

**CALIFORNIA ENERGY COMMISSION**1516 Ninth Street  
Sacramento, California 95814Main website: [www.energy.ca.gov](http://www.energy.ca.gov)

<b>Preparation of the 2008 Integrated</b>	)	<b>Docket 08-IEP-1</b>
<b>Energy Policy Report Update and the</b>	)	
<b>2009 Integrated Energy Policy Report</b>	)	
	)	
<b>and</b>	)	
	)	
<b>Implementation of Renewables</b>	)	<b>Docket No. 03-RPS-1078</b>
<b>Portfolio Standard Legislation</b>	)	<b>RPS Proceeding</b>

## Notice of Staff Workshop: Renewable Energy "Feed-In" Tariffs

The California Energy Commission's (Energy Commission) Renewable Energy Office will conduct a staff workshop concerning the use of feed-in tariffs in California. The specific purpose of the workshop will be to take public comment on the challenges and opportunities associated with the possible expansion of the use of feed-in tariffs as a mechanism to increase renewable electricity generation in California.

Two Energy Commission Committees oversee the work on this subject at the Energy Commission: the Renewables Committee with Commissioner Karen Douglas as Presiding Member, and Chairman Jackalyne Pfannenstiel as the Associate Member; and the Integrated Energy Policy Report (IEPR) Committee with Commissioner Jeffrey Byron as Presiding Member and Chairman Jackalyne Pfannenstiel as Associate Member. While this is a staff workshop, Commissioners from the Energy Commission may attend and participate in this workshop. Commissioners and staff from the California Public Utilities Commission may also attend and participate.

The workshop will be held:

**MONDAY, JUNE 30, 2008**  
9:00 a.m.  
**CALIFORNIA ENERGY COMMISSION**  
1516 Ninth Street  
First Floor, Hearing Room A  
Sacramento, California  
(Wheelchair Accessible)

**03-RPS-1078**

<b>DOCKET</b>	
<b>08-IEP-1</b>	
<b>DATE</b>	_____
<b>RECD:</b>	JUL 14 2008

Audio from this meeting will be broadcast over the Internet. WebEx will also be available. For details, please go to: [www.energy.ca.gov/webcast/](http://www.energy.ca.gov/webcast/)

**PLEASE NOTE:** If you are planning to attend this meeting, please be aware that there may be traffic congestion and delays due to repair work on Interstate 5 in the downtown Sacramento area. Information on road closures and alternate routes is available at the Fix I-5 website at [[www.fixi5.com](http://www.fixi5.com)], or call 5-1-1 to receive information in English and Spanish.

## Purpose

The *2007 Integrated Energy Policy Report (IEPR)* recommended both near-and long-term strategies to reach the state's renewable energy goals. The purpose of this initial staff workshop is to gather stakeholder feedback regarding the possible expanded implementation of feed-in tariffs based on the following policy recommendations from the *2007 IEPR*:<sup>1</sup>

- To fully examine the impacts of a renewable feed-in tariff in California, the Energy Commission, in collaboration with the California Public Utilities Commission (CPUC) should develop an evaluation and options report investigating the use of feed-in tariffs.
- The Energy Commission should begin a collaborative process with the CPUC to develop feed-in tariffs for larger projects.
- This work should be completed in 2008 for inclusion in the 2009 IEPR.
- The report should include a range of mechanisms for determining the appropriate price to pay for renewable energy in designated renewable resource zones.
- The report should investigate the use of feed-in tariffs to incorporate the value of a diverse mix of renewables as well as the features of the most successful European feed-in tariffs.

In this workshop, Energy Commission staff is seeking public input in regard to the challenges and benefits of possible expansion of renewable energy feed-in tariffs in California. This workshop will include discussion of key questions related to the expansion of feed-in tariffs in California, including:

- Whether renewable energy feed-in tariffs should be initiated for generators larger than 20 megawatts (MW);
- How feed-in tariffs may work in concert with the current RPS structure, or require changes in that structure;
- What problems in the existing RPS program could feed-in tariffs help to overcome;
- What designs of feed-in tariffs may work best in the California policy context;

The Energy Commission had a consultant prepare a draft report, "Exploring Feed-in Tariffs for California" Publication No. CEC-2008-003-D. The draft report explores the issues and options associated with the design and implementation of Feed-in Tariffs for California. The report is available on the Energy Commission web site at [[www.energy.ca.gov/2008\\_energypolicy/documents](http://www.energy.ca.gov/2008_energypolicy/documents)]. Please review the report before the workshop and be prepared to make comments.

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<sup>1</sup> California Energy Commission, 2007 Integrated Energy Policy Report, Publication No. p. 147.

Discussion at the workshop will inform development of a revised draft of a feed-in tariff evaluation and options report and assist California's energy policy makers in exploring the use of feed-in tariffs to support development of Renewables Portfolio Standard-eligible generation larger than 20 MW. A list of key questions that have been identified to be addressed in the report are provided in Attachment A.

