

2005 SELF-GENERATION INCENTIVE PROGRAM (SGIP)



Presented to: ***CSC Solar Forum
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Topics

- Program Overview
- Program Changes for 2005
- New Incentives
 - CPUC Decision(s)
 - December 16, 2004
 - February 24, 2005?
- Public Workshop



Program Overview

- Result of the 2000-2001 Energy Crisis
- Initiated by Assembly Bill 970 ('01 – '04)
- Extended by Assembly Bill 1685 ('05 – '07)
- Statewide program
- Four Program Administrators:
 - SoCalGas
 - Southern California Edison (SCE)
 - Pacific Gas & Electric (PG&E)
 - San Diego Regional Energy Office (SDREO)



Overview

- Level of incentive funding varies with generation technologies
 - Funding Level 1:
 - Photovoltaic (solar power)
 - Wind turbines
 - Fuel Cells on renewable fuel
 - Funding Level 2:
 - Fuel Cells on non-renewable fuel
 - Funding Level 3R and 3N:
 - Micro-turbines
 - Small Turbines
 - IC engine generators
 - Turbines



Overview

■ Eligibility:

- Customers of California IOUs:
 - SoCalGas, SCE, PG&E, SDG&E

- Customers served by both a Municipal Owned Utility (MOU) and IOUs:
 - Long Beach Gas & SCE
 - Anaheim and SoCalGas
 - SMUD & PG&E

- Contractors and ESCO's, with clients which are customers of the above utilities.

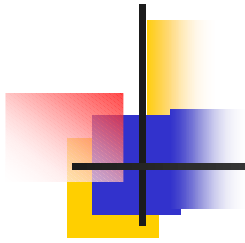
- Power to be consumed by the Host Customer



Overview

- Not Eligible

- Customers on interruptible or curtailable electric rate schedules
- Electric Utilities
- Exporting or Wheeling of power
 - Except Net-Energy-Metering applications
- Over the fence applications
 - Demonstration units
- Backup generation equipment
- Diesel fired equipment
- Equipment funded by research dollars



Program Changes for 2005



Program Changes for 2005

- Incentive Rates

- Straight \$/watt (no longer a percentage of Project Costs)
- Incentive table shown later

- “Other Incentives”

- Other Incentives still allowed with the SGIP
- Projects with “Other Incentives”, received a reduced SGIP incentive
- Total Incentives may not exceed “Eligible Out-of-Pocket” costs
- Performance Based Incentives (PBI) not allowed with the SGIP



Program Changes for 2005

- Maximum Project Size – 5MW
 - Maximum Incentive at 1 MW
 - Maximum 1 MW per Project Site for program duration

- Annual Corporate Limits Raised or Removed?
 - Raised from 1 MW to 4 MW 12/16/04
 - Removed 2/24/05?

- Proof of Project Advancement Milestone
 - OLD – 90 days w/ extensions up to 90 additional days
 - NEW – 60 Days, no exceptions. Only a Public Entity may be granted a 60 day extension



Program Changes for 2005

- Proof of Project Cost and Payment
 - OLD - Requires, contracts, P.O.s, invoices & canceled checks
 - Still required for projects with reservation numbers of 2001, 2002, 2003 or 2004
 - NEW - Affidavit of Projects Costs
 - Applies to projects with reservation numbers of 2005



