

Self Generation Incentive Program (SGIP)



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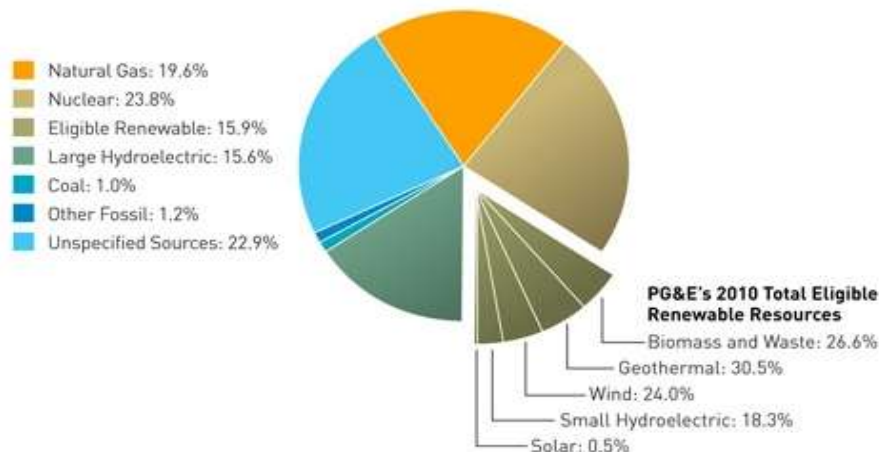


Pacific Gas and Electric



- One of the largest combination natural gas and electric utilities in the United states
- Approx 20,000 Employees
- Natural Gas & Electric Service to approximately 40% of Californians ~15M covering 70,000 Sq Miles.
- On average, approx ½ of the electricity PG&E delivers comes from a combination of renewable and greenhouse gas-free resources.

PG&E's 2010 Electric Power Mix Delivered to Retail Customers



Serve 5% of U.S. population, but produce only 1% of utility sector CO₂ emissions



Self Generation Incentive Program (SGIP)

- California Public Utilities Commission (CPUC) incentive program initiated in 2001 to reduce peak demand on the grid
- Provides financial incentives for the installation of new, qualifying self-generation equipment with the purpose of meeting all or a portion of the electric energy needs of a facility.
- Program Administrators:
 - Pacific Gas & Electric Company (PG&E)
 - Southern California Edison (SCE)
 - Southern California Gas (SoCal Gas)
 - California Center for Sustainable Energy (CCSE) for San Diego Gas & Electric (SDG&E)
- Approved funding through end of 2014





History of SGIP

- Governor signed Senate Bill (SB) 412 into law (10/11/09) to take effect in January 2010
- Implementation of SB412 allowing additional “Distributed Energy Resources” to participate in the program.
- Added standards to achieve reductions of greenhouse gas emissions pursuant to the California Global Warming Solutions Act of 2006.
- Authorized collection is \$36M/year (\$33.4M for incentives)
 - 75% for renewable and emerging and 25% for non-renewable
 - Program incentives approved through 2014
- Handbook & Forms available at www.pge.com/sgip



SGIP Incentivized Technologies



Wind Turbine



Pressure Reduction Turbine



Energy Storage



Waste Heat to Power



Fuel Cell



Microturbine



IC Engine



Wind Turbines

Wind turbine rated capacity is the highest electrical output from the manufacturer's power output curve for wind speeds up to 30 mph including inverter losses.

Wind Turbine Projects may be sized up to 200% of the Host Customer's previous 12-month annual peak demand at the proposed Site.

Equipment: Inverter must be on CEC Approved List, Wind Turbines must be commercially available

Fuel Cells, Microturbines, Combustion Engines, & Gas Turbines

Renewable vs. Non-Renewable

- Renewable Fuel: Biogas, Landfill Gas, Digester Gas (on-Site and Directed)
- Non-renewable Fuel: Natural Gas, Waste Gas

Non-Renewable fuel technologies must meet a minimum 40% operating efficiency requirement & must not exceed a GreenHouse Gas (GHG) emissions 10-year cumulative standard

Copies of applicable air pollution permitting is required

Equipment: Equipment must be commercially available



Advanced Energy Storage

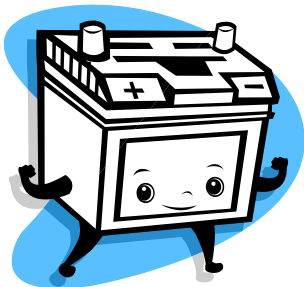
Advanced Energy Storage Technologies are technologies that convert electricity into another form of energy, stored and then converted back into electricity at another time.

Advanced Energy Storage systems eligible for SGIP incentives may be coupled with an eligible self generation technology, or be stand alone.

Advanced Energy Storage Projects coupled with generation technologies (i.e. Solar) must be sized no larger than the rated capacity of the PV or SGIP eligible technology it is operating in concert with.

- When coupled with a PV system, the rated capacity of the AES system can be no larger than the CEC-AC rating of the PV system, which is the rated AC output of the PV system including inverters.

Coupled or Stand-alone, AES systems must be able to discharge at rated capacity for a two hour period at least once per day (if coupled with Wind increased capabilities apply).





