>
<td>Open</td>
<td>Open</td>
<td>Will Open March 5, 2018</td>
<td>Open</td>
</tr>
<tr>
<td>Active Step</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
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<tr>
<td>Days in Step</td>
<td>248</td>
<td>28</td>
<td>-24</td>
<td>248</td>
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<tr>
<td>Allocated Funds</td>
<td>$13,778,636</td>
<td>$1,345,935</td>
<td>$0</td>
<td>$34,860,836</td>
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<tr>
<td>Available Funds</td>
<td>$3,406,734</td>
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<td>$7,524,260</td>
<td>$12,065,114</td>
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[https://www.selfgenca.com/home/program_metrics/](https://www.selfgenca.com/home/program_metrics/)
## Residential Storage Equity Budget as of 2/8/2018

<table>
<thead>
<tr>
<th></th>
<th>CSE</th>
<th>SCE</th>
<th>SoCalGas</th>
<th>PG&amp;E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step Status</td>
<td>Will Open Soon</td>
<td>Open</td>
<td>Will Open March 5, 2018</td>
<td>Will Open Soon</td>
</tr>
<tr>
<td>Active Step</td>
<td>3</td>
<td>3</td>
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<td>3</td>
</tr>
<tr>
<td>Days in Step</td>
<td>TBD</td>
<td>28</td>
<td>-24</td>
<td>TBD</td>
</tr>
<tr>
<td>Allocated Funds</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Available Funds</td>
<td>$405,925</td>
<td>$1,216,470</td>
<td>$276,148</td>
<td>$1,227,909</td>
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</table>

https://www.selfgenca.com/home/program_metrics/
## Self-Generation Incentive Program (SGIP)

**Non-Residential Storage Equity Budget as of 2/8/2018**

<table>
<thead>
<tr>
<th></th>
<th>CSE</th>
<th>SCE</th>
<th>SoCalGas</th>
<th>PG&amp;E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step Status</strong></td>
<td>Will Open Soon</td>
<td>Open</td>
<td>Will Open March 5, 2018</td>
<td>Will Open Soon</td>
</tr>
<tr>
<td><strong>Active Step</strong></td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Days in Step</strong></td>
<td>TBD</td>
<td>28</td>
<td>-24</td>
<td>TBD</td>
</tr>
<tr>
<td><strong>Allocated Funds</strong></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Available Funds</strong></td>
<td>$3,653,322</td>
<td>$10,948,234</td>
<td>$2,485,329</td>
<td>$11,051,185</td>
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[https://www.selfgenca.com/home/program_metrics/](https://www.selfgenca.com/home/program_metrics/)
CPUC Decision 17-10-004 establishes that 25% of the funds collected for energy storage shall be reserved for the SGIP Equity Budget and awarded to projects that meet specific criteria.

On November 17, 2017, the SGIP PAs filed an Advice Letter to implement the Equity Budget Decision into the SGIP Handbook:

- Beginning in Step 3, 25% of energy storage funds are directed to the Equity Budget, including the non-residential and residential carve-outs. These carve-outs will operate as distinct budget categories that are able to move at different paces.

- 90% of Equity Funding is allocated to non-residential projects.

- 10% is allocated to residential projects (including multi-family).

- A new 20% developer cap per step is established for the Equity Budget.

- If a PA does not confirm reservations in either the residential or non-residential Equity Budgets during any rolling three month period, while 5 or more general market energy storage projects secure confirmed reservations in the same time period, the incentive rate will increase by $0.05/Wh. In no event shall the incentive exceed $0.50/Wh.
Non-Residential Eligibility Criteria

- Non-residential: The project site must be located in a disadvantaged or low-income community and meet one of the following customer criteria:
  - State or local government agency
  - Educational institution
  - Non-profit organization
  - Small Business, defined as a business or manufacturer, including affiliates, with average annual gross receipts of $15 million or less, over the last three tax years.

- A disadvantaged community is defined as any census tract that ranks in the statewide top 25% most affected census tracts in the most recently released version of the environmental health screening tool, CalEnviroScreen, plus census tracts that score within the highest 5% of CalEnviroScreen’s pollution burden.