This workshop will also inform the analysis that will be conducted for the *2008 IEPR Update* and the *2009 IEPR* concerning changes to California's electricity system needed to support higher levels of renewable electricity generation.

## **Background**

Public Resources Code Section 25300, et seq., directs the Energy Commission to develop the IEPR every two years, with updates in the intermediate years, and directs state government entities to carry out their energy-related duties and responsibilities using the information and analyses contained in the adopted IEPR reports.

California currently has a mandate to achieve 20 percent of retail electricity sales from renewable resources by 2010, and the Governor and the state's energy agencies have identified a further goal of 33 percent renewable by 2020. This higher goal is a key strategy for meeting the state's greenhouse gas emission reduction targets.

The IEPR Committee issued its Committee Scoping Order for the *2008 IEPR Update* on May 15, 2008. One of the topics identified in that order is to identify how the 2020 electricity system could be structured to accommodate higher levels of renewables. Analysis and evaluation on this topic will continue in the *2009 IEPR* as well.

In Europe, feed-in tariffs are set either at a fixed price, a fixed premium above spot market prices, or a variable premium that provides fixed revenue in combination with market prices. Price levels and premiums vary by technology, reflecting variation in technology costs. Incentives vary by country; incentives for some technologies are scheduled to decline over time.

California has some experience implementing feed-in tariffs. In response to Assembly Bill 1969 (Yee, Chapter 731, Statutes of 2006), the CPUC is implementing a program that requires electrical corporations to offer a standard tariff for the purchase of renewable energy output produced by a renewable electric generation facility owned by a public water or wastewater agency within the service territory of the electrical corporations. The CPUC's implementation of the program is designed to make a cumulative total of 250 MW of small-sized renewable projects operated by a public water or wastewater agencies (including municipal wastewater treatment facilities and dairy digesters) eligible for feed-in tariffs. The tariff is set at the applicable market price referent (MPR), the proxy price for a long-term contract to build and operate a combined cycle natural gas facility. The projects must be RPS-eligible and may be up to 1.5 MW in size; contracts are for 10, 15, and 20-year terms. Effective January 1, 2008, the CPUC approved tariffs for the following electric corporations: Pacific Gas and Electric Company (PG&E), San Diego Gas and Electric Company (SDG&E), Southern California

Edison Company (SCE), PacifiCorp, Sierra Pacific Power Company, Mountain Utilities, and Golden State Water Company (operating as Bear Valley Electric Service). Customers in the service territories of PG&E, SDG&E, and SCE have the option to select a contract to sell only the excess energy produced at the facility that is not used on-site, or to sell all energy generated and to buy energy from the utility to serve the customer's load.

In addition, the CPUC adopted a voluntary program for SCE and PG&E to offer the tariff to other customers who install RPS-eligible facilities up to 1.5 MW in size, until a cumulative total of 228 MW sign up for the program. The tariff for customers other than water and wastewater customers is also set at the MPR.

SCE also offers standard contracts for biogas and biomass generators less than 20 MW priced at the 2006 MPR of approximately \$0.08/kilowatt hour (kWh). The expiration date for SCE's Standard Contract for Biomass is 12/31/2008 or 250 MW, whichever comes first. As of early June 2008, SCE has 11 MW under contract, 23 MW in negotiation, and 22 MW of inquiries. If SCE does not reach 250 MW by 12/31/2008, SCE may consider continuing to offer the contracts in 2009.

Finally, the CPUC has a current proceeding in which the question of expanding feed-in tariffs to renewable projects up to 20 MW is being addressed.

## Written Comments

Written comments on the attached questions and workshop topics must be submitted by 5:00 p.m. on Wednesday, July 11, 2008. Include the docket numbers **No. 08-IEP-1 and No. 03-RPS-1078** and indicate **2009 IEPR – Feed-in Tariffs** in the subject line or first paragraph of your comments. Please hand-deliver or mail an original.

If the original is more than 20 pages, please also provide 35 paper copies to:

California Energy Commission  
Dockets Office, MS-4  
Re: Docket No. 08-IEP-1 and No. 03-RPS-1078  
1516 Ninth Street  
Sacramento, CA 95814-5512

The Energy Commission encourages comments by e-mail. Please include your name or organization in the name of the file. Those submitting comments by electronic mail should provide them in either Microsoft Word format or as a Portable Document File (PDF) to [\[docket@energy.state.ca.us\]](mailto:docket@energy.state.ca.us). **One paper copy** must also be sent to the Energy Commission's Docket Unit.

Participants may also provide an original and 35 copies at the beginning of the workshop. All written materials relating to this workshop will be filed with the Dockets Unit and become part of the public record in this proceeding.

## Public Participation

The Energy Commission's Public Adviser provides the public assistance in participating in Energy Commission activities. If you want information on how to participate in this forum, please contact the Public Adviser's Office at (916) 654-4489 or toll free at (800) 822-6228, by fax at (916) 654-4493, or by e-mail at [pao@energy.state.ca.us](mailto:pao@energy.state.ca.us). If you have a disability and require assistance to participate, please contact Lou Quiroz at (916) 654-5146 at least five days in advance.

