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*Since the beginning of the 1900s,
Breathe California has fought for
clean air, healthy lungs
and the elimination of lung disease
in California.*



October 10, 2008

California Energy Commission
Dockets Office - No. 08-IEP-1 and No. 03-RPS-1078
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DOCKET

03-RPS-1078

DATE OCT 10 2008

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RE: Renewable Energy "Feed-In" Tariffs Workshop:
Preparation of the 2008 Integrated Energy Policy Report Update
and the 2009 Integrated Energy Policy Report (Docket 08-IEP-1);
Implementation of Renewables Portfolio Standard Legislation
(Docket No. 03-RPS-1078)

Energy Commission Policy Support for Feed-In Tariffs

Global concern over climate change and the reliability of conventional sources of electricity generation such as natural gas and coal have revived discussion of regulatory tools to provide significant incentives for renewable energy resources such as solar, wind, and sustainable biomass. In addition to health concerns regarding criteria pollutants emitted by conventional sources of electricity, global climate change poses significant public health impacts including increased asthma and lung disease due to increased ozone concentrations as the temperature rises.

The feed-in tariff can work as a mechanism to ensure compliance with the RPS by establishing a tariff requiring utilities to purchase renewable energy from small generators in their service area at fixed rates per kilowatt-hour (kWh) and requiring standard-offer must-take contracts for utility purchase of the generation. A feed-in tariff is not without cost, but many countries have successfully used a feed-in tariff to achieve cost-effective development of renewable energy. The Energy Commission should continue to provide policy direction and support toward implementing a feed-in tariff that will be effective in meeting California's renewable energy and other important sustainability policy goals.

The feed-in tariff has been enacted in several countries, most notably Germany and Canada (Ontario), and a total of 18 of the 25 European Union member States.¹ Feed-in tariff legislation has been introduced in the United States Congress, California, Hawaii Illinois, Michigan, Minnesota, and Rhode Island. Although capped at 478 MW state-wide, the California Public Utilities Commission recently approved a limited feed-in tariff for renewable energy projects up to 1.5 MW at the "market price referent", pursuant to AB 1969.

¹ Klein, Held, Ragwitz, Resch, Faber. Evaluation of Different Feed-In Tariff Design Options - Best Practice Paper for the International Feed-In Cooperation. 10 (2006).

Benefits of a Feed-In Tariff

- **Effective Implementation of RPS** – A feed-in tariff is an effective mechanism to achieve a portion of RPS targets, and can greatly assist smaller projects that face significant obstacles in the existing RPS bidding process, securing financing, or relying on future renewable energy credit prices. A feed-in tariff establishes terms for long-term contracts for utilities to purchase renewable energy, typically from small customer-generators, at rates that guarantee a feasible or reasonable return for the specific renewable energy source. By establishing a FIT aimed at smaller projects as part of a comprehensive strategy, utilities can acquire numerous smaller projects that will contribute to achieving the RPS requirement. Currently, only 12 percent of California’s electricity is generated by renewable sources, but the RPS mandate is 20 percent by 2010.² The state’s energy agencies and the Governor have also set a goal of achieving 33 percent renewables by 2020, which is also recommended in the draft CARB scoping plan. The FIT may be designed to work together with an RPS, by requiring new standard-offer must-take contracts only until the point where a jurisdiction achieves the RPS. The FIT encourages early development of renewables, so that RPS targets are met in advance of the target deadline, rather than after.
- **Overcomes Barriers of Long-Term Security** - In contrast to net metering, feed-in tariffs for renewable energy pay for all generation produced, and pay a tariff independent of the retail price of electricity, which is generally not a sufficient incentive to produce significant development of solar or other small-scale renewables. Feed-in tariffs offer improved financial security for customer-generators through long-term contracts, greater security with grid interconnection, and encourage continued maintenance and maximum output and efficiency by paying for electricity generated rather than a portion of capital costs.
- **Tailored to Specific Technologies and Applications** – Although the FIT is one regulatory tool, it can be specially tailored to reflect different costs and output dynamics of specific technologies and applications, such as geographic and time-based differences for solar and wind generation, or industry-specific biomass applications.
- **Distributed Generation** – A feed-in tariff promotes distributed generation of solar, wind, and biomass, and the distribution of small sources improves grid efficiency.
- **Green Jobs** - In the European Union, and Germany in particular, the feed-in tariff has been highly successful in stimulating significant development of renewable energy and green-collar jobs. It has brought together coalitions across the political spectrum including investors, farmers, labor unions, and environmentalists.

