SGIP Quarterly Workshop
March 10, 2017

Hosted By:
SGIP PAs

• Southern California Edison; Jim Stevenson, Virginia Velazquez
• Center for Sustainable Energy; Rebecca Feuerlicht, Mackenzie Romano, Jon Hart, Andi Woodall
• Southern California Gas Company; Rosie Magana, Nick Connell
• Pacific Gas & Electric Company; Brian Bishop, Ron Moreno
Welcome
**Safety;** emergency exits, duck & cover, CPR
**Housekeeping;** garbage/recycle, bathrooms

**Agenda**
- Background on key program changes from D.16.06.055
- Resolution E-4824, SCE’s Advice Letter, March 7 Proposed Decision
- Deep Dive: New Budget, Incentive Step Process, Attrition, Waitlist/Closure, energy storage incentive calculation, metering and monitoring, app information
- West LA Basin information, lottery specs, maps
- Developer Cap information
- Minimum fuel blending requirement, calculation scenarios
- Participant Performance and Infractions
- Program Opening dates
- Energy Solutions Presentation; Application Submission in Database
- Discussion of ACR, Proposed Decision; storage operational rules
Program Opening Dates

“Soft Opening”
• Monday, April 10, 2017
• Applicants can log into the portal and begin working on applications

“Program Opening”
• Monday, May 1, 2017
• Applicants can submit applications for Step 1 funding
Goals Refined:

**Environmental:** Reduce GHGs; reduce criteria air pollutants; limitation of other environmental impacts (water use); facilitate integration of renewables.

**Grid Support:** Reduce/Shift peak demand; improve efficiency, reliability of T&D system; lower grid costs; provide ancillary services and; ensure reliability of DERs.

**Market Transformation:** Support technologies that have the potential to thrive in future years without rebates.

**Lottery:** Program remains first-come, first-served unless funds are fully allocated in a single day; then a lottery is used for application selection. Step pauses and prioritization rules now exist.
Key Program Changes from D.16.06.055

**Budget**: 75% energy storage with a 15% carve out for small residential projects; 25% generation with a 40% carve out for renewable generation.

**Incentives**: Wind, $.90/W, Other Gen $.60/W; Storage $.50/Wh, $.36/Wh w/ ITC. Storage steps decline by $.05/Wh per step unless subscribed across all PAs w/in ten days; then the decline is $.10/Wh.

**Incentive Steps**: Gen = 3 steps; Storage = 5 steps.

**Technologies**: No changes. Projects must emit less than the first-year emission rate for the program year it has applied (pass GHG screen of D15.11.027)

**Biogas**: Fuel Blending requirement starts at 10% in 2017. Then: 25% in 2018, 50% in 2019, 100% in 2020. [More on biogas in subsequent slides]
**Key Program Changes from D.16.06.055**

**Project Size Caps:** Generation: <1MW = 100%; 1-2MW = 75%; 2-3MW = 50%. Storage: 2MWh = 100%; >2-4MWh = 50%; >4-6MWh = 25% of the incentive.

**40% Manufacturer Cap replaced by 20% Developer Cap:** Each application must include developer, parent company if applicable, all other info in new forms.

**CA Manufacturer:** changed from CA Supplier. New forms sent out recently.

**Technologies used in a microgrid allowed; DC/AC agnostic**

**Storage Operation:** 130 full discharge requirement for C&I; 52 for Resi

**M&E Plan:** Developed, hosted by the CPUC, Dec. 2016.
February 9, 2017, Energy Division issued Resolution E-4824 which approved the SoCalGas Joint Advice Letter 5049, with modifications.

February 23, 2017, SCE filed Tier 1 Advice Letter 3564, implementing changes and conforming the SGIP Handbook to the Resolution.

Changes made to:
- biogas adder calculation (to be discussed)
- list the zip codes in LADWP and West LA
- service warranty
- e-signatures
- CA Manufacturer rules
- peak demand estimation
- sizing requirements
- definition of Developer
- monitoring requirements
- pause period

Proposed Decision of Commissioner Rechtschaffen
Doubled budget per AB1637, 85% to large energy storage, 15% to renewable generation, no new energy storage operational rules.
The incentive budget will be set on April 1 and will include the sum of:

1) authorized incentive collections
2) funds from cancelled projects
3) application fee forfeitures in 2016.

**Pre-AB 1637 Budget:**
**Authorized Incentive Collections**
= 50% of PY 2016 collections + PY 2017 collections + PY 2018 collections + PY 2019 collections
= ($38,595,000) + (77,190,000) + (77,190,000) + (77,190,000)
= $270,165,000

**Total incentive budget** = $270,165,000 + sum of funds from cancelled projects + application fee forfeitures
Deeper Dive: New SGIP Budget (Pre-AB 1637)

Total incentive budget will be split:

1) By Program Administrator
   - Pacific Gas and Electric Company – 44%
   - Southern California Edison Company 34%
   - Center for Sustainable Energy – 13%
   - Southern California Gas Company – 9%

2) Between generation, large energy storage, and small residential energy storage
   - Large Energy Storage - 63.75%
   - Small Residential Energy Storage – 11.25%
   - Generation – 25%

3) Evenly across incentive steps
Applications will be assigned an incentive rate and reviewed in the order in which they are received unless application submissions on a single day exceed available funding in a given Program Administrator’s territory for a given budget and step, triggering a lottery.