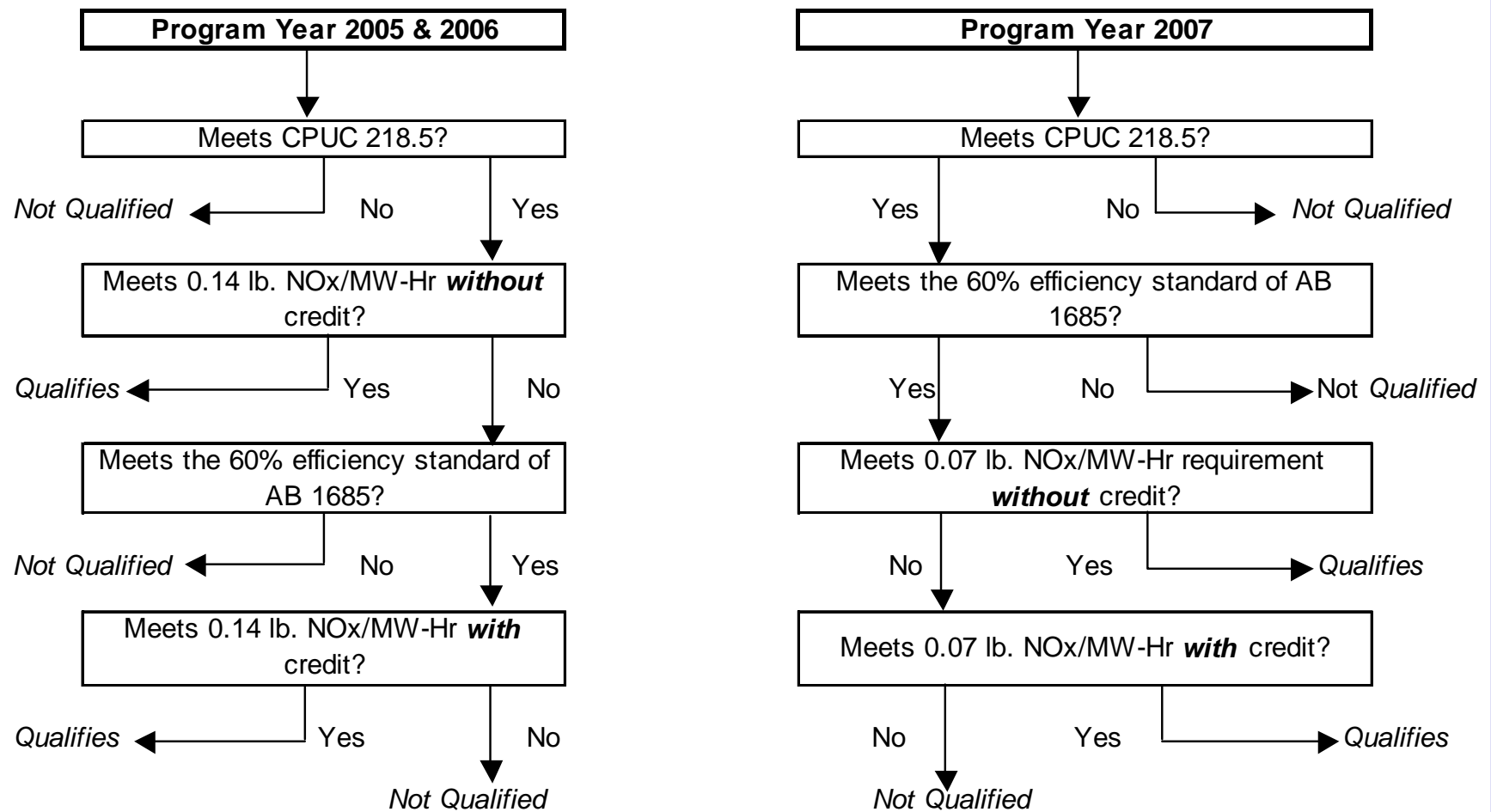
Level 3N - Eligibility Changes

- Natural Gas Users
- CPUC 218.5 (FERC 42.5%) still applies
- 2005 & 2006 Emissions Requirement
 - 0.14 lbs NOX per MW-Hr (~1/3 of current SCAQMD standard)
- 2007 Emissions Requirement
 - 0.07 lbs NOX per MWh
- Emissions Credit for Waste Heat Utilization
 - If 2005 project meets a 60% minimum system efficiency, then project earns an emissions credit using prescribed formula
- 2007 projects must meet 60% minimum system efficiency

Level 3N Flowchart

System Efficiency and Emissions Eligibility Flowchart

for all combustion-operated distributed generation projects using fossil fuels





Level 2 Fuel Cells

- No Eligibility Changes
- CPUC 218.5 (FERC 42.5%) still applies
- No minimum size



