

Self-Generation Incentive Program (SGIP) Opens Program Year 2012

SCE began accepting applications for the Self-Generation Incentive Program (SGIP) on April 12, 2012, for Program Year 2012 following the California Public Utilities Commission (CPUC) approval of the updates to the Program Handbook and forms.

Designed with business and large institutional customers in mind, SGIP provides rebates to customers who install new, eligible, self-generation equipment that meets all or a portion of their onsite electrical energy needs.

The 2012 version of SGIP pays rebates for Renewable and Waste Energy Capture (wind turbines, waste heat-to-power technologies and pressure reduction turbines), Conventional Heat-to-Power (internal combustion engines, microturbines and gas turbines), and Emerging Technologies (advanced energy storage, biogas and fuel cells).

How the rebates for the 2012 program are paid has also changed, with half paid up-front and the other half paid over five years based on actual system performance.

SGIP contributes to reductions in Greenhouse Gas Emission (GHG) emissions, and benefits both SCE and its customers by reducing electrical system demand, which in turn reduces the need to build expensive fossil fuel-fired power plants.

Contact your account representative for more information and to determine your eligibility, or visit www.sce.com/sgip for more information about the program including system sizing, eligible technologies and tiered incentives.

SCE Incentives Help Facilities Save Money with Self-Generation Incentive Program (SGIP) Solutions

Eastern Municipal Water District (EMWD) recently commissioned two 300-kilowatt (kW) DFC300 fuel cell power plants to be fueled by renewable biogas at the Perris Valley Regional Water Reclamation Facility in Perris, California. EMWD provides domestic and agricultural water, wastewater collection and treatment service, and recycled water in a 542-square-mile service area with a population of about 687,000 in western Riverside County.



Eastern Municipal Water District (EMWD) officials accept an SCE award for Self Generated Incentive Program incentives. Front row (left to right) SCE Account Executive Amy Olson, EMWD's Board Director David J. Slawson, Director Ronald W. Sullivan, Board President Joseph J. Kuebler. Back row (left to right) SCE's SGIP Program Manager James Stevenson, EMWD's Board Director, Randy Record, General Manager Paul D. Jones II, P. E., SCE's Manager, G&I Accounts Matthew Garcia.

EMWD received a \$2.7 million incentive from the SGIP for these renewable fuel cells, which operate on the biogas from the methane generated by the wastewater treatment process. EMWD treats wastewater by breaking down biodegradable material in a structure called an anaerobic digester, which uses heat and microorganisms to reduce the volume of bio-solids. Methane, a greenhouse gas, is produced by this process. The fuel cells will use 100 percent of this renewable methane as fuel for the electrochemical reaction within the fuel cell that generates electricity efficiently and cleanly. Efficiency is further enhanced by supplying the byproduct heat from the fuel cell to the anaerobic digester, supplementing a gas-fired boiler. The efficiency of fuel cells can exceed 80 percent when byproduct heat is utilized.



Eastern Municipal Water District's fuel cell power plants operate using renewable biogas.

These two fuel cells are not the first installed by the EMWD, which installed three 250-kilowatt (kW) fuel cells at the Moreno Valley Water Reclamation Facility in Moreno Valley, Calif. in 2010. EMWD received \$2.9 million in incentives from the SGIP for these renewable fuel cells, which operate using biogas similar to the generating system at the Perris facility.

Inland Empire Utilities Agency Powering Water Recycling Facility with Utility-Scale Wind Turbine

The Inland Empire Utilities Agency (IEUA) commissioned a wind turbine to power the Agency's water recycling facility. A 1-megawatt (MW) wind turbine generator will deliver 100% renewable energy onsite to the IEUA's Water Recycling Treatment Plant located in Rancho Cucamonga, Calif. The project is the first of its kind to utilize a utility-scale wind turbine onsite in San Bernardino County.

The 180-foot tall wind turbine will supply up to 20% of the electricity consumed by IEUA's plant, which on



The Inland Empire Utilities Agency wind turbine will supply up to 20% of the electricity consumed by IEUA's Water Recycling Plant (RPA) located in Rancho Cucamonga, California.

an average produces about 11 million gallons of recycled water per day and preserves and protects local drinking water supplies in IEUA's service area. The wind turbine has an annual production of 2,160 megawatt-hours (MWh), which will offset 1,252 tons of carbon emission and produce energy to power the equivalent of 129 homes for one year (based on EPA calculations).

Start Saving Now with SCE's Self-Generation Incentive Program (SGIP)

SGIP pays incentives that help you offset the cost of eligible self-generation technologies to offset your own, onsite energy use.

Phone: (866) 584-7436

Fax: (626) 302-3967

E-Mail: CSIGroup@sce.com

www.sce.com/sgip

Other SCE Programs to Help Save More

- Find out how SCE's Demand Response Programs can reward you for reducing electricity usage during peak hours:

(866) 332-7827

www.sce.com/drp

- Switch to a Time-of-Use (TOU) rate and take advantage of lower energy rates by shifting electricity usage to off-peak hours. To learn more: www.sce.com/business/rates/large-business

- Take free SCE classes in lighting, HVAC, energy management and more at an Edison Energy Center:

Irwindale: (800) 336-2822

www.sce.com/ctac

Tulare: (800) 772-4822

www.sce.com/agtac

Take the Online Business Survey at www.sce.com/Tools/Business/on-line-energy-guide or contact your SCE Account Representative to calibrate your facility for potential savings.

- Get building project design assistance and incentives from Savings By Design. To find out if your project qualifies, [visit www.sce.com/sbd](http://www.sce.com/sbd)

SCE offers a range of solutions such as cash incentives, energy surveys and payment options to help you better manage your electricity costs.

