RealEnergy / Arden Realty

SELFGEN CASE STUDY

RealEnergy Inc. designs, builds, owns, operates and maintains permanent on-site power generation systems in the commercial real estate, industrial, hospitality and government sectors. Arden Realty is the largest landlord of office buildings in Southern California.

SUMMARY

Customer:
RealEnergy, Inc.
Arden Realty

Project:
(3) 200 kW Internal combustion engine & (1)165-ton absorption chiller

Incentive:
$325,103

▼ Issues

Arden Realty wanted greater energy reliability and was concerned about high electrical costs in one of their flagship buildings (701 B Street in San Diego).

▼ Solution

RealEnergy installed a 600 kW co-generation system using three 200 kW internal combustion engines and one 165-ton absorption chiller. In addition to producing electricity, the waste heat from the engines is used to supplement the building's heating and cooling capacity. SDREO's Self-Generation Incentive Program provided an incentive of $325,103 for installation of the system.

▼ Results

The cogeneration system operates at an overall efficiency of 77.4% and provides about 66% of the building's total electric requirements plus 20% of the building's chilled water requirements. All development, fuel procurement and operational risks are borne by RealEnergy. In addition, Arden Realty receives an access fee that provides substantial capital and operational savings. The system also offers blackout protection for the building load or specific tenant load and delivers 94% reduction in NOx emissions compared to normal utility base-load generation.

▼ ▼ ▼ ▼ ▼

San Diego Regional Energy Office currently has over $30 million in incentives available for qualified self-generation projects including wind, solar, fuel cell, microturbine and conventional cogeneration and self-generation technologies. Contact us for more information.

"This is a great deal for our client. Our system provides Arden with two-thrids of their electric needs and a monthly rent check for the rooftop space we occupy – with no capital commitment on their part because we own, operate and maintain the sytem."

John Paul, CEO
RealEnergy

San Diego Regional Energy Office

8520 Tech Way, Suite 110 • San Diego, CA 92123-4150
Toll free: 1-866-SDENERGY • Fax: (858) 244-1178
E-mail: info@sdenergy.org
www.sdenergy.org

REBATES

Self-Generation Incentive Program

Just take a look at your facility's electric bills. If you use more than 3,750 kWh per month, you're a candidate for self-generation.

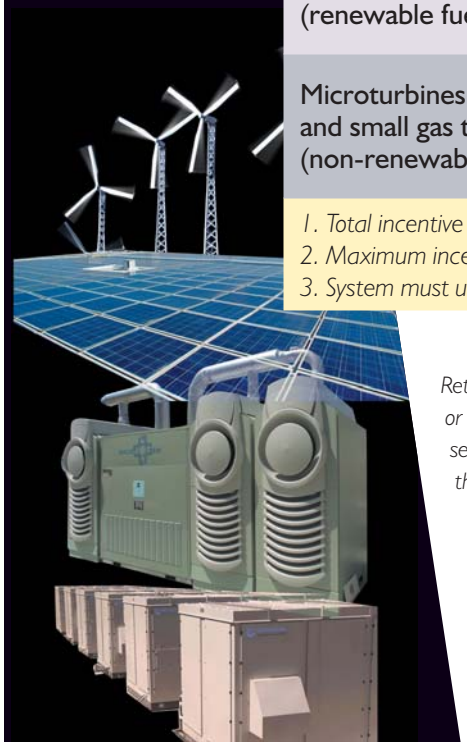
Generating your own power can lower costs, improve price stability and ensure reliable supplies. Plus if you use clean, renewable sources, you'll help reduce fossil fuel dependence and improve air and water quality.

With incentives covering up to 50% of total installation, self-generation makes good business sense and you'll be helping the San Diego region reduce its reliance on imported energy.

Incentives available for installation of qualifying equipment

Eligible Technology	Incentive ($/watt) [1]	Max. % of of Project Cost [1]	Minimum System Size	Maximum System Size [2]
Photovoltaics Fuel cells (renewable fuel) Wind turbines	$4.50	50%	30 kW	1.5 MW
		LEVEL 1		
Fuel cells (non-renewable fuel) [3]	$2.50	40%	None	1.5 MW
		LEVEL 2		
Microturbines, IC engines and small gas turbines (renewable fuel)	$1.50	40%	None	1.5 MW
		LEVEL 3-R		
Microturbines, IC engines and small gas turbines (non-renewable fuel) [3]	$1.00	30%	None	1.5 MW
		LEVEL 3-N		

1. Total incentive will be the lesser of these two amounts.
2. Maximum incentive payout capped at 1 MW.
3. System must utilize waste heat recovery meeting Public Utilities Code 218.5.



Retail electric or gas customers of San Diego Gas & Electric (SDG&E), Pacific Gas & Electric, Southern California Edison or Southern California Gas are eligible for the Self-Generation Incentive Program. The San Diego Regional Energy Office services applications within the SDG&E service territory. While residential customers are not excluded from this program, the minimum system sizes effectively limit most applications to commercial users.

San Diego REGIONAL ENERGY OFFICE

8520 Tech Way, Suite 110 • San Diego, CA 92123-4150
Toll free: 1-866-SDENERGY • Fax: (858) 244-1178
E-mail: info@sdenergy.org
www.sdenergy.org