### 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 11-05-005 (Filed May 5, 2011)

# REPLY COMMENTS OF THE UTILITY REFORM NETWORK

# ON THE STAFF FEED IN TARIFF PROPOSAL

# FOR IMPLEMENTING SB 1122



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### REPLY COMMENTS OF THE UTILITY REFORM NETWORK ON THE STAFF FEED IN TARIFF PROPOSAL FOR IMPLEMENTING SB 1122

Pursuant to the November 19, 2013 Ruling of ALJ Simon, The Utility Reform Network (TURN) submits these reply comments concerning the Staff Proposal implementing Senate Bill 1122.<sup>1</sup> TURN submitted opening comments on December 20, 2013. TURN generally supported the Staff Proposal, though we recommended a review of the proposed starting price based on RAM bid data.

# ffiffi Image: Comparison of the sector of the sector

In its opening comments TURN discussed the consumer price problems inherent in technology-specific carve outs for procurement. There is a tension between potential increased costs to consumers and the goal of promoting technologies which are currently not competitive, but may provide environmental benefits and have the hope of future price decreases due to technology maturation. Regrettably, resolving this tension is made more difficult by structural flaws in SB 1122 itself.

The Green Policy Institute ("GPI") explains that the categorization of bioenergy into three separate buckets in SB 1122 does not correspond to the technology and market realities of biogas and biomass projects. GPI thus proposes separate treatment of biogas and agricultural wastes in Category 2.

SCE and PG&E, on the other hand, emphasize that there could be significant costs to ratepayers and propose various mechanisms to limit or control future costs.

<sup>&</sup>lt;sup>1</sup> The Staff Proposal is included in Attachment B to the November 19, 2013 ALJ Ruling.

TURN generally agrees with both these perspectives. TURN has supported the development of certain bioenergy projects, especially those that provide additional value due to location, dispatchability, and/or incremental methane destruction; however, we likewise have serious concerns regarding potential costs. Regrettably, SB 1122 does not create a small pilot but instead sets a large **capacity** target of 250 MW, in addition to the existing ReMAT capacity goal of 750 MW. But the procurement of 250 MW of baseload bioenergy capacity (with capacity factors exceeding 80%) is equivalent in terms of energy procurement, and thus the dollar expenditures on contracts for kilowatt-hours of output, of more than 1000 MW of solar capacity (with capacity factors of only 20%). Thus, the total annual ratepayer dollar impact of a project with an 80% capacity factor costing \$125/MWh, as compared to a project with a 20% capacity factor costing \$90/MWh, is 5.6 times larger, not just 1.4 times larger.<sup>2</sup>

Lastly, TURN notes that the Bioenergy Association of California ("BAC") repeatedly describes SB 1122 as intended to incubate a "pre-commercial" industry. The BAC offers little evidence for this proposition, and in fact, many bioenergy technologies are mature and have been in commercial operation for decades. It is true that there has been little development of small bioenergy projects, but that economic reality does not demonstrate that SB 1122 intended the set-aside provisions of Section 399.20(f)(2) to result in significantly increased ratepayer costs, in contravention of the ratepayer indifference standard in Section 399.20(d)(4), which applies to the entire feed-in tariff program.

<sup>&</sup>lt;sup>2</sup> The ratio of prices is 125/90=1.39, but the ratio of annual energy payments is (125/90)\*(0.8/0.2)=5.56. This is the point SCE makes in emphasizing the total lifetime cost of the SB 1122 program.

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Based on the comments of other parties, TURN would support separate pricing for dairy biogas versus agricultural waste projects, which are presently bundled together in Category 2. As discussed by several parties, and corroborated by the Black and Veatch Report, these are different technologies with very different cost curves. Without separate pricing, the gasification and / or combustion of agricultural wastes could easily outcompete dairy biogas digesters for Category 2 megawatts.

Several parties suggest that one of the goals of SB 1122 was the promotion of dairy biogas.<sup>3</sup> The legislative history supports the contention that the Legislature was interested in promoting projects that provide the benefits of methane destruction.<sup>4</sup>

Some parties recommend a specific allocation of megawatts to dairy biogas versus agricultural waste, with separate pricing for each. The Bioenergy Association of California recommends separate pricing for each sub-category but no allocation of capacity, so that the capacity would be contracted on first-come first-served basis.