² Draft Scoping Plan Appendices, California Air Resources Board, C-76, 2008.

- **Degression Rates Promote Technology Improvements** – Many countries gradually lower contract rates for new installations over time to promote technology improvements, encouraging new research, investment, and efficiency.

Option 6 as Preferred Policy Path

- **Development of Full Market of Renewable Energy** – There are underutilized opportunities across the renewable energy market. Including the full market supports resource diversity and increased development of renewable energy.
- **FIT implemented early to achieve RPS targets, not after Noncompliance** – The rate of deployment for renewable energy projects under contract is too low to help predict successful achievement of RPS targets. Early implementation of the FIT will promote early achievement of California renewable energy goals.
- **20 MW Reasonable Project Size Limitation Due to Current Transmission Capacity** – Until greater transmission is planned, the proposed 20 MW project size limitation is reasonable. The California ISO representative testified that the grid will be able to accommodate this capacity without significant infrastructure needs, but could not make this claim for projects larger than 20 MW at this time.
- **Long-Term 20-year Standard-Offer Must-Take Contracts** – Reliable revenue and predictable streamlined processes are key incentives for developers to secure financing and assume project development risk. A short or medium-term contract would not provide these critical incentives. Although unlikely, developers would still have the option of proposing projects under the RPS solicitation process.
- **Differentiation by technology and size** – Tariff differentiation allows for a FIT program to maximize cost-effectiveness, and incentives that are proportional to costs that vary by technology, size. Differentiation should also consider installation technique as has been done in Europe, for example: resource potential in the case of solar and wind, building position in the case of solar, and fuel in the case of sustainable biodiesel.

Solar Industry Considerations

California and the United States already have a beginning system of incentives for solar development that should be maintained and supplemented.

To ensure there is no entanglement between a feed-in tariff and the California Solar Initiative, which is encouraging the development of behind-the-meter solar facilities of 1 MW and under, FIT offers for solar facilities should require a dedicated meter, and be targeted for projects up to 20 MW. The FIT represents an important niche in a market segment that does not currently have a sufficient incentive. If existing CSI incentives need additional strengthening, a FIT rate sufficient to cover costs could supplement choices available to customer-generators.

Ontario, Canada has also developed a mechanism to reflect national tax credits in its standard offer contract program. Since the national tax credit system is unreliable, it is important that the tariff provide for scenarios that reflect the impact of the federal

incentives.

Sustainability Concerns Regarding Biomass

While the FIT program can provide a needed incentive for sustainable biomass, especially for California's organic waste diversion goals, it is important to carefully consider applications that maximize sustainability indicators, and enforcement mechanisms. Such considerations should include limiting the program to fuels and processes that are climate-neutral (i.e. anaerobic digestion, but not wood incineration), and consider restrictions, incentives, or planning considerations to provide that locally-generated fuels are used locally rather than fuels being unnecessarily carried a long distance.

Feed-in Tariff Cost Considerations

Statewide Sharing Among Utilities - Germany and other countries adopt a state-wide sharing mechanism, rather than allotments by each utility service area. This provides for an equitable sharing of costs so one utility does not experience a disproportionate burden, and does not artificially limit renewable energy development in a particular service area.

Use of carbon credit sale proceeds – The KEMA presentation suggested that FIT program costs in Germany are low. Still, there may be equity and consumer justification for mitigating costs. Depending on AB 32 implementation, the carbon credit sale may be a long-term source to consider covering costs of the FIT program.

Periodic review of rates – Rates should be periodically reviewed administratively to ensure adequate incentive levels and for cost-effectiveness.

Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink that reads "Andy Katz". The signature is written in a cursive, flowing style.

Andy Katz
Government Relations Director