An Energy Efficiency Workshop & Exposition

Palm Springs, California

Investing in New Renewable Development in California

Suzanne Korosec

Manager, New Renewable Resources

Renewable Energy Program

California Energy Commission

Background

- AB 1890 set aside $540 million to support existing, new, and emerging renewables in California
- SB 90 then established the Renewable Energy Program (REP) and allocated $162 million (30% of AB 1890 funding) to support new renewables

New Renewable Resources Program

- Funding awarded through competitive auctions
- Pays cents / kWh production incentives to new renewable facilities for first five years of operation
- Renewable defined as: biomass, digester gas, geothermal, landfill gas, PV, solar thermal electric, small hydro, waste tire and wind

Auction Structure

- Renewable project developers submit bids for amount of incentive needed to compete in market, up to a max of 1.5 cents/kWh
- Developers submit detailed project description, proof of site control, and estimate of first five years of generation

Auction Structure (cont'd)

- Developers must submit 10% bid bond to demonstrate serious project
- Bids ranked from lowest incentive to highest and bids accepted until funds exhausted
- No payments made until projects are on-line and producing energy

Auction Results

Technology	# of Projects	Capacity (MW)	Average Incentive (cents/kWh)	Total Funding Awarded (millions)
Biomass	3	20	1.24	$ 8.00
Digester Gas	1	2	1.39	$ 3.00
Geothermal	4	157	1.29	$ 80.50
Landfill Gas	27	84	1.19	$ 29.00
Small Hydro	5	34	1.14	$ 5.50
Wind	40	986	0.84	$ 109.00
Waste Tire	1	30	0.65	$ 7.00
Total	**81**	**1313**	**0.93**	**$ 242.00**

On-Line Projects

- 2 biomass facilities, 11.3 MW
- 2 geothermal facilities, 59 MW
- 1 digester gas facility, 2 MW
- 11 landfill gas facilities, 31 MW
- 2 small hydro facilities, 11 MW
- 18 wind facilities, 88 MW

Post-Auction Issues

- Permitting issues
- Equipment availability
- Lack of power sales contracts
- Difficulty in obtaining financing
- Overall market uncertainty

Future Auctions

- Renewable Energy Program has been extended by legislation for 5 years at $135 m / year
- New resources allocated 50%of that
- Awaiting legislative authority to implement
- Future auctions problematic until power purchase issues resolved

Questions?

- For more information about the Renewable Energy Program:

  www.energy.state.ca.gov/renewables