

Comments of the Green Power Institute on the ^{03-RPS-1078}
2009 IEPR – Renewable Energy Feed-in Tariffs

CEC Docket Nos. 08-IEP-1, and 03-RPS-1078.
2009 IEPR – Renewable Energy Feed-in Tariffs

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The Green Power Institute (GPI) respectfully submits these *Comments of the Green Power Institute on the 2009 IEPR – Renewable energy Feed-in Tariffs*, in Docket numbers 08-IEP-1, and 03-RPS-1078, in connection with the 2009 IEPR – Renewable Energy Feed-in Tariffs, public workshop. We offer comments on the topics of extending the availability of feed-in-tariff contracts to projects in the size ranges of 1.5 MW – 20 MW and greater than 20 MW, and the use of feed-in-tariff contracts in the implementation of the Governor’s Executive Order on biomass, S-06-06.

Extending the Feed-In Tariff Program

The RPS program in California began in 2003 without the use of any kind of standard-offer contract or fixed standard-tariff rate instrument (feed-in tariff), preferring instead to base the program mainly on the use of competitive solicitations, supplemented with bilateral contracts. During the past couple of years a feed-in-tariff option has been

introduced into the RPS program, initially for small biogas systems at water and wastewater treatment facilities, and more recently for all renewables less than 1.5 MW in size. These contracts were developed because it is generally recognized that these small systems are at a significant disadvantage in the regular RPS solicitations; indeed in many cases they are not even eligible to participate.

The CPUC is currently considering whether to increase the size limit on renewables projects eligible for feed-in tariffs up to 20 MW. Concurrently with this effort, this Commission, through its IEPR proceeding, is studying whether to recommend extending feed-in tariffs to renewables projects that are greater than 20 MW in size. At the recent IEPR workshop (June 30, 2008), the IOUs argued for continued reliance in the RPS program primarily on the competitive solicitation process, and for maintaining the current restriction on access to feed-in tariffs to projects that are up to 1.5 MW in size. In recent filings (June 6, 2008) on the MPR in the CPUC's RPS proceeding, R.06-02-012, the utilities argued that in the future the MPR should become a parameter that is held in confidentiality, because, the utilities maintain, at the present time bidders are using the past, publicly-available MPR as a target price, with the result that the RPS solicitations are not living up to their promise for producing low-cost renewables via the competitive-market process. In other words, the utilities prefer the competitive approach now in place to minimize renewable procurement costs, but they complain that the competitive approach now in place is, in effect, equivalent to a feed-in-tariff program with the price set at the level of the MPR.

As non-market participants and market observers, it appears to us that a significant share of the new renewable generating capacity that has entered operation in California since the enactment of the original 2002 RPS statutes has been based on bilateral contracts, and that a significant fraction of the contracts for new capacity that have been derived from the competitive-solicitation process has failed to result in operating generating facilities, or projects that are timely progressing along their defined development milestones. In the opinion of the GPI, properly structured feed-in tariffs can be an effective contracting option for the maintenance of existing renewable generating capacity, and for the

development of new renewable generating capacity in California. The standard-offer contracts of the 1980s had their flaws, but it is a fact that they were very successful in supporting the development of renewable generating facilities. Most of the renewable generating capacity contributing to the state's energy supply today resulted from standard-offer contracts. We believe that the state's RPS program would benefit if effective feed-in-tariff types of contracts were made available to project developers in the size range of 1.5 – 20 MW, and beyond.

The utilities attribute the tendency for developers to target their bids to the MPR to the fact that the MPR is a publicly-disclosed value. However, we believe that the reason the current system is not functioning efficiently goes much deeper. The renewables market in California today is seriously out of balance, with demand for renewable energy far outstripping supply. Moreover, this situation is unlikely to change any time soon. The two largest utilities have fallen well behind in meeting their annual procurement targets, which increase every year, while statewide renewable energy production remains stubbornly resistant to achieving the dramatic increases that the RPS program was designed to engender. At the same time that the collective procurement deficit of the IOUs is growing, the roughly 35 percent of the California market that is not served by the IOUs is just now joining the effort to meet statewide RPS programmatic requirements, and this segment of the market is even further behind than the IOUs. And, while California is attempting to cast a wider net, looking to procure renewable energy or RECs from out-of-state sources, many of our neighbors are creating renewables mandates of their own, and increasingly broad greenhouse-gas control measures are on the horizon for all.

The imbalance in California today between the supply and demand for renewable energy is being mirrored worldwide. An unfortunate consequence of this situation is that there is currently a worldwide capacity shortage for manufacturing and installing renewable generating equipment of all varieties, resulting in recent significant increases in the cost of new renewables. The shortage of manufacturing capacity can be ameliorated over the next several years, particularly if there is confidence in the marketplace that the current

step-up in demand will be sustained. A falling dollar and other macroeconomic factors are also contributing to the recent run-up in the cost of not only new renewables, but new conventional energy generating systems as well. We believe that it will be some time before renewable energy supply and demand are brought into a reasonable semblance of equilibrium, which is generally recognized as a necessary pre-condition for the ability of the market to function competitively and efficiently. Until then, we will have to deal with a market that is seriously out-of-balance, with demand far outstripping supply, and design our policies accordingly. A well-designed feed-in tariff program, with realistic prices offered for renewables, is one policy that has been proven to work, and we believe that it could work today in California.

