



California Energy Commission

Existing Renewable Facilities Program

**Joint IEPR and Renewables Committee Workshop
on Biopower in California**

Hearing Room A

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Garry O'Neill

Renewable Energy Program

Efficiency and Renewable Energy Division

goneill@energy.state.ca.us / 916-651-0961

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Existing Renewable Facilities Program (ERFP) Incentivizes production of RPS-eligible generation from existing renewable facilities

- Existing renewable facilities must be operational prior to September 25, 1996
- Currently eligible technologies:
 - Solid-fuel biomass
 - Solar thermal
 - Wind (Currently does not require assistance.)
- Facilities are assigned a target price and cent/kWh cap on funding based on their utility contract
- Production incentives for generation that is sold below a target price
- Provides production incentives to existing renewable generation facilities.
- From 1998 through 2008, existing solid-fuel biomass facilities have received \$180M in production incentive payments

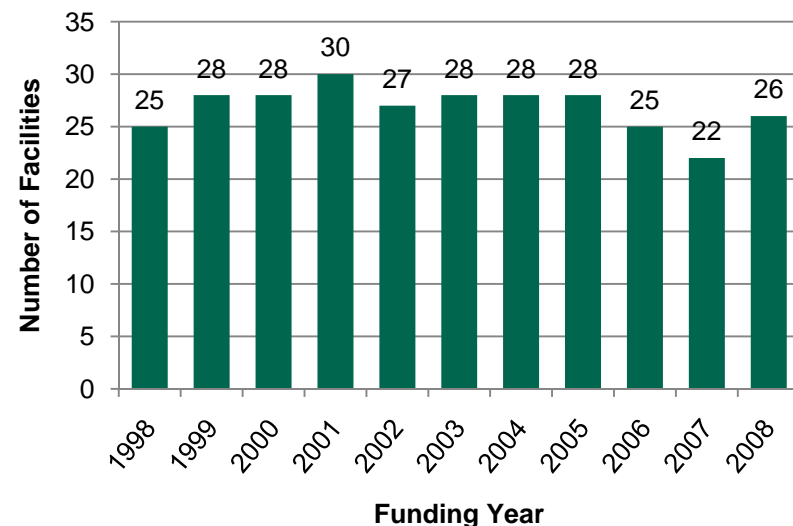


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Status of Participating Solid-Fuel Biomass Facilities

- Currently, 27 solid-fuel biomass facilities are eligible for funding from the ERFP, 26 participated in 2008.
- In 2008, Participating facilities generated 3,200 GWh and received \$14.9 M in production incentives
- Six participating facilities have gone off-line since 2001
 - One restarted in 2005
- In 2008, two solid fuel biomass facilities successfully restarted. These facilities were offline prior to the inception of the program.

Program Enrollment of Biomass Facilities



Source: California Energy Commission ERFP Database.

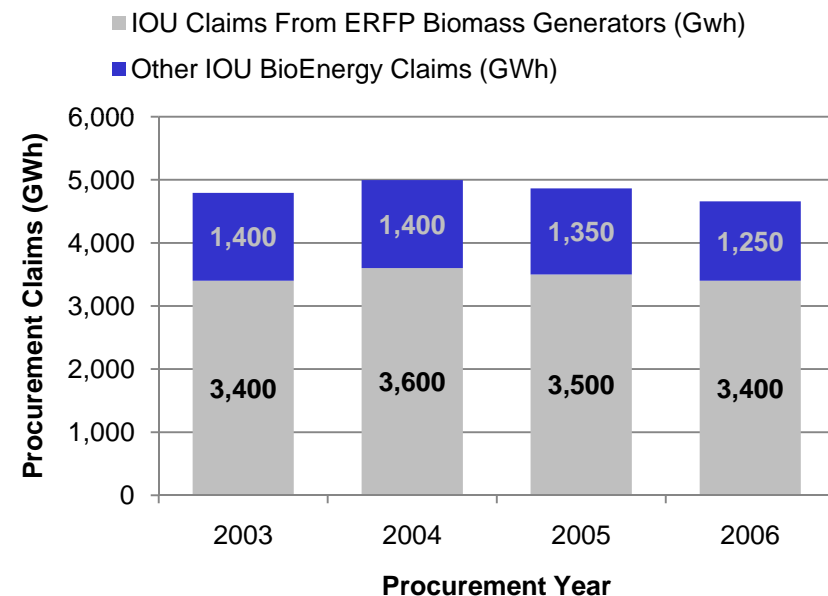


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Role of Existing Biomass in achieving California's RPS and Bioenergy Goals

- ERFP biomass facilities represent a large portion of the RPS procurement claims made by CA's 3 largest IOUs.¹
 - 70-73% of the bioenergy² claims
 - 15-16% of the total claims
- Executive Order S-06-06 requires 20% of the RPS to come from bioenergy sources by 2010/2020.

IOU RPS Procurement Claims from Bioenergy Facilities



1. IOUs include Pacific Gas and Electric, San Diego Gas and Electric, and Southern California Edison.
2. Bioenergy claims include RPS eligible biomass, biogas, landfill gas, digester gas, and MSW combustion.

Source: California Energy Commission RPS Procurement Verification Database. Data represents claims submitted to the Energy Commission as of April 10, 2009 via CEC-RPS-Track form for the purpose of verifying RPS procurement claims.



Cost and availability of fuel are barriers to a self-sustaining solid-fuel biomass industry in CA

- Statement based on information submitted on ERFP applications for funding¹
- Fuel cost for solid-fuel biomass facilities range between \$20-\$60 Bone Dry Ton (BDT)
 - Includes transportation costs
 - 1 BDT ~ 1 MWh
 - The energy price received by many ERFP facilities is \$65.90/MWh (PG&E's fixed energy price for qualifying facilities; annual average)
- Causes for increased fuel costs and other factors decreasing fuel availability
 - Decline in the timber industry
 - Decline in construction and deconstruction
 - Transportation costs and diesel prices
 - Increased competition for feedstock

1. Other barriers identified by applicants include energy price concerns and the ability to sell GHG offsets under a cap and trade program. However, these topics are beyond the scope of this workshop.



Industry-Proposed Solutions to Overcome Fuel Obstacles

- Solutions requiring statutory or regulatory changes
 - Restricting open burning of agriculture waste residue
 - Divert more green and wood waste from landfills (limit use for alternative daily cover)
 - Programs to cost-effectively utilize slash from logging and forest clearing operations
 - Eliminate the ban on federal forest-derived fuel for ERFP facilities (SB 3048, Statutes of 2008)
- Other solutions
 - Centralized fuel system or local fuel yards
 - Improving fuel processing systems to increase the variety of fuels a facility can utilize
 - Plant efficiency improvements



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Additional Information

Document Links

ERFP Eligibility Guidelines

www.energy.ca.gov/renewables/existing_renewables/index.html

RPS Eligibility Guidelines

www.energy.ca.gov/portfolio/index.html

Renewable Portfolio Standard Procurement Verification

2006 report expected to be published summer 2009

Contact: Gina Barkalow

gbarkalo@energy.state.ca.us

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(916) 651-0961

goneill@energy.state.ca.us