For More Information

www.sce.com

(800) 990-7788 or Contact your SCE Account Representative

CUSTOMER FOCUS

Marriott Makes Energy Management the Standard without Compromising Guest Comfort

Energy-efficient lighting cold cathode retrofits, occupancy sensors, electronic thermostats, Energy Management Systems (EMS)... not the usual list of amenities one may expect from an international hospitality leader. Nevertheless, these energy efficiency measures work behind the scenes at Marriott International hotels in the Southern California area to keep guests comfortable, while supporting operational efficiency and profitability.

The results speak for themselves: in the Southern California Edison (SCE) service area, effective energy management saves Marriott about \$463,756 annually, which equates to 3,567,355 kWh and 2,553 kW and reduces the company's greenhouse gas emissions by an estimated 3,500 tons.



Marriott maximizes SCE Energy Efficiency and Demand Response incentives to conserve energy without compromising guest comfort.

Marriott's Southern California properties have been proving grounds for many of the company's national energy management initiatives. "California is ahead of the rest of the country in energy management," says Robert Bahl, Vice President of Engineering & Facilities, the Americas, Marriott. "We've had a full-time energy management function since the time of deregulation and the energy crisis of 2000, and we've made it part of our business to reduce consumption wherever we can to manage our properties as efficiently and profitably as possible."

Marriott's energy management commitment extends beyond their guests and associates to include the communities they serve, and the environment. "Bill Marriott, our Chairman and CEO, says we are all guests on this planet. And that is the philosophy we carry forward in our day-to-day operations," Bahl states.

Optimized Functions, Maximized Savings

"We've taken measures property-by-property, room-by-room, in nearly 200 of our facilities in SCE's service area, making use of the Express Solutions and Customized Solutions programs to earn incentives on energy-efficiency equipment.

Marriott has completed these Express Solutions projects: cold cathode retrofits in lobbies, occupancy sensors in guest rooms, lighting retrofits throughout all areas of the facilities, and demand control ventilation products in kitchens. "Through our Express Solutions projects for the Demand Control Ventilation upgrades alone, we've saved nearly half-a-million kWh a year," explains Douglas Rath, Director of Energy and Environments, Marriott. Two of the properties (Marriott Newport Beach Hotel and Spa, and the Marriott Irvine) partnered with SCE to test bathroom occupancy sensors with LED nightlights, reducing bathroom lighting electricity costs by 40%.

"The Customized Solutions program has provided another great opportunity to improve the efficiency of our central plants by adding drives, heat exchangers, building automation systems, even LED pool lighting retrofits. With SCE's assistance, all of our hotels in their service area have had a Retrocommissioning (RCx) study done at the properties," Bahl further notes. "The ideas we got from our training in SCE's RCx program really made a difference for us," he continues. "We've incorporated what we learned from SCE as part of our company-wide Strategic Energy Policy."

The scope of the RCx studies was broad: control or building automation systems, central plant and HVAC systems, boiler equipment, hot water or steam distribution systems, and lighting. "The investments improve the efficiency of our buildings overall, resulting in over five million kWh saved since their inception," explains Rath. Additionally, as Marriott looks to continuous improvement, SCE's Lodging Energy Efficiency Program has already identified over 13 measures and recommendations for dramatically impacting efficiency.

Automated Demand Response (Auto-DR): Incentives for Change

Working with SCE, Marriott utilized the Automated Demand Response (Auto-DR) Technology Incentives program to install automation for Demand Response (DR) Program participation. Auto-DR allows Marriott's EMS to reliably reduce energy load during peak hours when a DR event is called.

The current SCE project is to install automation in over 30 hotels in Southern California for participation in DR programs through a Demand Response Contract (DRC) using Auto-DR technology. Marriott's verified demand reduction capability is estimated at 3.5 megawatts in SCE's territory alone. "The incentives that we get paid for shedding load, coupled with the automation incentives that we get paid to put in the controls, will make this program a huge success for Marriott," notes Rath.

"Using 2007 as a baseline, Marriott is committed to lowering energy and water use by 20% by 2020. At the halfway point, we are making great progress, but still have much to do. If we aren't saving energy by every means available to us, we'd need to pass the costs along to customers. Effective energy management is as important as guest amenities at keeping us competitive," states Bahl.

"Southern California Edison and our account representative Cynthia Davis have been exceptional partners in helping us to meet our goals."

Marriott: Estimated Savings by Managing Energy

Location: Properties throughout Southern California

Industry: Hospitality/Hotels

SCE Programs Utilized:

Express Solutions, Customized Solutions, Retrocommissioning (RCx), Lodging Energy Efficiency Program (LEEP), Automated Demand Response (Auto-DR) Technology Incentives, Demand Response Contracts (DRC)

Results:

Approximate local annual savings of \$463,756, 3,567,355 kilowatt hours (kWh), 2,553 kilowatts (kW), an estimated 3,500 tons of reduced greenhouse gas emissions

Incentives: \$372, 766 last year.

Earn Even More Savings with Other SCE Offerings

- Use Web-based tools like SCE EnergyManager to monitor your electricity usage in real time and over the long term. (888) 462-7078 or visit www.sce.com/energymanager
- Take free SCE classes in lighting, HVAC, energy management and more at the Edison Energy Education Center. For assistance contact the Irwindale Center at (800) 336-2822, the Tulare Center at (800) 7720 3822 or visit www.sce.com/workshops
- Take a free, easy-to-use Online Business Energy Survey to help you understand and reduce your building's energy use and lower your electricity bill.

For more information contact your account representative or visit www.sce.com_Tools/Business/online-energy-guide.htm.



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