Lotteries are to be conducted separately for large scale energy storage technologies, small residential energy storage technologies, and generation technologies by Program Administrator territory, as necessary.
Once the database determines there is enough demand to trigger a step change (by one or more projects), a pause period of no less than 20 days is initiated:

1) No new applications within the budget category are accepted.
2) Program Administrator may perform a pre-screen of applications.
3) After 10 days, Program Administrators will determine if the incentive level reduction for energy storage technologies shall increase from $0.05/Wh to $0.10/Wh based on statewide oversubscription for a given step.
4) If a lottery is conducted, a notification of the results of the lottery is sent to Applicants.
5) Applications that were not selected for funding in the current step through the lottery will be instructed on how to reapply for funding in the next step.
6) Projects that are only able to be partially funded within a certain step must choose to reapply or funding in the next step or claim the remaining funds in the current step.
7) The SGIP public website is updated with information on the new incentive rate(s), available funds, developer cap and the date of the next application submission opportunity.
Funds from cancelled projects will be allocated to the Program Administrator’s currently active incentive step. If the Program Administrator is in a pause period when attrition occurs, the funds will be placed in the next incentive step.

Once funds have been fully allocated in the final incentive step of a Program Administrator’s given budget, applications will be placed on a wait list.

When there is enough attrition to fund wait-listed projects, wait-listed projects will be assigned an incentive rate in the last step and reviewed in the order in which they were submitted.

Administrators may continue accepting new applications until all incentive funds have been fully paid or until December 31, 2020 whichever comes first.
Electronic Signatures

- PG&E, SCE and CSE will allow **verifiable** electronic signatures on all program forms requiring signatures.
  - Reservation Request Form
  - Proof of Project Milestone Form
  - Incentive Claim Form
  - All required attestations and affidavit forms

- SoCalGas does not accept electronic signatures on the program provided forms listed above.

- All PAs will continue to accept electronic signatures on customer contracts.
Deeper Dive: Energy Storage Incentive Calculation

Storage incentives based on:
- Energy capacity (kWh) – Incentive rate based on kWh
- Hours duration of the system
- Power capacity (kW) – Determines budget category and PBI
- Currently active step – declining rate per step

(proposed) 2017 SGIP Handbook Sections 5.1.1 and 5.1.2 explain how to calculate kW and kWh

(proposed) 2017 SGIP Handbook Sections 5.2.1 and 5.2.2 describe incentive limitations based on hours duration and kWh capacity
Deeper Dive: Energy Storage Incentive Calculation

Storage incentives based on:
- Energy capacity (kWh) – Incentive rate based on kWh
- Hours duration of the system
- Power capacity (kW) – Determines budget category and PBI
- Currently active step – declining rate per step

The inputs for the incentive calculation will be taken from the manufacturer specifications for the energy storage system and any relevant power electronics (i.e. inverter)

Manufacturer specification sheets must be provided for the energy storage system and relevant power electronics to verify that the kW, kWh, and hours duration have been accurately calculated
Deeper Dive: Energy Storage Incentive Calculation

Calculating kWh:

**kWh (AC/DC systems)**: nominal voltage * amp-hours * applicable efficiency
- Nominal Voltage in DC
- Amp-hours associated with the duration of discharge specified
- Applicable Efficiency - accounts for conversion, transformation, or other efficiency losses (Inverter CEC weighted efficiency, DC-DC converter efficiency)

Example:
Nominal Voltage: 12
Amp-Hours: 1000 (at 4 hour duration)
CEC Weighted Inverter Efficiency: 95%

\[ 12 \times 1000 \times 0.95 = 11,400 \text{ Wh or 11.4 kWh} \]
Calculating kW:

\( \text{kW (AC/DC systems)}: \) kWh/hours duration
- The average power output over the specified duration
- Not necessarily the “nameplate capacity” of the system
- If there is a limiting factor, such as a smaller inverter, then this reduces the kW capacity

Example: (Worksheet will be provided)
Nominal Voltage: 12
Amp-Hours: 1000
Hours Duration: 4
Inverter Efficiency: 95%

\[
(12 \times 1000 \times .95)/4 \quad \text{OR} \quad 11,400/4 = 2,850 \text{ w or 2.850 kW}
\]
Energy storage incentives are reduced as the duration and energy capacity increase:

<table>
<thead>
<tr>
<th>Hours Duration</th>
<th>Incentive Rate (Pct of Base)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2 hours</td>
<td>100%</td>
</tr>
<tr>
<td>&gt;2-4 hours</td>
<td>50%</td>
</tr>
<tr>
<td>&gt;4-6 hours</td>
<td>25%</td>
</tr>
<tr>
<td>&gt;6 hours</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Energy Capacity (kWh)</th>
<th>Incentive Rate (Pct of Base)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2 MWh</td>
<td>100%</td>
</tr>
<tr>
<td>&gt;2-4 MWh</td>
<td>50%</td>
</tr>
<tr>
<td>&gt;4-6 MWh</td>
<td>25%</td>
</tr>
<tr>
<td>&gt;6 MWh</td>
<td>0%</td>
</tr>
</tbody>
</table>
Combining both incentive reductions produces:

<table>
<thead>
<tr>
<th>Duration</th>
<th>Reduction 1</th>
<th>Reduction 2</th>
<th>Total Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;4-6 hours</td>
<td>25%</td>
<td>12.5%</td>
<td>6.25%</td>
</tr>
<tr>
<td>&gt;2-4 hours</td>
<td>50%</td>
<td>25%</td>
<td>12.5%</td>
</tr>
<tr>
<td>0-2 hours</td>
<td>100%</td>
<td>50%</td>
<td>25%</td>
</tr>
<tr>
<td>0-2 MWh</td>
<td>&gt;2-4 MWh</td>
<td>&gt;4-6 MWh</td>
<td></td>
</tr>
</tbody>
</table>