New SGIP Technologies & Incentive Rates

Incentive Levels	Technology	Incentive (\$/W)*	Biogas Adder (\$/W)
Renewable, Waste Heat Capture and Emerging Technologies	Wind Turbines	\$1.25/W	\$0.00/W
	Waste Heat to Power	\$1.25/W	\$0.00/W
	Pressure Reduction Turbine	\$1.25/W	\$0.00/W
	Renewable microturbine (onsite or directed biogas)	\$0.50/W	\$2.00/W
	Renewable internal combustion engine (onsite or directed biogas)	\$0.50/W	\$2.00/W
	Renewable gas turbine (onsite or directed biogas)	\$0.50/W	\$2.00/W
	Renewable fuel cells (onsite or directed biogas)	\$2.25/W	\$2.00/W
Emerging	Advanced Energy Storage	\$2.00/W	\$0.00/W
	Fuel Cells - CHP or Electric	\$2.25/W	\$0.00/W
Non-Renewable	Non-renewable microturbine	\$0.50/W	\$0.00/W
	Non-renewable internal combustion engine	\$0.50/W	\$0.00/W
	Non-renewable gas turbine	\$0.50/W	\$0.00/W

Tiered Pricing Structure

Capacity	Incentive Rate (Pct. of Base)
0 – 1 MW	100%
>1 MW – 2 MW	50%
>2 MW – 3 MW	25%

- *Project Maximum: 60% of approved project costs.*
- *Additional 20% adder available for approved California manufacturers*



SGIP Application Process

Three Step Applications:

Non-Public Entity

- Larger than 10kW non-residential projects

Public Entity

- Larger than 10kW public entities
 - Additional 60 days from conditional reservation to submit RFP or executed agreement.
 - Proof of Project Milestone due in 240 Days
 - Incentive Claim Deadline 18 months from conditional reservation.

Two Step Application:

All residential projects and small (<10kW) non-residential projects

- Combines documents from project milestone into the reservation request documents to shorten the process for smaller &/or less complex projects.
 - *Large projects may choose to opt into a 2 step process





SGIP Documentation Process

Most Common Process - Three Step (Non-Public Entity)

(1) Reservation Request Form

Completed and signed Self-Generation Incentive Program **Reservation Request Form** sent in to the Program Administrator along with the required attachments (see *Handbook Section 2.1 for complete list of required attachments*):

Conditional Reservation Notice Letter is received. **Proof of Project Milestone** documents are due in 60 calendar days (see *Handbook Section 3.1 for complete list of required attachments*):

(2) Proof of Project Milestone

Proof of Project Milestone Documents submitted to the Program Administrator. Failure to submit these items by the date shown will automatically result in the conditional reservation being terminated.

(3) Incentive Claim Form & Documents

When project is completed and operational the **Incentive Claim Form & Documents** are submitted with required attachments on or before the Reservation Expiration Date to the Program Administrator for processing.

Reservation Confirmation and Incentive Claim Form received. Self-generation system must be purchased, installed and put into operation by the Reservation Expiration Date (18-months from the date of the **Conditional Reservation Notice Letter**). See *Handbook Section 4.1 for complete list of required attachments*.



SGIP Program Eligibility Requirements

- **Energy Efficiency Audit**
 - Measures with a payback of 2 years or less must be implemented
- **System Sizing**
 - No greater than 125% of the last 12 months of electrical consumption (kWhs)
- **Incentive Payment**
 - Under 30 kW systems receive upfront payment
 - Performance based incentive (PBI) for over 30 kW systems
 - 50% upfront and 10% per year for 5 years based on baseline performance and technology capacity Factor)
 - Need to also meet GHG baseline requirement
 - Maximum incentive is \$5M / Maximum Size is 3MW
 - Customer must pay minimum of 40% of system cost
- **Metering Requirements**
 - Customer must pay for all metering and monitoring and send data to Administrators for performance payments



SGIP Program Eligibility Requirements

- **On-site and In-state biogas**
 - **Generator renewable fuel consumption - 75% min**
- **10 year generation system warranty requirement**
 - **Due with executed contract**
- **Application Fee (1% of requested incentive)**
 - **Due with RRF**
- **20% CA Supplier Adder**
 - **Application online for approved CA manufacturer status**
- **Supplier Cap of 40%**
 - **Yearly statewide incentive cap for any single manufacturer**



www.pge.com/sgip - Updates

SELF-GENERATION INCENTIVE PROGRAM

SGIP—What's New

A standard request form has been developed for SGIP suppliers who wish to request eligibility as a California Supplier. SGIP participants may be eligible for an additional 20 percent incentive if they qualify as a California Supplier. Please use the [California Supplier Projects Form](#) (DOC, 73 KB) for all requests to be considered for the California supplier status by the SGIP working group.

Thursday, April 12, 2012 marked the launch of the Self Generation Incentive Program (SGIP) for 2012 project applications.

Renewable & Emerging Technologies: We have already received enough applications to effectively fill all available reservation requests and waitlist availability for these technologies (based on approved 2012 funding guidelines). As a result, **we are not currently accepting 2012 applications for Renewable & Emerging projects**, and any applications received will be returned. (Please see Section 1.1 of the [2012 SGIP Handbook](#) for a complete list of these qualifying technologies). Any changes in incentive availability will be reviewed on a quarterly basis.

Non-Renewable Technologies: The *only* applications currently being accepted for 2012 SGIP review are for Non-Renewable Incentive Projects (Internal Combustion Engines-CHP, Microturbines-CHP, and Gas Turbines-CHP). Please visit the [Handbook and Forms](#) page do download the 2012 reservation request form, which also provides details on the additional documentation needed for submittal. Applications for these technologies can be submitted through mail, or through email at selfgen@pge.com. (Please see Section 1.2.1 of the [2012 SGIP Handbook](#) for instructions on electronic submissions). These applications will be reviewed in the order that they are received.





Contact Information

SGIP Contact Information

SGIP Hotline: (415) 973-6436

SGIP Inbox: selfgen@pge.com

Website: www.pge.com/sgip



....Questions and Answers