- A low-income community is defined as census tracts with median household incomes at or below 80% of the statewide median income, or with median household incomes at or below the threshold designated as low-income by the Department of Housing and Community Development’s list of state income limits adopted pursuant to Section 50093.
To check for eligibility based on location:

- [https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/communityinvestments.htm](https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/communityinvestments.htm)
- Type in the project site address and the map will display disadvantaged community, low-income community, or both.
Residential Eligibility Criteria

- **Multi-Family:** Eligible multi-family housing is defined as a multi-family residential building of at least five rental housing units that is operated to provide deed-restricted low-income residential housing, and is either located in a disadvantaged community, or is a building where at least 80% of the households have incomes at or below 60% of the area median income. Any customer account in such buildings will be eligible for the Equity Budget.

- **Single-Family:** Single-family low-income residences that are sold at an affordable housing cost to a lower income household that is subject to a resale restriction or equity sharing agreement.
Equity Budget Update

– The Equity Budget opened on January 11th, 2018 for SCE

– As of February 5th, 2018, no applications have been submitted in the Equity Budget. SCE has $10,948,233.85 available in the Non-Residential Storage Equity budget and $1,216,470.43 available in the Residential Storage Equity budget

– SoCalGas closed Step 2 Large-Scale Storage on January 31st, 2018

– SoCalGas will open their Equity Budget on Monday, March 5, 2018 (approximately $276,147.64 will be available in the Residential Storage Equity Budget, $2,485,328.76 will be available in the Non-Residential Storage Equity Budget)

– The Equity Budget will not open for CSE and PG&E until the funds have been exhausted in their respective Step 2 Large-Scale budgets.
SGIP Developer Definition and Eligibility for Homeowners
New Developer Definition and Application

SGIP Handbook Section 3.2.7

Developer Cap

Any single Developer is limited to 20% of the SGIP incentive funding for a given budget category in each statewide incentive step. The Developer cap will be calculated separately for generation projects, large scale energy storage projects, small residential energy storage projects, and equity budget projects. Applicants may not submit applications for Developers in excess of the statewide Developer cap for the active step, and Program Administrators shall not issue conditional reservations to projects by a Developer that has already applied for reservations in a given step that exceed 20%. The Developer cap will be established by budget step and posted prior to program opening. The Developer cap will remain fixed for each budget step once the step is opened even if total available funds change. Please see Section 4.1.5 for the definition of a Developer.

• Funding is limited
• Established to prevent any one entity to monopolize the incentives.
New Developer Definition and Application

New Developer Definition:

“A Developer is, if not individual homeowners applying for SGIP incentives for systems located on their own property, the corporate entity registered and in good standing with the Secretary of State of California, that handles a substantial amount of the project’s development activities.”

- Homeowners that choose to submit an application as a developer will be required to submit a Developer Eligibility Application and meet the standard analysis to determine whether they handle substantial amount of the development activities.

- For the purpose of this definition, the Program Administrators, with oversight from Energy Division, have discretion to determine whether a participant handles such activities, and whether a participant handles a substantial amount of these activities for a given project.
New Developer Definition and Application

Exclusive list of an SGIP energy storage project’s development activities

1. Approaching or communicating with the host customer about the project and learning about its needs and energy profile (i.e., customer acquisition or developing leads)
2. Developing the specifications for a system based on the customer’s needs and interests
3. Soliciting bids from multiple manufacturers for the specified system
4. Gaining the customer’s commitment to purchase or lease the specified system, usually but not necessarily by signing a purchase order with a customer or other form of agreement
5. Purchasing the specified system from the manufacturer to fulfill the obligation to provide a system to the customer
6. Securing permits for the system on behalf of the customer
7. Securing interconnection permission for the system on behalf of the customer
8. Submitting SGIP applications
9. Liaising with the SGIP administrators on incentive reservations
10. Liaising with the SGIP administrators on data reporting requirements
11. Supplying project data to SGIP evaluators
12. Physically constructing the system at the customer’s premises
13. Installing the system at the customer’s premises
New Developer Definition and Application