Level 1 -

PV, Wind Turbines & Fuel Cells

- No Eligibility Changes
- 30 kW minimum size for:
 - PV
 - Wind Turbines



New Incentives

CPUC Decision 12/16/04

Fuel Source	Technology	Incentive (per watt)
Renewable	<u>Level 1</u> <ul style="list-style-type: none"> ■ Fuel Cells ■ Photovoltaics 	\$4.50 \$3.50, decreasing to \$3.00 on 1/1/2006
	<u>Level 3R</u> <ul style="list-style-type: none"> ■ Microturbines ■ Wind Turbines ■ Internal Combustion Engines 	\$1.30 \$1.00 \$1.00 \$1.00
Non-renewable	<u>Level 2</u> <ul style="list-style-type: none"> ■ Fuel Cells 	\$2.50
	<u>Level 3</u> <ul style="list-style-type: none"> ■ Microturbines and Gas Turbines ■ Internal Combustion Engines 	\$0.80 \$.060

CPUC Decision 02/24/05?

Fuel Source	Technology	Incentive (per watt)
Renewable	<p><u>Level 1</u></p> <ul style="list-style-type: none"> ■ Fuel Cells ■ Photovoltaics ■ Wind Turbines <p><u>Level 3R</u></p> <ul style="list-style-type: none"> ■ Microturbines ■ Internal Combustion Engines 	<p>\$4.50</p> <p>\$3.50, decreasing to \$3.00 on 1/1/2006</p> <p>\$1.50</p> <p>\$1.30</p> <p>\$1.00</p>
Non-renewable	<p><u>Level 2</u></p> <ul style="list-style-type: none"> ■ Fuel Cells <p><u>Level 3N</u></p> <ul style="list-style-type: none"> ■ Microturbines and Gas Turbines ■ Internal Combustion Engines 	<p>\$2.50</p> <p>\$0.80</p> <p>\$0.60</p>



Public Workshop



Public Workshop & Concerns

- Program Administrator Summary Data Format
- Statewide Project Specific Data
- Declining Rebate Structure by Technology and Exit Strategy
- Comments due February 28, 2005
 - Submit to me at: aprietto@semprautilities.com

Program Administrator Summary Data Format

Concerns

- Include waitlisted projects
- Define terms

This table holds sample data only (PG&E as of mid Jan. 2005)

		Level 1 - Photovoltaics, wind turbines, fuel cells	Level 2 - Fuel cells (using non- renewable fuel, such as natural gas)	Level 3N, 3R Microturbines, internal combustion engines and small gas turbines
Original Budget (2001, 2002, 2003, 2004, 2005)*		\$82.0	\$82.0	\$82.0
Reallocated budgets		\$105.2	(\$60.5)	(\$18.7)
Total Budget (Original + Reallocated)		\$187.2	\$21.5	\$63.3
Paid Projects	# of Projects	143	2	43
	MW	16.1	0.8	24.7
	\$ (in Millions)	\$62.5	\$2.0	\$15.1
Active Projects	# of Projects	134	3	103
	MW	23.7	1.5	41.6
	\$ (in Millions)	\$92.2	\$3.5	\$32.0
Available 2005 Funding**		\$32.5	\$16.0	\$16.2
Projects on the Wait list	# of Projects	84	0	0
	\$ (in Millions)	\$51.5	\$0.0	\$0.0



Statewide Project Specific Data

■ Required Fields per CPUC decision

Currently Reported:

- Program Year
- Status
- Incentive Level
- Technology
- Fuel Type
- Equipment (manufacturer and model)
- Capacity Size (kW)
- \$/Watt

Fields to be Reported per CPUC Decision:

- Electric Utility
- Inverter (manufacturer and model), where applicable
- Installed Cost
- Applicant/Installer Name (Confidentiality Concerns)
- Facility City
- Facility Zip