Both types of incentive reductions apply if the project has a duration longer than two hours **AND** an energy capacity greater than 2 MWh.
Calculating the Incentive:

<table>
<thead>
<tr>
<th>Duration</th>
<th>Incentive Rate</th>
<th>Rate</th>
<th>Incentive Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;4-6 hours</td>
<td>25%</td>
<td>12.5%</td>
<td>6.25%</td>
</tr>
<tr>
<td>&gt;2-4 hours</td>
<td>50%</td>
<td>25%</td>
<td>12.5%</td>
</tr>
<tr>
<td>0-2 hours</td>
<td>100%</td>
<td>50%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Example:

5 kW, 20 kWh, 4 hour duration, step 1 ($.50/Wh)

First two hours: 10,000 Wh * $.50/Wh = $5,000
Second two hours: 10,000 Wh * $.50/Wh * 50% = $2,500

**Total Incentive**: $5,000 + $2,500 = $7,500

*First two hours funded at 100%, second two hours funded at 50%
Deeper Dive: Energy Storage Incentive Calculation

Calculating the Incentive:

<table>
<thead>
<tr>
<th>Duration</th>
<th>First MWh</th>
<th>Second MWh</th>
<th>Third MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;4-6 hours</td>
<td>25%</td>
<td>12.5%</td>
<td>6.25%</td>
</tr>
<tr>
<td>&gt;2-4 hours</td>
<td>50%</td>
<td>25%</td>
<td>12.5%</td>
</tr>
<tr>
<td>0-2 hours</td>
<td>100%</td>
<td>50%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Example:

2 MW, 4 MWh, 2 hour duration, step 1 ($0.50/Wh)

First two MWhs: 2,000,000 Wh * $0.50/Wh = $1,000,000

Second two MWhs: 2,000,000 Wh * $0.50/Wh * 50% = $500,000

**Total Incentive:** $1,000,000 + $500,000 = **$1,500,000**

*First two MWhs funded at 100%, second two MWhs funded at 50%*
Best Practices for Submitting Equipment Specifications and NRTL Certifications

<table>
<thead>
<tr>
<th>Document</th>
<th>Requirement</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment Specifications</td>
<td>Manufacturer specifications for all major system components</td>
<td>If there are multiple documents, please compile these into one PDF for review</td>
</tr>
<tr>
<td>Commercial Availability</td>
<td>All eligible technologies must be certified for safety by a nationally recognized testing laboratory (NRTL).</td>
<td>Upload as an ad-hoc document. If certification is not complete or is not applicable for a technology, upload an exemption request for review.</td>
</tr>
</tbody>
</table>
### Best Practices for Submitting Energy Storage Equipment Specifications and NRTL Certifications

<table>
<thead>
<tr>
<th>Document</th>
<th>Requirement</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Storage Calculation Worksheet</td>
<td>Not required, recommended for every energy storage application</td>
<td>Recommended upload as an ad-hoc document to expedite review process.</td>
</tr>
</tbody>
</table>
Energy storage projects rated 30kW or greater are subject to a performance-based incentive (PBI)

• 50% of the final incentive is paid when the ICF and inspection are approved. The remaining 50% is paid annually based on the performance of the system. For non-residential systems, full payment is expected if the project meets the expected operational requirements of 130 full discharges per year.

A “full discharge” is the equivalent of discharging the SGIP-incentivized energy capacity, whether it is during a single or multiple discharges.
All energy storage systems, regardless of system size or customer class, are required to discharge a minimum number of full discharge cycles per year (proposed 2017 SGIP Handbook, section 5.3.3):

- Non-residential systems must discharge at least 130 full discharges per year
- Residential systems must discharge a minimum of 52 full discharges per year
PBI Reporting Requirements vs Operational Data Reporting

<table>
<thead>
<tr>
<th>PBI Metering and Reporting</th>
<th>Standard Operational Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose: used to calculate inventive funds based on the performance of the system</td>
<td>Purpose: ensure the project is meeting SGIP’s operational requirements</td>
</tr>
<tr>
<td>Only applies to project 30kW and greater</td>
<td>Applies to ALL energy storage projects</td>
</tr>
<tr>
<td>Customers must contract with an approved SGIP Performance Data Provider</td>
<td>The customer or system owner may self-submit the data</td>
</tr>
</tbody>
</table>
### PBI Reporting Requirements vs Operational Data Reporting

<table>
<thead>
<tr>
<th>PBI Metering and Reporting Requirements</th>
<th>Standard Operational Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data must comply with the PBI File Format Specification and pass database validations</td>
<td>Data must be provided upon request (emailed, zipped file of 15 minute interval data) for up to 5 years after project approval</td>
</tr>
<tr>
<td>Data must be uploaded monthly to the SGIP database and payments are issued annually</td>
<td>Data must be submitted within 15 days of the request to the Program Administrator, the California Public Utilities Commission, or the SGIP Measurement and Evaluation Contractor</td>
</tr>
</tbody>
</table>
## PBI Reporting Requirements vs Operational Data Reporting

<table>
<thead>
<tr>
<th>PBI Metering and Reporting Requirements</th>
<th>Standard Operational Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>The meter used to report data must be listed on the CEC’s list of Eligible System Performance and Revenue Grade Meters</td>
<td>System owner and/or Host customer have the tools to control the usage of the system when operating in parallel with the grid. Additional metering may be required if the storage system is not equipped to provide the data.</td>
</tr>
</tbody>
</table>
Lottery Process – Energy Storage Priority Projects

- Energy storage projects located within the service territory of Los Angeles Department of Water and Power.

