Update on SB 1122 Implementation
for California Bioresources Alliance Symposium 2013

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Presentation Outline

- Renewable Portfolio Standard (RPS) Program Basics and Current Status
- Overview of the RPS Feed-in-Tariff (FIT) Program
- SB 1122: Legislation Overview
- SB 1122: CPUC Implementation
- Implementation Challenges
RPS Program Basics and Current Status

RPS: A market-based program that requires all retail sellers* of electricity to procure increasing amounts of renewable energy through 2020

• The RPS program was established in statute in 2002 and currently requires retail sellers to generate 33% of retail sales from RPS-eligible sources by 2020

• The three large IOUs (PGE, SCE, SDGE) generated more than 19.5% of their energy from RPS-eligible sources in 2012

• Statutory goals include: displacing fossil fuel use in CA; building new renewable capacity; reducing GHG emissions; reliable operation of the grid; promoting stable retail rates

*Retail Sellers: Includes all investor-owned utilities, electric service providers, and community choice aggregators, in addition to the publicly owned utilities.
California’s Electric Utility Service Areas

Multiple Utility Service Territories:

- 81% Investor Owned
  - regulated by CPUC
- 19% Municipal

2012 Peak Demand:

- 63,978 MW

2012 Electricity Use:

- 293,033 GWh
The role of SB1122 within the 33% RPS:

CPUC’s Procurement Options for RPS-Eligible Resources

Large-Scale RPS Annual RFO

Bilateral PPAs

Renewable Auction Mechanism (RAM)

Utility PV Programs

RPS FIT Program

RPS-Eligible Self-Generation

Bioenergy FIT (SB1122)

RPS Distributed Generation Programs:

1,250 MW program
3-20 MW projects
Peaking / Off-Peak / Baseload
Pay-as-bid auction
Statewide, standard program

750 MW program
1-20 MW projects
PV Only
Pay-as-bid auction
IOU-specific programs
MW split between IPP and UOG

750 MW (IOUs: 494 MW; POUs: 256 MW)
0-3 MW projects
Peaking / Off-Peak / Baseload
Standard offer, market-adjusting pricing
Statewide, standard program

250 MW program
0-3 MW projects
Bioenergy projects only
\ 50 MW wastewater, food
\ 90 MW dairy and other ag
\ 50 MW sustainable forest

(Implementation Pending)
The RPS FIT Program is codified in Section 399.20 of the Public Utilities Codes and has been amended several times in recent years.

  - **Program Size:** 500 MW
  - **Eligibility:** projects up to 1.5 MW
  - **Price:** MPR (benchmarked to cost of a natural gas facility)

  - **Program Size:** 493 MW for IOUs (of which 237.7 MW remain)
  - **Eligibility:** projects up to 3 MW
  - **Price:** Renewable Market Adjusting Tariff (Re-MAT)

- **SB 1122 (2012) – FIT for Bioenergy** *(implementation pending)*
  - *More information on the next slide…*
SB 1122: Legislation Overview

SB 1122 sets aside a 250 MW carve-out for new bioenergy facilities within the RPS FIT program.

- **SB 1122 (2012) – FIT for Bioenergy**
  - **Program Size:** 250 MW
  - **WWTP, Food waste, organic waste, codigestion:** 110 MW
  - **Dairy and Ag Bioenergy:** 90 MW
  - **Forest Biomass:** 50 MW
  - **Eligibility:** projects up to 3 MW
  - **Price:** ReMAT (more on the following slide)

**Note:** For the 50 MW of forest biomass, SB 1122 directs the CPUC to determine the allocation of those MWs based on the resource potential from sustainable forest management in fire threat treatment areas, as designated by Cal Fire.
Overview of the ReMAT Pricing Mechanism

Key Elements:

• **Current Starting Price:** $89.23/MWh (pre-TOD)

• **Price Adjusts:** Every two months, price may adjust depending on market subscription levels at the previous offered price.

• **Adjustment:** If conditions for an adjustment are met, price adjusts by +/-$4, then by +/-$8, then by +/-$12 for successive adjustments. Max adjustment = +/-$12

• **Min. Participants:** Price adjusts only if 5+ projects in a given market segment participate during a period.

For more information, see Section 6 of D.12.05.035
SB 1122: CPUC Implementation

• CPUC’s Energy Division released a **draft consultant study** titled, “**Small-scale Bioenergy: Resource potential, costs, and feed-in tariff implementation.**” (April 2013)

• CPUC’s Energy Division staff held an **informal workshop** with stakeholders to solicit input on the draft consultant study. (May 2013)

• Post-workshop **written responses from parties** submitted to Energy Division staff, focused on documenting alternative sources of resource potential and constraints and SB 1122-eligible technology costs. (June 2013)

• **Next Steps:**
  o Energy Division’s **Staff Proposal** on SB 1122 will be issued for party comment.
  o A **proposed decision** on SB 1122 will be issued for party comment.
  o CPUC will adopt a **decision** to implement SB 1122.
Implementation Challenges Identified by Consultant Study and Workshop

• **Policy Challenges:**
  o The infancy of the small-scale bioenergy market may not result in robust market competition when the Bioenergy FIT program launches.

• **Location Challenges:**
  o Section 399.20 requires projects to be “strategically located,” defined by the CPUC as a project not having transmission upgrade costs in excess of $300k. SB 1122 now mandates the procurement of specific types of bioenergy projects that may need to be sited in locations that are not close to load.

• **Resource Challenges:**
  o The terminology used to describe the bioenergy categories in SB 1122 are not consistent with definitions provided in the CEC RPS Eligibility Guidebook.
  o Bioenergy resources are unevenly distributed across California, but SB 1122 mandates procurement targets based on each IOUs share of statewide peak demand, not based on resource availability.
  o CalFire has not defined “sustainable forest management,” and has organized an informal working group in an effort to do so.
More Information

CPUC RPS Website:
http://www.cpuc.ca.gov/renewables

CPUC Feed-in-Tariff:
http://www.cpuc.ca.gov/PUC/energy/Renewables/hot/SB_1122_Bioenergy_Feed-in_Tariff.htm

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