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

REPLY COMMENTS OF THE GREEN POWER INSTITUTE ON THE STAFF PROPOSAL ON SB 1122 IMPLEMENTATION

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REPLY COMMENTS OF THE GREEN POWER INSTITUTE ON THE STAFF PROPOSAL ON SB 1122 IMPLEMENTATION

Pursuant to the November 19, 2013, *Administrative Law Judge's Ruling Seeking Comments on Staff Proposal on Implementation of Senate Bill 1122 and Accepting Consultant Report into the Record*, 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), the renewable energy program of the Pacific Institute for Studies in Development, Environment, and Security, provides these *Reply Comments of the Green Power Institute on the Staff Proposal on SB 1122 Implementation*. Like our *Opening Comments*, our *Reply* is focused on the subset of the SB 1122 market that is slated to use solid biomass fuels.

Programmatic Cost Control and SB 1122

Although cost control per se was not a topic that the November 19, 2013, *Ruling Seeking Comments* asked parties to address, it is the topic that dominated the *Comments* of all three of the IOUs, as well as several other parties. We are not surprised. As we stated at the beginning of our own *Opening Comments*: "As a preliminary matter, we wish to make the observation that in order to successfully implement SB 1122, the utilities will almost surely have to procure some very expensive power (*GPI Comments on SB 1122 Implementation*, Dec. 20, 2013, pg. 1)." That notwithstanding, our understanding of the legislation is that SB 1122 creates mandates without providing cost-based off ramps, so unless and until the statute is changed, the Commission's job is to implement it. If parties disagree with the statute, the place for redress is the legislature, not the Public Utilities Commission. The Commission's challenge is to make enough resources available to implement the program, while keeping programmatic costs under control. That will require a delicate balancing act, to say the least.

Suitability of Staff Proposal Starting Price

The Staff Proposal proposes a starting ReMAT price of $124.66 /MWh for all categories of SB 1122 projects, a price that is well above the market price for other forms of renewable energy, including other forms of biopower. It is also a price that is consistent with the cost of energy production in the Black and Veatch consultant report for SB 1122 category-1 biogas systems, but well below the cost of energy production for generators in categories 2 and 3. The GPI argued for basing starting ReMAT prices for each category at prices that are consistent with the prices in the consultant report.

In their *Opening Comments*, several parties, including ORA, TURN, and SDG&E, express concern that the Staff Proposal's proposed starting ReMAT price is too high. The GPI is sensitive to the to the fact that we are talking about very large numbers, but if the real objective of designing this program is to achieve the objectives of SB 1122, then realistic starting prices need to be used or the market will never get off the ground. It is wishful thinking at best to suggest that a starting price below $90/MWh, as several parties propose, will get the process started. On the contrary, a starting price that low, especially for categories 2 and 3, will undoubtedly be a non-starter. As the BAC points out in their *Opening Comments*, SB 1122 is aimed at a segment of the marketplace that is still in the early stages of the commercialization process, and not yet ready to compete on a cost-only basis with the cheapest commercially mature, renewable-generating options.

Flexibility and Cost

Many of the parties who want to control SB 1122 costs by, for example, limiting the starting ReMAT auction price, also want to impose rigid controls on some key technical aspects of the projects, such as the mix of fuels they are able to use. As we argued in our *Opening Comments*, the most effective way to control programmatic costs is to build flexibility into the program rules to the maximum extent possible, in order to allow operators to seek ways to minimize their operating costs. SCE, in their *Opening Comments*, present a constructive discussion about controlling costs via programmatic flexibility. We agree with their analysis.

On the subject of fuel mix, we do not question whether SB 1122 generators should be required to use SB 1122-qualifying fuels. We differ with the staff proposal in that we believe that generators should have the flexibility to adjust the mix of SB 1122-qualifying fuels they use in response to changing market conditions, as long as the flexibility given to the operators to adjust their fuel use does not allow them to game the system, for example by misrepresenting their intentions in terms of which fuel category they bid their project into. The GPI presented a methodology for preventing that kind of manipulation in our own *Opening Comments*.

Small (< 3 MW) biomass generators suffer from being unable to take advantage of the economies of scale that larger facilities enjoy. On the other hand, one of the key virtues of small biomass generators is that the fuel they use does not have to be transported for the kinds of long distances that are required for fueling the state's fleet of full-scale biomass generators. When an SB 1122 facility shows a need to bring in fuel from outside of its immediate vicinity, it is a sure indication that the originally-intended fuel source is not adequate, and the continued operations of the facility are in question. It is our opinion that it is better to let stressed facilities that are already built and operating find alternative ways to continue operating, than it is to force them to shut down because of unproductive and unnecessary restrictions on their operations.

Another area in which we believe the staff proposal could be made more flexible is by eliminating the sub-allocation of each IOU's overall share of the 250 MW mandate by the three resource categories. Rather than setting rigid allocations in each bioenergy category for each IOU, we would prefer to let project proponents determine the optimal statewide distribution of where projects in each category should be located, and impose only overall MW mandates on the utilities, to be filled-in by category as the project proposals dictate.