- Energy storage projects located within the West Los Angeles Local Reliability Area of Southern California Edison’s service territory. (The West LA Local Reliability Area zip code list and interactive map is available at www.sce.com/sgip.

- Energy storage systems paired with an on-site renewable generator and claiming the Investment Tax Credit (ITC) or, if not claiming the ITC, charging a minimum of 75% from the on-site renewable generator.
Energy storage projects located within the West Los Angeles Local Reliability Area

- The West LA Local Reliability Area is within the electrical service area of the West LA Basin High Voltage Substation or a lower voltage substation that electrically connects to a West LA Basin High Voltage Substation.

- SCE will maintain a list that identifies zip codes located within these substation areas.

- It is possible that zip codes listed would be partially within the West LA Local Reliability Area.

- An interactive map will be provided that will show the boundary of the West LA Local Reliability Area.

- The PAs will provide a link on their respective SGIP webpages.
Interactive Map of the West LA Basin Local Reliability Area

- Google Earth is required to use the interactive map.

- A map overlay is used in conjunction with Google Earth.

- The overlay outlines the West LA Basin Local Reliability Area.

- The applicant enters a site address to the interactive map. A plot point of the site address will show if it falls within the West LA Basin Local Reliability Area.

- SCE will verify submitted applications that claim site address in within the West LA LRA.
WEST LA BASIN LOCAL RELIABILITY AREA
Developer

• A Developer is the corporate entity that holds the contract for purchase and installation of the system, and/or alternative System Ownership Agreement (such as a Power Purchase Agreement) with the host customer and handles the project’s development activities.

• The Developer must fully disclose their participation in developing the project and/or ownership in the project

• Developer cap will apply to any combination of affiliated developers under same majority ownership.
Developer Cap

- Any single Developer is limited to 20% of the SGIP for a given budget category in each statewide incentive step.

- Applicants may not submit applications for Developers in excess of the statewide cap. Program Administrators shall not issue reservations to projects by a Developer that has exceeded the 20% cap.

- Developer cap will be calculated separately for generation projects, large energy storage projects, and small energy storage projects.

- The Developer cap will be established by budget step and posted prior to program opening. (Develop cap remains fixed for each budget step, even if available funds change.)
CA Manufacturer Rules

Per the CPUC's Resolution E-4824, all new projects seeking the California supplier 20% incentive adder must demonstrate that at least 50% of its capital equipment value is manufactured by an approved California manufacturer. Prior approval as an approved California manufacturer is insufficient and all manufacturers must meet the new requirements by June 23, 2017 in order for a project to receive the 20% incentive adder.
Before June 23, 2017, projects may include the 20% adder to their incentive if they apply with currently-eligible CA Suppliers. However, in order for these projects to receive the 20% adder at the time of payment, the equipment manufacturer must meet the new CA Manufacturer requirements by the time the project reaches the Incentive Claim stage. All projects using equipment from manufacturers that are not eligible for the adder under the new requirements will not receive the 20% adder at the time of payment, even if they applied before June 23, 2017 with a then-eligible CA Supplier.
Final Resolution E-4824 Ordering Paragraph 2:

“The Program Administrators (PAs) must change their biogas adder calculation so that only the amount of biogas used that exceeds the minimum required by the biogas blending rule for that program year is used to determine the total biogas adder incentives.”
Incentive Calculations

Incentives will be calculated according to system size, fuel type, and amount of renewable fuel.

**Projects Using The Minimum Blending Requirement**
Projects using only the minimum renewable fuel requirement will only receive an incentive for the generation capacity. In this case, the incentive is calculated by multiplying the rated capacity of the system by the incentive rate for the appropriate technology type.

\[ \text{Incentive} = \text{rated capacity} \times \text{incentive rate} \]
Incentive Calculations

**Example 1:** A 100 kW fuel cell project applying in 2017, fueled with 10% renewable fuel in Step 1.

**Assumptions:**
- 2017 projects are required to use 10% minimum renewable fuel
- Step 1 fuel cell funding receives $.60/watt

**Incentive calculation:**
- 100,000 watts (rated capacity) * $.60/watt = $60,000.00
Incentive Calculations

Projects Using Above The Minimum Blending Requirement (Up To 100% Renewable)

Incentives are calculated by multiplying the rated capacity of the system by the technology incentive rate, plus the rated capacity of the system, multiplied by the percentage of renewable fuel above the minimum, multiplied by the renewable fuel adder rate ($0.60/watt).

\[
\text{Incentive} = (\text{rated capacity} \times \text{incentive rate}) + (\text{rated capacity} \times \% \text{ above min RN Fuel} \times \text{RN incentive})
\]
Example 2: A 100 kW fuel cell on-site project applying in 2019, using 100% renewable fuel in Step 1.

Assumptions:
• 2019 projects are required to use 50% minimum renewable fuel
• 2019 projects using 100% renewable fuel would only be paid for the additional 50%  
• Step 1 fuel cell funding receives $.60/watt

Incentive calculation:
• 100 kW fuel cell = (100,000 watts* $.60/watt) + [(100,000 watts*.50)*$.60/watt]  
  = ($60,000 technology incentive) + ($30,000 renewable adder) = $90,000.00
Participant Performance
All participants are expected to follow program rules and eligibility requirements. Failure to do so will result in warnings and/or infractions. The PAs will exercise their judgment in issuing warnings and assessing infractions.

