



Regulatory Environment for CHP *Current & Future Incentives*

A  Sempra Energy utility™

Waster Heat to Power Workshop

Neena Master, Self Generation Program Manager
Southern California Gas Company
February 15, 2006

Overview

2006 CHP rebate program available in CA
Changes in store impacting CHP incentives
Translating pro-CHP policy statements to
continued support for incentives and
measures
Call to Arms

Southern California Gas Company

The SoCalGas SGIP implements programs, provides information and fosters public policies to aid the adoption of clean, renewable, sustainable and efficient energy technologies and practices.

Focus

- Energy Education
- Regional Energy Policy and Planning
- Energy efficiency and onsite generation programs

Serves as the region's independent voice on energy issues and is a trusted resource for businesses, consumers and public agencies.

Self-Generation Incentive Program

“Self-Generation,” as defined by CPUC, refers to DG technologies installed on the customer’s side of the meter, that provide electricity for a portion or all of the customer’s electric load.

Self-Gen systems must be interconnected for // operation w/utility grid to qualify for incentives.

CPUC funded program, pursuant to AB970
Statewide program administered regionally
Non-solar program components scheduled to sunset January 1, 2008
Provides financial incentives for businesses & public agencies installing ≤ 5 MW* of "clean" DG
Renewables receive higher incentives

*Max incentive 1MW.

2006 SGIP Technology Levels

Incentive Levels	Eligible Technologies	Incentive Offered (\$/Watt)	Minimum System Size	Maximum System Size ¹
Level 1 (Solar)	Photovoltaics	\$3.00/W for project "rolled over" into 2006 from the 2005 Wait List	30 kW	5 MW
		\$2.80/W for projects received after 12/15/05		
Level 2 (Renewable Non-Solar)	Wind turbines	\$1.50/W	30 kW	5 MW
	Renewable fuel cells	\$4.50/W		
	Renewable fuel internal combustion engines and large gas turbines	\$1.00/W	None	
	Renewable fuel micro-turbines and small gas turbines ³	\$1.30/W		
Level 3 (Non-Renewable Non-Solar)	Non-renewable fuel cells ²	\$2.50/W	None	5 MW
	Non-renewable & Waste Gas fuel micro-turbines and small gas turbines ^{2,3,4}	\$0.80/W		
	Non-renewable & Waste Gas fuel internal combustion engines and large gas turbines ^{2,3,4}	\$0.60/W		

1 Maximum incentive payout capped at 1MW

2 System must utilize waste heat recovery meeting Public Utilities Code 218.5

3 Small Gas Turbines are defined as gas turbines < 1.0 MW

4 System must meet AB1685 Emissions standards



Statewide SGIP Statistics

Where are we now?

Technology	Projects			Total (kW)		
	Active	Installed	Total	Active	Installed	Total
IC Engine (renewable)	12	1	13	8,466	500	8,966
IC Engine (non-R)	100	115	215	65,746	76,263	142,009
Microturbine (renewable)	8	10	18	1,599	1,670	3,269
Microturbine (non-R)	51	63	114	10,357	9,535	19,892

Updated November 2005

www.sdenergy.org/selfgen



A Sempra Energy utility

2006 SGIP Budget (in millions)

	Budget by IOU Service Territory				Total
	PG&E	SCE	SDG&E/ SDREO	SoCalGas	
Admin/M&E	\$19.20	\$13.45	\$5.45	\$4.40	\$42.50
Level 1	\$136.80	\$101.55	\$39.75	\$29.40	\$307.50
Level 2	\$18.00	\$9.75	\$4.65	\$5.10	\$37.50
Level 3	\$18.00	\$9.75	\$4.65	\$5.10	\$37.50
Total Budget	\$192.00	\$134.50	\$54.50	\$44.00	\$425.00



Possible SGIP Changes on Horizon: Unanswered Questions

3 cost-benefit tests may serve as minimum hurdle to qualify for rebate

- Participant | Non-participant | Societal

PMGs still to be ruled on at CPUC

What happens after 2007?

- Solar program to be stand alone 10-year CSI
- Will there be continued non-solar, renewable and non-renewable rebate programs?
- Will dedicated long-term program be applied to other onsite generation?



Positive State Level Support for CHP

Energy Action Plan (EAP)

- Implementation Roadmap for state's energy policies
- Established "preferred loading order"

Integrated Energy Policy Report (IEPR)

- Policy Blueprint to direct State's Energy Future

Several Pro-CHP Recommendations in IEPR

- Separate CHP from DG in next EAP so CHP issues/strategies not subsumed by broader DG topic
- Translate goal of 5,400 MW of CHP by 2020 into yearly IOU procurement targets



IEPR CHP Recommendations cont'd

Improve access to wholesale energy markets and ability to secure long-term utility contracts.

Compensate IOUs for revenue shortfalls to make them neutral to deployment of DG/CHP.

Require utilities to design and construct distribution systems more DG/CHP compatible.

Explore production credits for CO2 reductions provided by CHP.

Direct utilities to provide transmission and distribution capacity payments for CHP projects.



More IEPR Recommendations

Addressing natural gas:

- Diversify NG supply portfolio w/LNG & other sources (e.g. biomass gasification, landfill gas, agricultural gas, and underground gaseous reservoirs).
- To increase natural gas efficiency, CHP facilities should play a larger role in meeting electricity supply needs.

Addressing water-energy relationship:

- Pursue cost-effective water efficiency opportunities that produce energy savings, especially in SoCal
- Increase generation from water system, including in-conduit hydropower and biogas recovery

We Want You!

High state level impetus for increased CHP exists, but must be translated into continued support

Stakeholders can build on current momentum and seek continued support for CHP

Ways to Get Involved

Legislative Arena

- Support DG legislation
- Meet with energy committee members /staff
- Frame CHP message in context of implementing state directives

Regulatory Arena:

- Join CPUC DG service list (R.04-03-017)
- File comments (as appropriate)
- Meet with Commission staff

Governor's Office

Thank You!

Contact information:

Neena Master, SGIP Program Manager

Tel. 213-244-4104

nmaster@semprautilities.com

www.socalgas.com/business/selfgen