



California's Feed-in Tariff (FiT) Experience

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California's FiT: Background

- A feed-in tariff (FiT) is a policy mechanism designed to accelerate investment in renewable energy by offering standardized long-term contracts to energy producers at a pre-established price
 - ▶ California uses the FiT to encourage small distributed generation renewable facilities up to 3 MW
 - ▶ Available on a first-come, first-served basis to facilities using qualified renewable technology
 - ▶ Total program size: 750 MW over the next two years
 - ▶ Capacity currently online: 22.6 MW
 - ▶ Capacity under contract and in development: 174.3 MW

Qualified renewable technologies in California are:

Photovoltaics, solar thermal, wind, biomass, geothermal, small hydro, ocean wave, thermal, tidal energy, fuel cells using renewable fuels, landfill gas, and municipal solid waste conversion



Determining Pricing for the FiT

- Most controversial aspect of designing the FiT
- Stakeholders debated administratively-set price versus market models
- Final result: a price based on the results of the Renewable Auction Mechanism, a reverse auction for small renewable facilities
 - ▶ Price will adjust every month
 - up or down by \$4/MWh in the first month
 - up or down by \$8/MWh in the second month
 - up or down by \$12/MWh in the third month
 - ...and so on
 - ▶ Price individual to each utility and three product categories
 - Baseload, peaking, and as-available
 - ▶ Starting price: \$89.23/MWh
- All FiT prices are adjusted by Time-of Day factors to encourage delivery during peak times



Implementation of the FiT

- **Performance assurance**

- ▶ Contract language includes Guaranteed Expected Production clause that requires the facility to deliver a certain minimum percentage of its expected annual output
- ▶ Inability to deliver the stated minimum results in financial penalties

- **Evaluation of regulation**

- ▶ The newly-expanded FiT program will run for two years
- ▶ If it is successful, the California Legislature may choose to expand it further

- **FiT as part of California's renewable efforts**

- ▶ California's three major utilities, which serve 68% of the state's load, are responsible for 500 MW of the FiT
- ▶ These three utilities have 25,000 MW of renewable capacity currently contracted, about half of it currently delivering
- ▶ FiT is currently a small portion of California's renewable procurement



Resources

- California Public Utilities Commission's Feed-in Tariff page:
<http://www.cpuc.ca.gov/PUC/energy/Renewables/hot/feedintariffs.htm>
- California Public Utilities Commission's latest decision on the Feed-in Tariff (May 24, 2012):
http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/167679.pdf
- Division of Ratepayer Advocates' report on renewable programs, including the Feed-in Tariff:
http://dra.ca.gov/uploadedFiles/Content/Energy/Renewable_JungleRevisedJan31FINAL.pdf

