# **CPUC Distributed Generation** and Feed-In Tariff Programs

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## **Customer Generation Programs**

### Programs:

- Self-Generation Incentive Program (SGIP)
- California Solar Initiative (CSI)

#### Characteristics:

- Incentives for capacity "behind the meter"
- Projects Sized to Customer Load
- Exempt from Interconnection costs
- Net Energy Metered
- Renewable self generation exempt from standby charges



## Utility Procurement Programs

- Qualifying Facilities (QFs)
  - CPUC approved a series of std. offer contracts in 1980s at "avoided cost", PURPA (1978)
    - Installed 8,600 MW of capacity, CPUC suspended program due to oversubscription in 1985
  - New std. offer QF contracts authorized by D.07-09-040 at revised avoided cost formula
- Renewable Portfolio Standard (RPS)
  - Competitive Solicitations
  - Bilateral Contracts
    - Includes standard offer contracts for the sale of energy from a qualifying DG facility to the utility grid (ex. SCE's biomass Std. offer)
- Small Renewable Energy Generation Tariffs
  - AB 1969 (Yee) Renewable Feed In Tariff (FiT)
  - AB 1613 (Blakeslee) CHP FiT

## Utility Procurement Programs

#### Characteristics:

- Energy and Capacity used to meet utility procurement obligations
  - Energy can be scheduled in CAISO markets
  - Resource Adequacy can be counted as supply
- Projects located at end-use customer sites are sized larger than onsite load requirements
- CPUC Rule 21 and/or FERC Interconnection rules apply
- Generator paid based on terms of contract and cost to utility included in "generation" portion of electricity rates

# **Small Renewable Energy Generation Tariffs**

- CPUC approved feed-in tariffs for small renewable generators in February 2008
  - Originally authorized by AB 1969 (Yee, 2006) for generators (<1.5 MW) owned by public water and wastewater facilities</li>
  - Facilitates a streamlined interconnection process
- Expanded to include "all customers" of three IOUs
  - PG&E, SCE, and quite recently SDG&E
- Statewide cumulative capacity up to 498 MW
  - allocated proportionally by share of total peak demand, per statute
- □ Two contract options under FiT (depending on customer's choice):
  - Full sale of production
  - Excess sales (after onsite usage)

## Small Renewable Energy

### Generation Tariffs - Price

- Rate is determined by Market Price Referent (MPR) with Time of Delivery (TOD) adjustments
  - MPR as AB 1969 feed-in tariff price was set by law
  - Reference point of MPR is set by law as a new combined cycle gas plant

 In AB 1969, MPR (and annual number) is adjusted for season and time of delivery

	15 Yr. Annual Average (\$/kWh)	
IOU	MPR	Solar Estimate*
		Estimate
PG&E	\$0.09	\$0.11
SCE	\$0.09	\$0.13
SDG&E	\$0.09	\$0.11

\*Solar produces largely on peak so receives a slightly higher average rate



## Small Renewable Energy Generation Tariffs- Under Consideration

- □ CPUC R.08-08-009 is currently considering:
  - Expansion of installation size cap between
     1.5 MW and 20 MW considered
  - Counting excess sales toward program limits
  - Expansion of FiT to third-party ownership of RPS eligible facilities



## AB 1613 (Blakeslee) CHP Feed-in-Tariff

- FiT for new Combined Heat and Power DG under consideration in R.08-06-024
- Fixed or variable price to be determined by the CPUC
- Facility Eligibility:
  - □ CHP up to 20MW
  - CHP systems must be sized to meet customer's thermal load. There is no requirement that CHP systems be sized to the customer's electric load. Thus, oversized systems (from an electric perspective) are permitted.
  - Only "new" CHP systems (installed after January 1, 2008) are eligible.
  - NOX emissions limit of 0.07 pounds per MWh



## **RPS Program**

### **Standard Offer Contracts**

- SCE currently has standard offer contracts for biomass projects up to 20MW in size available under its RPS contracting authority
  - Price set at the MPR
  - □ 3 contracts offered: <1 MW, 1-5 MW, 5-20MW</p>
  - 5- 20 MW contract includes performance and development security requirements
- SCE proposes in its 2009 RPS procurement plan to expand standard offer contracts to all renewable technologies

2 contracts will be offered: 1.5-5 MW and 5-20 MW