■ Additional Fields For Consideration

- Date of Incentive Payment
- Utility Name
- Other Incentives
- Program Administrator

System Cost Table

- Level 1 Photovoltaics, January 2005

LEVEL 1 (Photovoltaics)		Statewide SELFGEN Projects to Date									
		Total # Projects	Total kW	System Size				\$/Watt Installed			
System Size	Status			Low	Avg	High	St. Dev.	Low	Avg	Median	High
< 50	Complete	139	5,027	30	36	50	6	\$ 4.71	\$ 8.83	\$ 9.00	\$ 15.47
	Active	163	5,950	25	37	50	6	\$ 5.60	\$ 8.90	\$ 9.00	\$ 13.44
51 - 100	Complete	55	3,994	51	73	100	16	\$ 4.93	\$ 9.03	\$ 8.91	\$ 16.21
	Active	127	9,295	50	73	100	13	\$ 3.10	\$ 9.16	\$ 8.99	\$ 28.21
101 - 200	Complete	46	6,552	100	142	200	38	\$ 4.73	\$ 8.38	\$ 8.13	\$ 15.90
	Active	109	15,188	100	139	200	32	\$ 3.89	\$ 8.84	\$ 8.97	\$ 15.91
201 - 500	Complete	27	8,626	201	319	480	93	\$ 4.64	\$ 7.59	\$ 7.89	\$ 9.05
	Active	71	21,448	200	302	497	91	\$ 6.40	\$ 8.55	\$ 8.68	\$ 13.59
501 +	Complete	9	6,702	521	745	1,050	215	\$ 4.51	\$ 7.97	\$ 7.57	\$ 11.45
	Active	33	26,893	513	815	1,000	191	\$ 5.76	\$ 8.23	\$ 8.49	\$ 9.70
Total Completed		276	30,902								
Total Active		503	78,773								
Total Programs		779	109,675								

Statewide Project Specific Data

- *Concerns*

- Customer specific Information (name, address, phone, etc.)
- Installer/Contractor information
- Other incentives
- Inclusion of Rejected and Withdrawn projects
- SIC Code
- Project Milestones Dates

Exit Strategy & Declining Incentives

- *Questions*

- Factors to be considered?
 - Hi/Med/Lo
- PBI vs. Lump Sum?
- Auction approach?
- Locked or Re-evaluated later in time ?
- Differentiate by size, customer, owner, etc.?
- Influence of Other incentives/benefits:
 - RECS?
 - Tax Credits?
 - Net metering?
 - Rate exemptions?
- Borrow from future program years?

Declining Rebates & Exit Strategy - *Recommendations*

Effective Dates	12/16/04	1/1/06								1/1/15
Level/Technology										
Level – 1										
Perf. Based (y/n)										
o Photovoltaic	\$3.50	\$3.00								\$0.00
o Fuel Cells	\$4.50									\$0.00
o Wind Turbines	\$1.00*									\$0.00
o										
Level – 2										
Perf. Based (y/n)										
o Fuel Cell	\$2.50									\$0.00
o										
Level – 3R										
Perf. Based (y/n)										
o Micro-Turbines	\$1.30*									\$0.00
o IC Engines	\$1.00*									\$0.00
o Turbines	\$1.00*									\$0.00
o										
Level – 3N										
Perf. Based (y/n)										
o Micro-Turbines	\$0.80									\$0.00
o IC Engines	\$0.60*									\$0.00
o Turbines	\$0.60*									\$0.00

Exit Strategy & Declining Incentives - *Concerns*



- Don't lower incentives
- More money to the program
- PBI: Both Yes and No
- Auction Incentives
- Reservation Fees
- Use a formula and update annually
- Link with and consider other regulatory and legislative issues



Availability of Documents

- All documents can be downloaded from SGI P website:
<http://www.socalgas.com/business/selfgen/>
- Available Funds
- Website has two sets of documents
 - 2004
 - 2005
- Statewide Project Specific Data
- Public Workshop Presentation



QUESTIONS??

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