DEVELOPER ELIGIBILITY

• **Acceptance by the Program Administrators of the Developer Eligibility Application does not guarantee that a participant qualifies as a Developer of any given project.**

  - At Reservation Request the applicant will be required to identify development activities for that project.
  - The Program Administrators will review RRF and confirm developer.
  - Documentation at all stages of the application must confirm developer is performing substantial amount of development activities.
  - If Developer did not perform stated activities, the Incentive Reservation may be cancelled.
GHG Working Group Background and Update
Itron’s 2016 Program Research; GHG Emissions

- SGIP Program increases GHGs.
- Roundtrip Efficiency (RTE) and Capacity Factor are low.
- PBI projects provide system benefits of peak demand reduction. Non-PBI do not.
- Residential projects provide mainly backup benefits to customers.
- Energy storage is succeeding at customer bill reduction.
### Agenda

<table>
<thead>
<tr>
<th>Activity</th>
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<tbody>
<tr>
<td>Itron &amp; E3 Presentation</td>
</tr>
<tr>
<td>Panel: How can energy storage reduce utility costs and peak demand? How can non-PBI improve?</td>
</tr>
<tr>
<td>Panel: How can energy storage reduce GHGs and integrate renewables?</td>
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</tbody>
</table>

### Outcome

<table>
<thead>
<tr>
<th>Activity</th>
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<tbody>
<tr>
<td>Agreement that SGIP is failing to meet goals so far.</td>
</tr>
<tr>
<td>Disagreement on value of RTE, CF and impact of new rates.</td>
</tr>
<tr>
<td>Working Group and Pilots were discussed. The CPUC responded w/ 12/29 order.</td>
</tr>
</tbody>
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Ruling

ASSIGNED COMMISSIONER’S RULING (1) ESTABLISHING AN ENERGY STORAGE GREENHOUSE GAS SIGNAL WORKING GROUP (2) ENTERING A SUMMARY OF THE NOVEMBER 15, 2017 ENERGY STORAGE WORKSHOP INTO THE RECORD

1. Develop a proposal for a greenhouse gas signal (to SGIP projects).

2. Develop operational requirements for SGIP storage systems based on the GHG emissions from the grid.

3. Develop a verification mechanism to track & monitor.

4. Consider an enforcement mechanism in the event of net GHG emissions on an annual basis.

5. ED must serve Working Group findings by April 2, 2018.
GHG Signal Working Group Status

GHG Signal Working Groups Have Been Successful

- 1st GHG Signal Working Group convened January 9, 2018; co-facilitated by Energy Division, PG&E & CESA.
- Four in-person meetings so far; very productive info-sharing
- Multiple 1 to 3-hr calls to discuss load profiles, rates, models.
- Sub-teams currently led by CSE, Pete Hamilton, PG&E
- Models will test “base case”, “constraints” and “GHG signaling”
- Modeling done by Enernoch, Stem, Custom Power, Tesla, Avalon

Agree on project plan
Identify potential solutions to study
Identify study test approaches
Conduct studies (models)
Review results
Propose SGIP reforms
File Report by April
Modeling Process

- GHG Signal Working Group is currently finalizing Model Inputs
- Model runs to be executed 2/12 – 2/20
- Final modeling expected no later than 2/23
- March; report-writing
- Final Report Due April 2, 2018

⇒ Extension request submitted; awaiting Energy Division
SGIP Inspection Process and Best Practices
Inspection Process and Discharge Data

- Upon receipt of a complete Incentive Claim Form package, the PA may organize a field verification visit to verify that the project’s system is installed as represented in the application and conforms to the eligibility criteria of the SGIP.

- If an energy storage project is selected for an inspection, discharge data files must be submitted to the PA prior to scheduling the onsite field verification visit.

- Discharge data files verify that the project is operational and that the system is capable of discharging energy at its incentivized capacity.
Inspection Process and Discharge Data

1 week of operational data, in addition to:

Option 1: Field Test
- Continuous discharge test measuring actual energy storage system output over the discharge duration specified on the application.
  
