BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Implementation and Administration of California Renewables Portfolio Standard Program.	Rulemaking R.11-05-005

COMMENTS OF THE GREEN POWER INSTITUTE ON THE RPS PROCUREMENT REFORM PROPOSALS

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Pursuant to the October 5, 2012, *Second Assigned Commissioner's Ruling Issuing Procurement Reform Proposals and Establishing a Schedule for Comments on Proposals*, as modified by an email *Ruling* by ALJ Simon on November 5, 2012, granting an extension to file Comments, in Proceeding R-11-05-005, the **Order Instituting Rulemaking to Continue Implementation and Administration of California Renewables Portfolio Standard Program**, the Green Power Institute (GPI), a program of the Pacific Institute for Studies in Development, Environment, and Security, provides these *Comments of the Green Power Institute on the RPS Procurement Reform Proposals*. The *Ruling* presents eight procurement-reform proposals for comment by the parties, six in the category of Streamlining the Contract Review Process, and two in the category of Other Procurement Reforms. Our *Comments* address the two proposals in the category of Other Procurement Reforms.

5.1 Implementation of New Least-Cost Best-Fit Requirements

Section 5.1 of the Oct. 10, 2012, *Ruling* is focused on the implementation of new PUC §399.13(a)(4), which adds four new criteria to the least-cost / best-fit (LCBF) process that is used in the evaluation of projects bid into the utilities' RPS solicitations, and calls for the Commission to adopt these new statutory requirements by rulemaking. The new code section adds provisions to the LCBF process dealing with the indirect costs of transmission upgrades and integration, a proposed project's cost impact on an IOU's overall electricity portfolio, project viability, and workforce-advancement plans.

In fact, a general overhaul of the LCBF process has been promised in the RPS proceedings for several years. Item no. 3 in the Scope of Issues in the September 12, 2012, *Amended Scoping Memo and Ruling of Assigned Commissioner*, reads (pgs. 5-6):

3. Improvements to least cost best fit (LCBF) methodology and evaluation of bids for RPS procurement, including but not limited to:

-- implementation of new LCBF requirements set by SB 2 (1X);

-- review of resource adequacy value, integration cost adders, congestion cost adders, time of delivery factors, and similar elements potentially affecting evaluation of RPS bids;

-- development of a more robust relationship between RPS procurement evaluation methodology and elements of the determination of system need through the LTPP proceeding.

The October 5, 2012, *Ruling* addresses only the first of the three bullet points in item no. 3 from the *Scoping Memo*'s Scope of Issues. The GPI would strongly prefer to see all three of the bullet points in item no. 3 addressed together in a general overhaul of the LCBF process rather than modifying the LCBF process on a piecemeal basis, and we cannot imagine that there could be a better time to do this than now. With concerns about the integration of increasing amounts of intermittent renewables now a major focus of not only this Proceeding but also the LTPP Proceeding, as well as renewed concerns about the capacity value of intermittents (resource adequacy), the need for expensive transmission investments to accommodate remote resources, and a system-wide demand curve whose peak appears to be drifting into later hours of the day, it is clear that all aspects of the LCBF process could benefit from an overhaul. Due to the fact that in many cases there is interconnectedness among the various elements, we believe that it would be much more effective to address all of the various issues together in one integrated process.

The GPI has long been interested in improving several aspects of the LCBF process, including the time-of-delivery factors, integration costs, and the transmission costs and benefits of different kinds of renewable generators. Section 5.1 in the October 5, 2012, *Ruling*, references the existing LCBF process, as authorized originally in Decision D.04-07-029. Section 7 a) of D.04-07-029, *Applying the MPR to RPS Bids*, has an extensive discussion of an alternative approach to handling time-of-delivery factors in RPS solicitations, in which hourly profiles would replace the block TOD periods that are still in use today (D.04-07-029, pgs. 23-28). The Decision states:

> We recognize that the TOD method [hourly profiling] may have a number of advantages by virtue of its precision and transparency. The method, an initial version of which was first introduced by GPI in its April 1, 2003 testimony in the predecessor to this Rulemaking (R.01-10-024), would effectively establish a payment schedule for each of the 8760 hours in the year. Generators would bid an output profile, for example 2000 hours per year delivered at specific times, and the value of the bid would be judged by comparing this profile to a TOD payment schedule adopted by this Commission.
>
> A number of parties have subsequently endorsed some variant of this approach and encouraged the Commission to begin examining it soon, for implementation in advance of next year's RPS round. Suggested benefits include a more accurate estimation of the value of capacity, avoidance of problems associated with applying MPRs to products that are neither strictly baseload nor peaking, and better fit with one of the utilities' proposed method of evaluating RPS bids. The proposed method is discussed in Subsection C below.
>
> We agree that the TOD method is potentially superior to the two-MPR methodology we will employ this year, and we direct staff to begin exploring it expeditiously.
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> (D.04-07-029, pgs. 24-25)

The hourly profiling method still has not been given full consideration for use in the RPS program. With the shape of system demand curves currently in flux in California, and with new research suggesting that significant penetration levels of variable renewables could affect the shape of the traditional hourly value profiles (Mills and Wiser, *Changes in the Economic Value of Variable Generation at High Penetration Levels: A Pilot Case Study of California*, Report LBNL-5445E, June 2012), in our opinion any adjustments to the LCBF protocols employed by the IOUs in evaluating bids in their RPS solicitations should include improvements in the time-of-delivery differentiation of the value of electricity.

It is also time to move to a more balanced treatment in the LCBF process of the transmission costs and benefits that can be associated with renewable energy generators. Virtually all of the attention so far has been focused on the costs of providing transmission access to remote renewable-resource areas. We believe that it is time to also consider how to reward renewable generators who provide tangible benefits to the power grid. A number of biomass generators in California, for example, are located on weak parts of the existing grid, where they provide crucial voltage and var support without compensation or other consideration. In fact, we know of one particular situation where a biomass generator is located on a weak part of the grid in a transmission-constrained part of the state. Not only

does the generator provide voltage and var support without compensation, it is docked nearly 10 percent of its revenues, by virtue of the fact that the portion of the grid it is supporting has a power factor close to 0.9. Generators that provide grid-support services deserve to be appropriately compensated for the services they provide.

24. Please describe how the Commission should implement each of the four topics listed in Section 399.13(a)(4)(A).

The first topic in §399.13(a)(4)(A) concerns the costs associated with transmission upgrades and integration costs that might be associated with a project bid into an RPS solicitation. Our understanding is that the annual *Transmission Ranking Cost Reports* provide the input that currently is used in the LCBF process for factoring in transmission upgrade needs. The question then becomes, does the current process do the job? We are not sufficiently familiar with this part of the process to know the answer to this question. As far as integration costs are concerned, this has been the topic of a great deal of study for several years, including at this Commission, the CEC, and the CAISO. These studies are ongoing, and we would hope that the Commission will continue to participate in the process and incorporate its results when they become available, and not act precipitously or alone in response to §399.13(a)(4)(A)(i).

The second topic in §399.13(a)(4)(A) reads: "(ii) The cost impact of procuring the eligible renewable energy resources on the electrical corporation's electricity portfolio." It is difficult to know how to implement this code section in the context of the LCBF process, because LCBF is applied to individual projects proposed in response to an RPS solicitation, not to the RPS portfolio as a whole. Moreover, this code section is duplicative of §399.15, which provides the full statutory specifications for a cost-control mechanism for each retail seller's RPS-compliance efforts. The LCBF process is already largely driven by project cost, so it is our opinion that §399.13(a)(4)(A)(ii) does not require any changes to the existing LCBF process.

The third topic in §399.13(a)(4)(A) concerns project viability, or the risk that a given project will not be able to complete the development process and come online after it has

been short listed in a utility solicitation and/or awarded a PPA. This Commission has already developed a project-viability calculator, and requires its use in RPS solicitations. Our preference would be to use estimates of project viability, or probability of success, differently than is currently the practice in the RPS solicitation process. We would like estimates of project probabilities of success to be used as a means of discounting the expected contribution of a project to a retail provider's portfolio, rather than as a gateway for eliminating consideration of a particular project in a solicitation. Nevertheless, we do not see any need to modify the LCBF process in response to new §399.13(a)(4)(A)(iii), as project viability is already a part of the project-selection process. On the other hand we would like to see project viability assessments used in a more sophisticated manner as described above, so if implementing this new code section initiates the process, we are in favor.