Infractions
Infractions are any actions that circumvent program policy or requirements, or have the intent to do so, in addition to low performance levels. Infractions can be issued to any participant. The Program Administrators will evaluate program infractions which may include gross negligence or intentional submission of inaccurate project information. Program infractions may be determined at any stage of the SGIP process and are applicable statewide.
SGIP Online Database Workshop

What's New for 2017

March 10, 2017

PRESENTED TO
SGIP Public Workshop
Public Participants

PRESENTED BY
Andrea Vas
Energy Solutions
What’s New for 2017

• Applicant Account Registration
• Lottery Process
  – New Status Flow
  – Lottery Trigger
  – Lottery Randomization
• Application Submission
• Application Changes
• Calculators
• Developer Cap
  – Developer Cap Management
  – New Panel: Developer Contact
• Budget Reports
  – Incentive Step Tracker
  – Incentive Rates Table
  – Developer Tracker
APPLICANT ACCOUNT REGISTRATION
Applicant Account Registration

• New Applicant Companies must send a registration request through selfgenca.com/register

One account per Applicant Company

Energy Solutions handles registrations
Applicant Settings

- Existing Applicant Admins can add new users to their SGIP Applicant Account through Settings page.

Users set their own password through “Forgot Password?” link on homepage.
LOTTERY PROCESS
Lottery Process

Applicant Creates Draft
Application for a given Step/PA Territory/Budget category. App has “RRF Draft” status.

Applicant Submits App to the SGIP. Application has “RRF Pending” status.

If Lottery is Required

Prioritize and Randomize
The system identifies the weighted priority for each app. A random lottery value is assigned to each app.

Identify Rejected and Selected Apps
Sort pending apps by lottery value, and Priority. Fill the Step in this order.

Submit and Confirm
Set status to RRF Submitted, assign App Code. Email a Confirmation of Submission to the Applicant.

Reject and Notify
Set status to RRF Rejected for apps rejected by the lottery. Email a Notification of Rejection to the Applicant.

Close the Step
Prevent any apps from submitting after midnight.

Pause and Evaluate Lottery
At the close of the calendar day, the automated job tests if a lottery is needed in the Step/PA Budget for the day.
New Statuses

1. RRF Draft
   - Developer Funds?
     - Yes: RRF Pending
     - No: Cannot Submit
   - Lottery Triggered?
     - No: RRF Submitted
     - Yes: Lottery Results?
       - Accepted: Draft Next Step
       - Rejected: RRF Rejected

Draft Next Step
## Jane Doe Enterprises

### + Create New

<table>
<thead>
<tr>
<th>Application Number</th>
<th>Host Customer</th>
<th>Developer</th>
<th>Stage/Status</th>
<th>Status Date</th>
<th>Next Due</th>
<th>Submit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft-4321</td>
<td>Sample Name</td>
<td>N/A</td>
<td>RRF Draft</td>
<td>05/13/17</td>
<td></td>
<td><img src="Submit" alt="Submit" /></td>
</tr>
<tr>
<td>Draft-4322</td>
<td>Sample Name 124 Farm Lane City, CA 99999</td>
<td>Developer A Co.</td>
<td>RRF Draft</td>
<td>05/13/17</td>
<td></td>
<td><img src="Submit" alt="Submit" /></td>
</tr>
<tr>
<td>Draft-4323</td>
<td>Sample Name 121 Farm Lane City, CA 99999</td>
<td>Another Developer</td>
<td>RRF Draft</td>
<td>04/01/17</td>
<td></td>
<td><img src="Submit" alt="Submit" /></td>
</tr>
<tr>
<td>Draft-4325</td>
<td>Sample Name 7 Industrial Drive City, CA 99999</td>
<td>Dev-Eloper Inc.</td>
<td>RRF Draft</td>
<td>mm/dd/yy</td>
<td></td>
<td><img src="Submit" alt="Submit" /></td>
</tr>
<tr>
<td>Pending-4319</td>
<td>Sample Name 100 Industrial Drive City, CA 99999</td>
<td>Dev-Eloper Inc.</td>
<td>RRF Pending</td>
<td>04/20/17</td>
<td></td>
<td><img src="Submit" alt="Submit" /></td>
</tr>
<tr>
<td>Pending-4320</td>
<td>Sample Name 1 Industrial Drive City, CA 99999</td>
<td>Developer A Co.</td>
<td>RRF Pending</td>
<td>05/30/17</td>
<td></td>
<td><img src="Submit" alt="Submit" /></td>
</tr>
</tbody>
</table>
Submit Application

**Current Status:** RRF Draft

Instructions
Carefully review your application before proceeding. Once you submit your application, you will not be able to make changes or provide additional documentation for this application milestone unless requested by the PA.

Applications remain in “RRF Pending” Status until assigned to an incentive step. You will receive a notice when your project is assigned to step with an Application ID. If a lottery is conducted and your application is not selected, you will receive a notice confirming that the application has reverted back to RRF Draft status and you may resubmit your application when the next step opens.

All Applicants must agree to the Terms of Use and click the Submit button below to submit your application to the Program Administrator. Any violation of the Terms of Use or intent to circumvent the program rules may result in disciplinary action, including expulsion from the program.

**NOTE:** After a project is assigned to an incentive step, the application fee check must be mailed to the Program Administrator within 7 calendar days.