The key to the ultimate success of these contracts in the marketplace, of course, is the price that is offered as the feed-in tariff rate. The tendency so far in California has been to use the MPR as the feed-in tariff price. The MPR, by definition, represents the market price of energy for brown (conventional) power. However, in today's marketplace renewables often need above-market prices in order to be viable, a premium that can be justified by the environmental benefits provided by renewable energy, benefits that are conveyed to the purchasing utilities along with the energy, in the form of the RECs. The feed-in tariffs that have been successful in Europe have all offered a healthy renewable premium. The 2007 MPR included a modest greenhouse-gas adder to account for the future cost of generation by the proxy CCGT in a carbon-constrained world, but the adder at its present level is probably insufficient to make feed-in tariffs based on the MPR an effective RPS contracting alternative. It is a basic tenet of economics that the higher the price in a feed-in tariff offering, the greater the magnitude of the response. Of course, the magnitude of the price offered for renewable electricity has to be balanced against the consumer-cost impact.

Unfortunately, the California IOUs have not been making very much progress towards meeting their RPS annual procurement targets. In fact, collectively they have been losing ground almost every year since the inception of the state's RPS program. This is alarming, especially in view of the state's nascent efforts under AB 32 to curb

greenhouse-gas emissions. The ARB has recently adopted the *Energy Action Plan's* stretch RPS goal of 33 percent renewables by 2020, as part of the June 26, 2008, *Climate Change Draft Scoping Plan*, and it is generally acknowledged that an even greater level of renewables might be required in order to meet the 2020 statewide greenhouse-gas emissions target that is specified in AB 32. Under these circumstances, and considering the direction that natural gas prices are heading, it is difficult to imagine that the risk of oversubscription of a feed-in tariff offering for renewable energy is a serious threat. The state needs to both sustain the existing fleet of renewable generating capacity in the state, and add thousands of MW of new renewable generating capacity over the coming years. It might make sense to impose some maximum subscription levels on new and expanded renewables feed-in tariff offerings, but any such limits should allow for a good deal of growth in the state's renewable generating infrastructure.

Using Feed-In Tariffs to Implement Ex. Order S-06-06

The use of feed-in tariffs in the California RPS began with a limited program geared to promoting small biogas generators in the water and wastewater treatment industries. It was later extended to all small (< 1.5 MW) renewable energy systems. Now, feed-in tariffs are under consideration by the CPUC for application to systems up to 20 MW in size, and at this Commission for systems larger than 20 MW in size. In connection with this expanded consideration of feed-in tariffs, the GPI believes that the Commissions have an opportunity to return a focus of the feed-in tariff program to its original objective: promoting biomass and biogas technologies, which provide waste-disposal benefits in addition to renewable energy and RECs.

Recent reports about the latest rounds of RPS solicitations in California indicate that an increasing number of projects are being offered in each solicitation cycle. However, biomass and biogas projects are becoming increasingly under-represented in the mix, which means that their future contribution to the state's renewable electricity supply will inevitably decline from the present level. This is exactly the situation that the Governor's Executive Order on biomass, S-06-06, seeks to prevent. SCE, undertaking a voluntary

initiative in response to the Executive Order, created a feed-in-tariff offering for biomass and biogas systems up to 20 MW in size, an offering that remains open today. However the SCE offering, which is based on the 2006 MPR, has not been widely subscribed (the offering block is up to 250 MW, but so far only four small projects are reported to have shown interest).

As part of the effort to implement Executive Order S-06-06, we believe that both the CEC and CPUC should consider creating a special statewide feed-in tariff offering exclusively for biomass and biogas facilities. The SCE biomass feed-in tariff offering, whose tariff is set at the level of the 2006 MPR, is not attracting very much interest. Our guess is that an offer that includes a tariff that is sufficient to make the development of new biomass projects viable will attract a good deal of interest. In addition, it would be desirable to develop a feed-in tariff for existing generating facilities that seek new contracts. For solid-fuel biomass facilities, which are unique among renewables in having a significant fraction of their total cost of electricity production in the category of variable operating cost (mostly fuel cost), it might be reasonable to develop feed-in tariff contracts that have elements of tolling provisions in the pricing mechanism, for example a tie-in to the cost of diesel fuel, although this is an issue that would require a significant amount of deliberation before being moved forward.

Conclusion

The Commission should support the extension of the feed-in tariff program to renewable power projects larger than 20 MW in size. The Commission should develop special feed-in-tariff offerings for biomass and biogas generators, in order to help implement the electricity-sector provisions of Executive Order S-06-06.