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### **Electronic Delivery**

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

Re: Docket No. 08-IEP-1 and No. 03-RPS-1078

Docket Office:

Please find attached PG&E's comments on the workshop held June 30, 2008, regarding "2009 IEPR – Feed-in Tariffs.

Please contact me should you have any questions. I can be reached at 415/973-4185.

Sincerely,

Kathy Trelever

Attachment

### Comments of Pacific Gas and Electric Company Regarding Feed-in Tariffs Following CEC IEPR Workshop of June 30, 2008

### 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?

Feed-in tariffs (FITs) should be limited to 1.5 MW in size, the size at which they are currently offered. PG&E has agreed with and satisfied the CPUC's AB 1969 implementation ruling by filing a form offer to purchase excess on-site generation from units up to 1.5 MW at the MPR price. A standard contract for projects sized no larger than 1.5 MW may increase renewable power installations that would otherwise not compete in the utility RPS process.

However, for larger renewable resources above 1.5 MW, the RPS process is adequate and successful on its own. Adding or substituting a feed-in tariff process would result in higher costs to customers and administrative inefficiencies. As a general rule, a competitive solicitation will provide the most cost-effective power. For larger installations, the ratepayers' savings resulting from a competitive process outweigh the savings to generators from a standard contract.

Sellers with facilities as large as 20 MW are most likely experienced and sophisticated market participants given the greater capital outlay such larger facilities require. Such sellers can and should be encouraged to participate in Request for Offer (RFO) solicitations. Competitive bidding yields the lowest reasonable prices and least cost for PG&E's customers.

If PG&E were to sign a fixed contract with a facility as large as 20 MW, it would adjust its procurement efforts accordingly, based on the assumption that PG&E would be receiving this generation in the future. If the seller elects not to develop its project, PG&E would be forced to replace that generation, most likely at a higher cost. While this price risk is manageable for units sized 1.5 MW, it could quickly become quite expensive for customers in the case of generators as large as 20 MW.

# 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?

The growth of renewable energy generation is constrained by many factors that cannot be overcome by the adoption of feed-in tariffs alone. At the CEC feed-in tariff workshop on June 30, 2008, the CPUC correctly identified the significant risk factors for 2010 RPS generation. The most serious risks, including the need for transmission expansion and the possible end of production tax credits/investment tax credits, will not be hedged by feed-in tariffs.

If one looks at renewable resource development in California under the RPS program, the limitation to procuring additional renewable resources is related to regional supply limitations, not to access to a standard contract at a cost-effective price. Consider the following:

- The Solano Wind Enterprise Zone is being fully developed.
- Incremental geothermal resource supply at the Geysers is being built.
- Environmental studies to determine under what conditions wind energy turbines may operate
  have delayed the repowering of facilities located in the Altamont Wind Energy Area by at least 3
  vears.
- Transmission, which has been constrained in the Tehachapi Wind Energy Area, is now being built
- Transmission expansion is enabling the construction of the Salton Sea geothermal facilities.
- The lack of transmission has delayed the development of solar generation in Southern California.

Moreover, PG&E has executed several contracts with renewable generators sized between 1.5MW and 20MW through its competitive solicitations. Several of these contracts have been signed for a price below the MPR. Thus generators larger than 1.5 MW can and do compete in the competitive process. It is neither necessary nor prudent to increase the maximum generator size under this program.

3. What are the costs and benefits associated with feed-in tariffs for larger projects from the administrator, ratepayer, and societal perspective?

PG&E has no comment on this question.

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?

PG&E has no comment on this question.

5. Are feed-in-tariffs supported by the same guiding principles used to develop the same RPS procurement process?

PG&E has no comment on this guestion.

6. Can feed-in tariffs be designed to bring down costs over time and limit ratepayer exposure?

PG&E recognizes that the value of renewable energy might be different depending on whether the power is purchased pursuant to a tariff or is procured through a contract resulting from an RFO. RFO bids must satisfy credit and performance requirements, which increase the value of the bids relative to the value under the existing feed-in tariff. In addition, RFO bids are subject to negotiations which potentially could further increase the value of the bids by optimizing risk sharing between buyer and seller (the optimal trade off between price and risk).

A bilateral contract can also provide more value to PG&E's customers than a FIT contract because PG&E could negotiate terms such as the size of the project, dispatchability for the project, delivery schedule, schedule coordinator responsibility, the amount of the collateral, and the length of the contract. For new projects the exact location and point of interconnection could be optimized, thus providing a higher value in terms of resource adequacy, and potentially lowering transmission costs and congestion charges.