5.2 Green Attributes Standard Term and Condition

All RPS power-purchase contracts must include non-modifiable standard term and condition no. 2 (STC 2) on green attributes. This term was painstakingly negotiated over a multiyear period in the RPS proceeding, and as far as we know STC 2 has served both generators and retail providers well. In our opinion, any alteration of STC 2 should be undertaken with caution and deliberation.

29. In view of the adoption of RECs as the basis for RPS compliance, is STC 2 still necessary in its entirety?

Before we answer this question we cannot help but observe that it is highly questionable whether STC 2 was necessary **in its entirety** at the time it was enacted. That is a different, although not unrelated question to what is being asked in question no. 29.

We note that RECs are a currency representing the counting rights to renewable energy for use in demonstrating compliance with mandatory RPS programs, and for making product claims in voluntary markets. Adopting RECs as the basis for RPS compliance in California has changed nothing insofar as the RPS program is concerned, except for

determining the accounting system that is to be used to demonstrate compliance. When STC 2 was being crafted the market for green energy was still in the formative stage, and an effort was made to write the term in a way that would allow it to be adapted to any number of situations. We now know that the accounting system to be used for demonstrating RPS compliance in California is WREGIS, so archaic references in STC 2 to things like green tags could certainly be corrected and/or removed without any loss of utility. In fact, we doubt that anybody would consider the current text of the standard term and condition to be a model of English clarity, and this might indeed be a good opportunity to upgrade its wording. We caution, however, that some very important content lies below the surface of the convoluted wording in STC 2, and it is important to ensure that nothing of substance is lost or altered in the course of a rewrite.

30 & 31. Are specific elements of STC 2 still necessary or useful? If so, which ones?

One of the contentious issues debated in the early days of the implementation of the RPS program in California was the question of just what it was that a REC represented. On one side parties argued that the REC was nothing more than counting rights to one MWh of renewable energy. On the other side parties argued that the REC contained all of the environmental attributes of renewable energy. The difference between these two approaches only matters when there is a means to monetize something that might be considered to be an environmental attribute. STC 2 makes it clear that the environmental attributes common to renewable energy generation, in particular the attribute of avoiding the use of fossil fuel, is part of the REC, and cannot be counted or marketed separately from the REC.

On the other hand, some particular kinds of renewable energy generation produce specific kinds of environmental services that are ancillary to the production of the renewable energy. STC 2 excludes these kinds of attributes from the REC, and assigns their rights to the generators. For example, biomass generators provide an environmentally superior waste-disposal alternative to conventional practices like open burning and landfill disposal of biomass wastes and residues. Biomass energy generation reduces landfill consumption,

emissions of conventional pollutants like CO, NOx and particulates, and of greenhouse gases associated with the disposal of the biomass, and helps to make the state's forests more fire-resilient by promoting better forest management. STC 2 explicitly excludes the rights to the environmental attributes of diverting biomass materials from conventional disposal to energy production from the REC, leaving it to the generator to try to derive a tangible benefit for their value. STC 2 makes it clear that the REC itself must net out as carbon neutral before any fuel-related, carbon-reduction benefit can be credited separately.

In simplifying STC 2, it is important to ensure that the substantive distinctions and exclusions that it contains are preserved.

Dated November 20, 2012
Respectfully Submitted,

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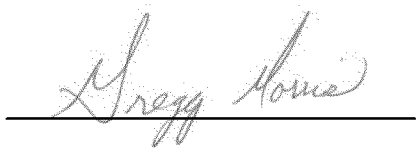
VERIFICATION

I, Gregory Morris, am Director of the Green Power Institute, and a Research Affiliate of the Pacific Institute for Studies in Development, Environment, and Security. I am authorized to make this Verification on its behalf. I declare under penalty of perjury that the statements in the foregoing copy of *Comments of the Green Power Institute on the RPS Procurement Reform Proposals*, filed in R.11-05-005, are true of my own knowledge, except as to matters which are therein stated on information or belief, and as to those matters I believe them to be true.

Executed on November 20, 2012, at Berkeley, California.



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