TURN supports the BAC proposal as it is somewhat less restrictive from a technology perspective. TURN thus recommends a single starting price for Category 2, but with separate adjustments for each of the two subcategories, but no specific capacity carve-out for each subcategory.

<sup>&</sup>lt;sup>3</sup> See, for example, BAC, p. 3. All citations to a party refer to the party's Opening Comments on the Staff Proposal, unless otherwise specified.

<sup>&</sup>lt;sup>4</sup> See, TURN, p. 3, fn. 3.

SCE and PG&E calculate the total potential costs over the lifetime of the program at between \$5 billion and \$7.8 billion, assuming blended prices from the Black & Veatch Report.<sup>5</sup> A more relevant number is not the total cost, but the incremental cost of purchasing energy at these prices as compared to purchases with existing prices in the ReMAT program. As discussed above, 250 MW of capacity with an 80% capacity factor will result in significant annual energy production. Purchasing this amount of energy at \$125/MWh would cost \$4.38 **billion** on a nominal basis over 20 years. Purchasing the same amount of energy at \$90/MWh would cost \$3.15 **billion**, resulting in an incremental nominal cost to ratepayers of \$1.23 **billion**.<sup>6</sup> If prices increase significantly above the \$125/MWh starting price, the incremental cost to ratepayers will likewise increase.

In order to control these relatively large costs, TURN supports at a minimum the following cost-control measures.

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PG&E proposes a price cap of 200% of the average of all executed RAM projects,<sup>7</sup> and SCE proposes a price cap of \$197 / MWh based on the maximum blended price from the Black and Veatch Report.<sup>8</sup> TURN supports PG&E's

<sup>&</sup>lt;sup>5</sup> PG&E, p. 4; SCE, pp. 12 and 19.

<sup>&</sup>lt;sup>6</sup> As explained by TURN and SCE in opening comments, the cost of production from 250 MW of solar capacity (assuming \$90/MWh) would be about \$3.6 billion less, due to both the lower price as well as the much lower energy output from solar of the same capacity. See, for example, SCE, p. 14.

<sup>&</sup>lt;sup>7</sup> PG&E, p. 9.

<sup>&</sup>lt;sup>8</sup> SCE, p. 18-19.

recommendation as a more reasonable level of ratepayer exposure. Paying more than double the RAM prices would violate the "ratepayer indifference" standard that likewise applies to SB 1122 projects.

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In its opening comments TURN supported a single starting price for all categories, as did most other parties.<sup>9</sup> TURN recommended, however, that the price be lower based on previous RAM bids for baseload projects.

However, after reviewing parties' comments and data in the Black and Veatch Report, TURN recommends that the starting price for Category 1 (wastewater biogas) projects should be significantly less than for Category 2 and 3. The B&V Report shows that prices in Category 1 can be significantly lower than \$125/MWh.<sup>10</sup> These projects have already successfully bid into prior RPS and RAM solicitations. PG&E notes that the eight biogas and biomass projects developed under the former E-SRG and E-PWF feed in tariffs all have prices less than \$112/MWh.<sup>11</sup>

Allowing these Category 1 projects to start at \$125/MWh will result in a number of projects contracting for much higher prices than necessary to support development. It will take significant time for the price adjustment to decrease to appropriate levels. TURN recommends that the Commission adopt a starting price for Category 1 based on a weighted average of all existing biogas projects.

<sup>&</sup>lt;sup>9</sup> Significantly, SCE strongly opposed separate price adjustment for each Category. See, SCE, p. 13-17.

<sup>&</sup>lt;sup>10</sup> Black and Veatch Report, p. 1-5, 4-1 and 4-2. See, also, SCE, p. 8.

<sup>&</sup>lt;sup>11</sup> PG&E, p. 6.

GPI explains that the requirement that a biomass facility gasify or burn only agricultural waste or forest biomass (Sec. 1.6.4) is contrary to market dynamics of facilities that are constructed to use a variety of fuel sources. GPI recommends that pricing be weighted based on annual fuel sourcing (agricultural or forest biomass).