Definition of Sustainable Forest Management and Fire Threatened Areas

In the opinion of the GPI, the clear intent of including category-three fuels (forest fuels) in SB 1122 is to help the state deal with the extreme wildfire risk that plagues forests across

the state. In defining fuel-category no. 3, SB 1122 uses terms like "sustainable forest management" and "fire-threat treatment areas" that are not currently defined in law. This inevitably leads to confusion and disagreement about the meaning of the statute. In their *Opening Comments*, PG&E asks the Commission to provide a clear definition for terms like "sustainable forestry management," and "fire-threat treatment areas," so that there is no ambiguity as to what fuels are qualified for SB 1122 facilities, and what fuels are not qualified. We agree with PG&E on this point.

CalFire has devoted a significant effort to developing working definitions for these forestry-related undefined terms, and we believe that their definitions should be adopted in this proceeding. We ask parties to keep in mind that the supply of at-risk forests in the state is bountiful, and that putting unnecessary stumbling blocks in the way of reducing the fire risks in California's forests dooms the forests to suffer serious and avoidable catastrophic fire damage at some point in the future. The spirit and intent of the inclusion of the 50 MW allocation of capacity to forest fuel projects is to support forest-improvement projects across the state, and the needed definitions should be crafted in order to support that goal.

In their *Opening Comments*, The Pacific Forest trust presents an extensive discussion about the practice of clear cutting forests in California, and how that is not, in their opinion, an example of sustainable forestry management. In the opinion of the GPI this discussion is inappropriate in the context of this proceeding, and irrelevant to the implementation of SB 1122. The fact is that while clear cutting is allowed under certain circumstances in California, no forest in the state has ever been clear cut for the express purpose of producing fuel for energy generation, nor can any reasonable case be made for why this might ever happen in the future. The record in this proceeding clearly demonstrates that SB 1122 generators using category-3 fuels will be economically-marginal operations at best, and will only be able to use fuels that are available in the form of residues from other activities, such as residues from forest-thinning operations designed to reduce the risk of catastrophic wildfire and improve the health and productivity of at-risk stands of forest.

Monitoring of Fuel Use by Category

Large biomass generators are subject to annual fuel-use reporting requirements that they must comply with, and SB 1122 generators undoubtedly will also have fuel-reporting requirements. The question for this track of the proceeding is: Who will be in charge of monitoring the fuel use-by-category of SB 1122 generators? The major candidates are the PUC, the CEC, or the utilities purchasing the power in their territories.

On this topic we side with SDG&E, who argues that the CEC already provides fuel-tracking-related services for the large biomass generators, and therefore already has the needed expertise, and should provide the service here. Unless the CEC objects, they are the logical choice to monitor the fuel use of SB 1122 generators.

Miscellaneous Issues: CHP, and Thermochemical Gasification of Biomass

In their *Opening Comments*, the Agricultural Energy Consumers seem to be arguing that SB 1122 biomass facilities should be required to be CHP facilities. We strongly disagree. There is nothing in the legislation that limits any part of the SB 1122 250 MW mandate to generators who are CHP, and there is no reason for the Commission to impose such a limitation. CHPs have some advantages, and should be encouraged to participate in the program. However, in no way should CHP operations be a requirement of the program.

As we discussed in our *Opening Comments*, SB 1122 covers two functionally different categories of bio-resources, biogas, and biomass. Phoenix Energy, in their *Opening Comments*, argues that SB 1122 generators who thermochemically gasify solid biomass fuels deserve to be treated the same as biogas generators. We disagree. Biogas and producer gas are not the same, and there is no reason to treat them as if they were.

The Elephant in the Room

On the same day that these *Reply Comments* are due to be filed, the Commission is scheduled to pass a Decision in another proceeding, R.13-02-008, that will pave the way to allowing biogas that is upgraded to biomethane to be injected into the state's common-

carrier, natural-gas pipeline system. As the GPI has argued in that proceeding, one of the primary motivations for making biomethane injection an option for biogas producers in the state is that the use of biogas to generate electricity using small engines has been largely eliminated as an option in California for new facilities, due to the difficulty in meeting current NOx standards with small, spark-ignition engines.

One of the primary means of converting both biogas and biomass (via gasification) into electricity at the 3-MW scale is through the use of small, spark-ignition engines. It is difficult to imagine how the SB 1122 mandates can be fulfilled if small engines cannot be employed. Nevertheless, the SB 1122 track of the proceeding is being conducted without giving any consideration at all to the implications of the state's restrictive NOx regulations, and their implications for the permitting of small engines, for achieving the goals of the legislation.

Conclusion

SB 1122-qualifying projects, particularly in statutory categories 2 and 3, have costs of electricity production that are well above current market prices. The Commission needs to take all possible steps to keep the program as flexible and simple as possible for the generators, in order to avoid pushing project costs even higher with unproductive and unnecessary compliance costs.

Dated January 16, 2014
Respectfully Submitted,

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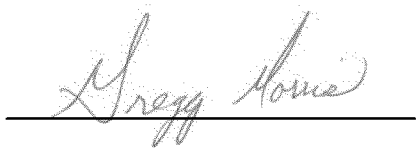
VERIFICATION

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 *Reply Comments of the Green Power Institute on the Staff Proposal on SB 1122 Implementation*, 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 January 16, 2014, at Berkeley, California.



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