Available if the step program for the selected PA is open for submissions

- I agree to the Terms of Use
  - Check my Application
  - Submit

Edit Application
Documents
Communications
Submit
Lottery per Program

- Group by priority
- Randomize order within priority
- Accept applications that can be entirely funded by remaining budget
- The last application is a “straddler”
  - PA will contact straddler to offer the partial incentive.
  - If straddler rejects the offer, the funds rollover to the next step.
- Remaining applications are rejected
Your application was rejected by the automated lottery process. If you would like to submit this application for the next open step, please click the button above to set application back to Draft.
Application Process

• Process that has not changed:
  – Provide all required fields*
  – Upload all required documents *
  – Use “Check My Application” button to ensure application is complete
  – Watch the 2016 SGIP Tutorial

• Process that will change:
  – Dashboard columns
  – New “smart display” panels
  – Applications cannot be submitted between midnight and 1 AM.
  – Approved CA Manufactured Equipment?
    • Moved to Project Costs panel
    • Validation of Approved CA Manufacturer in June
New Panel: Application Type

Dashboard | Settings | Resources

App List | Application | Submit

Current Status: RRF Review

Edit Application
Documents
Communications
Submit

Application Type

Program Administrator:
Utility Territory

Application Type:
Energy Storage

NOTES
Provide this preliminary information to determine the applicable panels required for your application type.

Budget Category
Small Residential Storage

Incentive Step
2

Incentive Rate
$0.45 /Wh

Remaining Statewide Developer Funds
$276,872.43

Calculated SGIP Incentive
$128,000.00

Save
Upload all required documents

The RRF is a document you fill out online. Click Edit Application to continue.

When your form is complete, click Print & Sign to get a printable version of the form. Attach a signed copy of the form with Upload New.

Equipment Specifications (Generating System Info) *

Preliminary Monitoring Plan (>=30 kW) *

Proof of Electric Service *

Electric Load Documentation *

Can’t Print RRF until application has no errors
Proposed System Information - Generation

- **Equipment Technology**
- **Renewable Fuel Type**
- **% of Fuel From Renewable Source**
- **% of Fuel From Non-renewable Source (<100 - Renewable)**
- **Is this an "Export to Grid" Project?**
- **Non-renewable Fuel Type**
- **Annual Onsite Load**
- **Paired Equipment Type**

**NOTES**

Enter information about the proposed generating system that is applying for an SGIP incentive.

Please refer to the SGIP Handbook for the minimum fuel blending requirements per program year.

Directed renewable fuel must be injected into a common carrier pipeline system that is either within the Western Electricity Coordinating Council (WECC) region or interconnected to a common carrier pipeline system located within the WECC region.

Report details of the paired system in the Paired Onsite System Information Panel.

Export to Grid projects are sized based on the Eligible Capacity restrictions in the SGIP Handbook.
Proposed System Information – Energy Storage

Proposed System Information - Energy Storage

<table>
<thead>
<tr>
<th>Equipment Technology*</th>
<th>Model*</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Manufacturer*</th>
<th>Total Rated Capacity*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>kW</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Energy Capacity *</th>
</tr>
</thead>
<tbody>
<tr>
<td>kWh</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discharge Hours Duration*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hrs</td>
</tr>
</tbody>
</table>

Is there currently, or will there be by the time of inspection, other self-generation or storage equipment onsite?*

- [ ] Yes
- [ ] No

Will the energy storage system be charged at least 75% from onsite renewables?

- [ ] Yes
- [ ] No

Check the box to confirm that the system will be operated in accordance with the program’s minimum operating and reporting requirement.*

- [ ] I Agree

NOTES

Enter information about the proposed storage system that is applying for an SGIP incentive.

Total Rated Capacity (kW) = Energy Capacity (kWh DC) x inverter efficiency (%) / Discharge Duration (hours)

Total Energy Capacity (kWh) = # Batteries x Amp-hour rating of each battery x System voltage

Report details of the additional onsite system(s) in the Other Onsite System Information Panel.
CALCULATORS
## Incentive Calculation - Generation

<table>
<thead>
<tr>
<th>Generation Incentive Calculator</th>
<th>Current Step: 2</th>
<th>Incentive Rate: $0.5 per Watt</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equipment Incentive</strong></td>
<td>0-1 MW</td>
<td>&gt;1-2 MW</td>
</tr>
<tr>
<td>Incentive Rate [$/W]</td>
<td>$0.50</td>
<td>$0.38</td>
</tr>
<tr>
<td>Previous SGIP Capacity [W]</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Capacity [W]</td>
<td>1,000,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Eligible Capacity [W]</td>
<td>1,000,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Base Equipment Incentive</td>
<td>$500,000.00</td>
<td>$380,000.00</td>
</tr>
<tr>
<td>CA Manufacturer Adder</td>
<td>$100,000.00</td>
<td>$76,000.00</td>
</tr>
<tr>
<td>Max Equipment Incentive</td>
<td>$600,000.00</td>
<td>$456,000.00</td>
</tr>
<tr>
<td><strong>Biogas Adder</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incentive Rate [$/W]</td>
<td>$0.60</td>
<td>$0.45</td>
</tr>
<tr>
<td>Eligible Capacity [W]</td>
<td>1,000,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Pro-Rated Biogas Capacity</td>
<td>$980,000</td>
<td>$980,000</td>
</tr>
<tr>
<td>Pro-Rated Biogas Adder Amount</td>
<td>$588,000.00</td>
<td>$441,000.00</td>
</tr>
<tr>
<td>DBG Premium Cap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted Biogas Adder</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other Incentives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other IOU Incentive (100%)</td>
<td>$6,000.00</td>
<td></td>
</tr>
<tr>
<td>Other Non-IOU Incentive (50%)</td>
<td>$0.00</td>
<td>f) $0.00</td>
</tr>
<tr>
<td>Non-Ratepayer Incentive (0%)</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td>Investment Tax Credit (0%)</td>
<td>$400,000.00</td>
<td></td>
</tr>
<tr>
<td>Adjusted Equipment Incentive</td>
<td>$406,000.00</td>
<td></td>
</tr>
<tr>
<td>Total Other Incentives</td>
<td>$406,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>SGIP Incentive Adjustments</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Incentive Cap (Equipment and Biogas)</td>
<td>$1,350,000.00</td>
<td>$1,323,000.00</td>
</tr>
<tr>
<td>Eligible Cost Cap (All Incentives)</td>
<td>$1,350,000.00</td>
<td>$1,323,000.00</td>
</tr>
</tbody>
</table>