A properly structured feed-in tariff, with project milestones, performance requirements and appropriate liability if the generator fails to develop its facility, could provide a potential solution to the current tension surrounding the various subsidies supporting solar generation and its impact on non-participating customers. The various incentives including the CSI and net metering could be combined into a single incentive structure that declines over time. Customers receiving the incentive would interconnect the solar generator on the grid side of their meter and receive compensation for the total output of the generator. This very specific use of a feed-in tariff may serve to lower costs to ratepayers.

- 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?

PG&E has no comment on this question.

2. Should feed-in tariffs be differentiated by selected technologies or size?

PG&E believes it is currently more practical for any feed-in tariffs that might be offered to be value-based, not cost-based. Cost-based tariffs for mandated purchases would reward the less efficient, less beneficial

resources, unless technology costs fall significantly in comparison to fossil alternatives, or unless society chooses to specifically invest in higher cost resources even when lower cost renewables are available. The German system of paying more for poor-producing wind farms should not be emulated in California. Moreover, a tariff that considered time-value of generation would necessarily account for technology specific difference in generation profile (such as wind and solar), and would negate the need for technology-specific tariffs.

Since our AB 1969 contracts are priced at the MPR, which is time differentiated, time of use coincidentally takes care of the higher price of some technologies. For example, given the higher value of solar (due to its time of delivery) and the higher price, compared to wind, the MPR appropriately pays more for solar technology.

# 3. What levels of resource potential, and/or operational characteristics should be considered in determining feed-in tariffs?

PG&E has no comment on this question.

# 4. Should feed-in tariffs be differentiated by geographical location, or just by an in-state or out-of-state designation?

Any feed-in tariff requirement should be universal across the state. The over-market costs of feed-in tariffs should be allocated to all customers on whose behalf they were contracted, even if those customers later leave utility procurement services. Leaving utility commodity service should not remove the obligation to pay the over-market costs that were incurred to provide feed-in tariff supplies to customers or else it will provide an incentive for customers to leave utility service simply to avoid the higher costs. Moreover, feed-in tariffs, if implemented, should be required of all load serving entities, including publicly owned utilities, CCAs and ESPs providing power to direct access customers.

### 5. How should costs be distributed?

If feed-in tariffs are to succeed, especially if they are priced above MPR, the costs must be fairly distributed. Placing the burden only on customers of regulated utilities would burden them disproportionately with the cost premium of supporting renewable energy, and could accelerate customer migration to competitive alternatives, thereby shifting those costs to PG&E's remaining customers. Since RPS and emissions goals are statewide, the costs should be borne by all customers statewide, not only those of CPUC-jurisdictional utilities. PG&E supports exploration of a wide range of cost allocation mechanisms.

### 6. Should feed-in tariffs replace the current MPR plus 'Above Market Funds' (AMFs) to support the RPS?

PG&E has no comment on this question.

#### 7. How could AMFs and feed-in tariffs work together?

PG&E has no comment on this question.

# 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?

PG&E has no comment on this question.

### 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?

As previously stated, PG&E contends that ratepayers are better served with implementing FITs for projects below 1.5MW while allowing contract negotiations for projects larger than 1.5 MW. The competitive solicitation process lowers cost and provides more flexible terms and conditions.

In addition, the "devil is in the details" for proper implementation for feed-in tariffs. As exemplified by the KEMA report on FIT design and implementation, there are many ways to design feed-in tariffs. Proper implementation for feed-in tariffs is dependent on what type of feed-in tariff we would choose to apply.

#### 2. How should feed-in tariffs be administered?

PG&E has no comment on this question.

#### 3. How should feed-in tariffs be adjusted to match supply and demand?

One of the lessons from the Standard Offers program of the 1980s and the Netherlands' feed-in tariff experience is that one cannot make available an open-ended supply of contracts with open-ended tenure and performance obligations. If feed-in tariffs are necessary, they should be offered for finite quantities of resources with specific performance and online requirements. In that way they could be re-evaluated after those tranches are subscribed before determining what the next level of commitment should be.

### 4. How should feed-in-tariffs be linked to statewide RPS targets?

FITs should be connected on the utility side of the meter, with all generation REC's counting towards RPS goals.

5. What current state and federal legislation may affect development of a feed-in tariff for generators larger than 20MW?

PG&E has no comment on this question.