OR

Option 2: Factory Test Accompanied by a 30-Minute Field Test
- Manufacturer and/or system integrator continuous discharge test report of the same make and model as the unit(s) inspected in the field. Additionally, a ½ hour continuous field discharge test measuring actual energy storage system output at the project site must be provided.

If the Field Test or the Factory Test yield results outside of a +/-5% threshold, the project may be subject to incentive adjustments or additional eligibility requirements.
Familiarize yourself with the details of the Field Inspection Protocols. Contact PAs with any questions/concerns.

– https://www.selfgenca.com/home/resources/

Develop a plan for how to access and provide required data to PAs prior to inspection. This may require close coordination with the equipment manufacturer to perform a factory test or obtain operational data from project sites.

It is encouraged (not required) that discharge data be uploaded as “Ad Hoc” documents when the Incentive Claim Form documents are submitted for a faster approval process.
## Inspection Process and Discharge Data

<table>
<thead>
<tr>
<th>ICF Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>- System is installed, interconnected and operational at the project site</td>
</tr>
<tr>
<td>- Applicant submits ICF documents and discharge data</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>- If project is selected for inspection, discharge data is reviewed and onsite field inspection is scheduled</td>
</tr>
<tr>
<td>- The results of the discharge data and field inspection determines eligibility and final incentive payment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>- PA sends ICF Approval email – noting any incentive adjustments</td>
</tr>
<tr>
<td>- PA issues incentive check to payee designated on incentive claim form</td>
</tr>
<tr>
<td>- PA refunds application fee to original payor</td>
</tr>
</tbody>
</table>
The SGIP provides several program forms for download, including:

- Proposed Monitoring Plan Template & Sample
- CSE’s 3rd Party Authorization Form
- Project Cost Breakdown and Affidavit

These forms can be downloaded directly from the SGIP application portal: https://www.selfgenca.com/home/resources/

Documents NOT provided by the SGIP include:

- Equipment Specifications
- Energy Efficiency Audit
- Customer Contract
- Final Monitoring Schematic
Ask your local PA if you have questions about what the documentation should include:

- Are online energy efficiency audits accepted?
- What needs to be included on a final monitoring schematic?
- Who should I contact to get the specifications for the equipment I am using, and how do I know that they will be approved?
Stakeholder Q&A
Self-Generation Incentive Program (SGIP)

Quarterly Workshop

The webinar is on hold from 12:00 PM – 1:00 PM for a lunch break. We will resume the recording at 1:00 PM
1. Who am I?
2. What does this status mean?
3. What should I do about this communication?
4. How do I update my contact information?
5. What is my application fee? Who pays it?
6. When does a lottery happen? What should I do if my application is in a lottery?
7. Where is all this information?
1) Who am I?

- Applicant Company
  - Admin
  - Applicant

- Developer

- Installer

- Host Customer
2) What does this status mean?

- Draft
- Submitted
- Review
- Technical Review
- Inspection
- Suspended
- Resubmitted
3) What should I do about this communication?

- Application Selected Notification
- SGIP Application Lottery Rejection
- Request for Clarification / Missing Information
- Confirmed/Conditional Reservation Letter
- Cancellation Notices
4) How do I update my contact information?

• Developer

• Applicant Company

• Applicant
5) What is my application fee? Who pays it?

- 5% of the *calculated incentive*
- Mailed within 7 days from the date of *Application Selected Notification*
- Clarify payment responsibility with host customer/system owner/Applicant Company
- Mailing addresses are listed in the notification and in the Contact page
6) When does a lottery happen? What should I do if my application is in a lottery?

- Only during step closure
- Review process
  - Straddler application
  - Review eligibility
- Next step opens after minimum of 20 days
- Wait for communication from your PA regarding the status of your application
7) Is all of this useful information accessible anywhere?

- Yes! https://www.selfgenca.com/home/resources/
- Program Handbook
- FAQ, Video Tutorial
- Program Metrics
- Public Report
- …and so much more!
Application Q&A
Thank you for attending the SGIP Quarterly Workshop! The slide deck is available for download via Handouts on the webinar toolbar. The materials are also posted at www.selfgenca.com.