**Calculated SGIP Incentive**

- **Equipment Incentive**: $271,000.00
- **Biogas Incentive**: $1,323,000.00
- **Calculated SGIP Incentive**: $1,594,000.00

**Footnotes:**
* j = 0 if g+d <= $5M, otherwise k = $5M - (g+d)
* l = 0 if g+d+h <= Total Eligible Cost, otherwise l = Total Eligible Cost - (g+d+h)
* m = k - l
# Incentive Calculation - Storage

<table>
<thead>
<tr>
<th>Incentive Calculation</th>
<th>Current Step: 3</th>
<th>Incentive Rate: $0.4 per Watt-hour</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reference Table</strong></td>
<td>0-2 MWH</td>
<td>&gt;2-4 MWH</td>
</tr>
<tr>
<td>0-2 HOURS</td>
<td>100%</td>
<td>50%</td>
</tr>
<tr>
<td>2-4 HOURS</td>
<td>50%</td>
<td>25%</td>
</tr>
<tr>
<td>4-6 HOURS</td>
<td>25%</td>
<td>12.50%</td>
</tr>
<tr>
<td><strong>Existing Onsite Equipment Off-Set</strong></td>
<td>0-2 MWH</td>
<td>&gt;2-4 MWH</td>
</tr>
<tr>
<td>0-2 HOURS</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2-4 HOURS</td>
<td>1,250,000</td>
<td>-</td>
</tr>
<tr>
<td>4-6 HOURS</td>
<td>750,000</td>
<td>500,000</td>
</tr>
<tr>
<td><strong>Base Equipment Incentive</strong></td>
<td>$700,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>CA Manufacturer Adder</strong></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Max Equipment Incentive</strong></td>
<td>a) $700,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>Other Incentives</strong></td>
<td>Total Dollars</td>
<td>Impact on SGIP Incentive</td>
</tr>
<tr>
<td>Other IOU Incentive (100%)</td>
<td>$6,000.00</td>
<td>b) - $6,000.00</td>
</tr>
<tr>
<td>Other Non-IOU Incentive (50%)</td>
<td>$0.00</td>
<td>c) $0.00</td>
</tr>
<tr>
<td>Non-Ratepayer Incentive (0%)</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td><strong>Adjusted Equipment Incentive</strong></td>
<td>a+b+c = d) $694,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>Total Other Incentives</strong></td>
<td>$6,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>SGIP Incentive Adjustments</strong></td>
<td>Equipment Incentive + Total Other Incentive &lt;= Incentive Cap(s)</td>
<td>Incentive Adjustment</td>
</tr>
<tr>
<td>Project Incentive Cap (Equipment)</td>
<td>f) $694,000.00</td>
<td>g) $5,000,000.00</td>
</tr>
<tr>
<td>Eligible Cost Cap (All Incentives)</td>
<td>f+g = h) $694,000.00</td>
<td>h) $6,000.00</td>
</tr>
<tr>
<td><strong>Equipment Incentive</strong></td>
<td>j) $694,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>Calculated SGIP Incentive</strong></td>
<td></td>
<td>$694,000.00</td>
</tr>
</tbody>
</table>

Footnotes:
* $g = 0$ if $f \leq $5M, otherwise $g = $5M - $f$
* $i = 0$ if $h + i = \text{Total Eligible Cost}$, otherwise $i = \text{Total Eligible Cost} - (h + i)$
* $j = h + i$
DEVELOPER CAP
Developer Cap Management

- Each application must designate one Developer
- Applicant must enter corresponding Developer Key
- Developer Key is provided only by the Developer to the Applicant
  - SGIP Support and PAs cannot provide the Key
- Developer must sign Reservation Request Form
- Developer cannot submit requests greater than 20% of statewide step funds for each budget category
  - Developer must manage the list of applications that will be submitted on their behalf towards the cap in a given step
- Developer cannot be changed after RRF is submitted without PA approval
New Panel: Developer Contact

Developer Contact

Developer Company*
Developer A

Developer KEY*
1xJ8#kP!sd3

Contact Name*
Jane Doe

Mailing Address
123 Main St.

City
Somewhere

State*
CA

Zipcode*
90210

Email Address*
jane.doe@job.com

Phone Number*
510-837-5201

NOTES
You must designate a Developer Company from the provided list, even if you are both the applicant and the developer. You must also enter the corresponding key matching that Developer designation to proceed to submit this application.