Please direct all news media inquiries to the Media Office, at (916) 654-4989 or by e-mail at [mediaoffice@energy.state.ca.us](mailto:mediaoffice@energy.state.ca.us). For technical questions regarding the subject matter of this workshop, please contact Drake Johnson by phone at (916) 651-0312, or by e-mail at [djohnson@energy.state.ca.us](mailto:djohnson@energy.state.ca.us). For general questions regarding the IEPR proceeding, please contact Suzanne Korosec, Assistant Director of Policy Development, by phone at (916) 654-4516, or by e-mail at [skorosec@energy.state.ca.us](mailto:skorosec@energy.state.ca.us).

Date Mailed: June 20, 2008

Mail Lists: 5507 RPS, 5504 New. E-mail list-serves: IEPR, Renewables

Note: California Energy Commission's formal name is State Energy Resources Conservation and Development Commission.

## **Participation through WebEx, the Energy Commission's On-Line Meeting Service**

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- Please go to <https://energy.webex.com> and enter the unique meeting number 926 305 836.
- When prompted, enter your information and the following meeting password fit@0630.
- After you login, a prompt will appear on-screen for you to provide your phone number. In the Number box, type your area code and phone number and click OK to receive a call back on your phone for the audio of the meeting. International callers can use the "Country/Region" button to help make their connection.

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- After you login, a prompt will ask for your phone number. **CLICK CANCEL.** Instead call 1-866-469-3239 (toll-free in the U.S. and Canada). When prompted, enter the meeting number above and your unique Attendee ID number which is listed in the top left area of your screen after you login. International callers can dial in using the "Show all global call-in numbers" link (also in the top left area).

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- Call 1-866-469-3239 (toll-free in the U.S. and Canada) and when prompted enter the unique meeting number above. International callers can select their number from <https://energy.webex.com/energy/globalcallin.php>

If you have difficulty joining the meeting, please call the WebEx Technical Support number at 1-866-229-3239. Please be aware that the meeting's WebEx audio and on-screen activity may be recorded.

## **ATTACHMENT A**

### **Questions for June 30, 2008 Staff Workshop on Feed-In Tariffs for Renewable Energy**

In this workshop, the staff of the Energy Commission seeks public input to further inform consideration of the issues and options related to the needs, costs, and benefits of possible expansion of renewable energy feed-in tariffs to generators larger than 20 megawatts (MW). To help further discussion on this topic, KEMA has prepared a draft report, "Exploring Feed-in Tariffs for California," summarizing issues and options for renewable energy feed-in tariffs in California. The KEMA draft report is available on the Energy Commission website at [\[www.energy.ca.gov/2008\\_energy\\_policy/documents\]](http://www.energy.ca.gov/2008_energy_policy/documents). Please review the KEMA report before the workshop.

To assist in developing the draft final report, staff seeks public input on the following questions. Please address the following questions in verbal and/or written comments for this workshop:

#### **A. What are the key policy objectives for a feed-in-tariff in California?**

1. Should feed-in-tariffs be expanded or limited to projects 20 MW or less?
2. What are the barriers to renewable resource development that have led to delay or project failure of RPS contracts that feed-in tariffs may overcome?
3. What are the costs and benefits associated with feed-in tariffs for larger projects from the administrator, ratepayer, and societal perspective?
4. Could feed-in-tariffs help increase the mix of renewable energy resources in California and thereby have a dampening effect on electricity price fluctuations?
5. Are feed-in-tariffs supported by the same guiding principles used to develop the same RPS procurement process?
6. Can feed-in tariffs be designed to bring down costs over time and limit ratepayer exposure?

#### **B. What are the key feed-in-tariff design issues?**

1. How should feed-in tariffs be designed to effectively support California's RPS programs and RETI?
2. Should feed-in tariffs be differentiated by selected technologies or size?
3. What levels of resource potential, and/or operational characteristics should be considered in determining feed-in tariffs?
4. Should feed-in tariffs be differentiated by geographical location, or just by an in-state or out-of-state designation?
5. How should costs be distributed?
6. Should feed-in tariffs replace the current MPR plus 'Above Market Funds' (AMFs) to support the RPS?

7. How could AMFs and feed-in tariffs work together?
8. The RETI is working on transmission corridor planning for Competitive Renewable Energy Zones. How should feed-in tariffs be designed to contain costs and encourage renewable energy development in Competitive Renewable Energy Zones?

**C. What are the key feed-in-tariff implementation issues?**

1. What is the proper implementation structure for feed-in tariffs for generators larger than 20 MW?
2. How should feed-in tariffs be administered?
3. How should feed-in tariffs be adjusted to match supply and demand?
4. How should feed-in-tariffs be linked to statewide RPS targets?
5. What current state and federal legislation may affect development of a feed-in tariff for generators larger than 20MW?