All participating Developers must be registered with SGIP Program Administrators. The registration form can be found on the Homepage.
• Developers can come here to track their allocations towards the Developer Cap
• “RRF Pending” apps not included until apps are in RRF Submitted or beyond
• Developer Cap is 20% of statewide funds per step, per budget category
• Developer Cap is enforced at the Submit Button
BUDGET REPORTS
## Incentive Step Tracker

### Statewide Summary - Program Metrics

Select a Budget Category from the dropdown below to view the Incentive Step Tracker for the SGIP. The tracker is updated nightly, or in the case of a lottery, after the results are published. You can click on the category headers to view additional details.

<table>
<thead>
<tr>
<th></th>
<th>PG&amp;E</th>
<th>SCE</th>
<th>CSE</th>
<th>SoCalGas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active Step</strong></td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Step Opening Date</strong></td>
<td>5/01/2017</td>
<td>5/15/2017</td>
<td>5/01/2017</td>
<td>5/18/2017</td>
</tr>
<tr>
<td><strong>Days in Step</strong></td>
<td>18</td>
<td>3</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td><strong>Authorized Collections</strong></td>
<td>$300,000.00</td>
<td>$1,500,200.00</td>
<td>$1,000,200.00</td>
<td>$500,000.00</td>
</tr>
<tr>
<td><strong>Reallocations</strong></td>
<td>$10,000.00</td>
<td>$0.00</td>
<td>$50,000.00</td>
<td>$0.00</td>
</tr>
<tr>
<td><strong>Authorized Rollover</strong></td>
<td>$0.00</td>
<td>$200,000.00</td>
<td>$0.00</td>
<td>$50,000.00</td>
</tr>
<tr>
<td><strong>Allocated Funds</strong></td>
<td>$110,000.00</td>
<td>$500,200.00</td>
<td>$1,000,200.00</td>
<td>$500,200.00</td>
</tr>
<tr>
<td><strong>Available Funds</strong></td>
<td>$200,000.00</td>
<td>$1,200,000.00</td>
<td>$50,000.00</td>
<td>$49,800.00</td>
</tr>
</tbody>
</table>
### Incentive Rates for Current Steps

The equipment and biogas incentive rates per PA territory are displayed in the table below. The table references the incentive rates for the currently active step in each PA territory and is updated nightly, or in the case of a lottery, after the results are published.

<table>
<thead>
<tr>
<th></th>
<th>PG&amp;E</th>
<th>SCE</th>
<th>CSE</th>
<th>SoCalGas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Generation</strong></td>
<td>Step 3</td>
<td>Step 2</td>
<td>Step 2</td>
<td>Step 1</td>
</tr>
<tr>
<td>Wind</td>
<td>$0.70/W</td>
<td>$0.80/W</td>
<td>$0.80/W</td>
<td>$0.90/W</td>
</tr>
<tr>
<td>Other Generation</td>
<td>$0.40/W</td>
<td>$0.50/W</td>
<td>$0.50/W</td>
<td>$0.60/W</td>
</tr>
<tr>
<td>Max Biogas Adder*</td>
<td>$0.60/W</td>
<td>$0.60/W</td>
<td>$0.60/W</td>
<td>$0.60/W</td>
</tr>
<tr>
<td><strong>Large Energy Storage</strong></td>
<td>Step 2</td>
<td>Step 2</td>
<td>Step 1</td>
<td>Step 1</td>
</tr>
<tr>
<td>Energy Storage**</td>
<td>$0.45/Wh</td>
<td>$0.45/Wh</td>
<td>$0.50/Wh</td>
<td>$0.50/Wh</td>
</tr>
<tr>
<td>Energy Storage + ITC**</td>
<td>$0.31/Wh</td>
<td>$0.31/Wh</td>
<td>$0.36/Wh</td>
<td>$0.36/Wh</td>
</tr>
<tr>
<td><strong>Small Residential Energy Storage</strong></td>
<td>Step 1</td>
<td>Step 1</td>
<td>Step 1</td>
<td>Step 1</td>
</tr>
<tr>
<td>Energy Storage**</td>
<td>$0.50/Wh</td>
<td>$0.50/Wh</td>
<td>$0.50/Wh</td>
<td>$0.50/Wh</td>
</tr>
</tbody>
</table>

* Biogas adder does not apply to wind and waste heat to power. Final biogas adder will be prorated based on fuel blending and minimum fuel blending requirements.
** Energy Storage rates are subject to change if all PA territories close a step within 10 days of the Step Opening Date.
QUESTIONS?
Proposed Decision of Commissioner Rechtschaffen

- PG&E, SCE, SCG & SDG&E are ordered to collect on an annual basis double the amount collected in year 2008.
- 85% of new funds go to large energy storage; projects greater than 10kW.
- 15% of new funds go to renewable generation projects.
- Energy storage funding is apportioned accordingly: Step 1 0%; Step 2 15%, Step 3 30%, Step 4 30%, Step 5 25%.
- Generation funding is apportioned: Step 1 33.3%, Step 2 33.3%, Step 3 33.4%

Total AB 1637 Funds and Allocation: $249,000,000
- Energy Storage Allocation, 85%: $196,834,500
- Renewable Generation, 15%: $34,735,500
- Program Administration: $17,430,000
Stakeholder opinion of Proposed Decision?
• Talk to Patrick Doherty

What energy storage operational rules would you have recommended?
• What performance-based incentive requirements would help energy storage better support the grid or improve the GHG performance?
• Should any changes to PBI/operational requirements be made retroactive?

Opinions on energy storage GHG performance as reported in the Impact Evaluation?

Any other feedback about other aspects of the ACR / Proposed Decision, Program Modifications or the future? Open Forum….