Similarly, Phoenix Energy argues that the requirement that the fuel source for agricultural waste be generated from the same premises as the project location is also contrary to market dynamics and would severely limit project development.

TURN supports the locational and fuel sourcing limits in the Staff Proposal. This program is supposed to facilitate small renewable facilities that provide net environmental benefits. The gasification and combustion of biomass already produces harmful air emissions, but is a net GHG benefit as compared to in-place decomposition or simple combustion without power extraction.<sup>12</sup>

However, TURN is concerned that without any limits on locational sourcing of fuel, it is not clear whether these projects would then provide net environmental benefits after transportation emissions are added to the mix. If the Commission chooses to relax the locational requirements for fuel sourcing, it should conduct a lifecycle emissions study to determine whether any geographic restrictions are necessary to ensure net emissions benefits.

<sup>&</sup>lt;sup>12</sup> TURN is not an expert on laws and regulations limiting open pi burning of biomass and organic waste.

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The BAC argues that the market dynamics of bioenergy projects warrant additional flexibility in contract terms. While TURN does not agree with BACs characterization of bioenergy technologies as "pre-commercial" or immature, TURN does agree bioenergy projects inherently rely on fuel sources that may be quite variable over the course of a ten to twenty-year period. The availability of forest biomass or agricultural waste may vary with factors that are beyond the control of the project developer. This creates a significant risk of production levels, and some price risk.

While normally TURN does not believe that ratepayers should bear longterm production risks, TURN agrees that certain ReMAT contract terms could be modified without imposing significant risk on ratepayers. Specifically, TURN supports:

 BAC requests that the definition of "strategically located" be modified to allow for transmission upgrades above \$300,000 if "the generators bears any costs above \$300,000." TURN supports this proposal, but if and only if proper cost accounting and cost allocation can be authorized by the Commission so that none of the costs above \$300,000 are recovered from ratepayers through the "Repayment of Amounts Advanced for Network Upgrades" provisions of the CAISO tariff.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> See, for example, CAISO Tariff, Dec. 3, 2013, Appendix T, Small Generator Interconnection Agreement, Article Cost Responsibility For Network Upgrades. TURN does not have sufficient information to know whether an IOU tariff provision or contractual arrangement can modify this element of the CAISO tariff.

- BAC requests that the guaranteed energy production over the first two years of a project's term be reduced to allow for as little as 140% of the forecast annual production.<sup>14</sup> BAC also requests removing any penalty provision for production guarantees, since it alleges that actual replacement power costs will likely be lower than contract prices. While current market conditions suggest that renewable replacement power would be available, as a general matter the availability of renewable replacement power is not assured. TURN supports revising this provision to allow greater flexibility during the first two years of a project's term; however, the damages provision should not be eliminated, especially given such greater flexibility.
- BAC requests the ability to change contract quantities more than once over the course of the contract, though BAC does not specify an alternate number. BAC claims that there should be no negative impact from "delivery changes agreed to a year or more in advance."<sup>15</sup>
  TURN does not oppose expanding the number of allowed changes. However, there is no specific proposal on the record. How many changes might be allowed could depend on the amount of change and amount of advance notice. Assuming a one-year advance notice, TURN could at this time support one change for every five-year period.

<sup>&</sup>lt;sup>14</sup> BAC, p. 15 (as calculated based on printout). TURN interprets BACs request for "140 percent fluctuation."

<sup>&</sup>lt;sup>15</sup> BAC, p. 16-17 (as numbered by TURN).

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TURN supports proceeding with implementation of new Section 399.20(f)(2), but we caution that the structure of the legislation creates certain difficulties for both market participants and ratepayers. TURN supports the proposals to allow for separate pricing for projects included in Category 2; but at the same time TURN strongly supports cost control measures to ensure that ratepayers do not pay an incremental \$1.23 billion for SB 1122 energy output.

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Respectfully submitted,

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## VERIFICATION

I, Marcel Hawiger, am an attorney of record for THE UTILITY REFORM NETWORK in this proceeding and am authorized to make this verification on the organization's behalf. The statements in the foregoing document are true of my own knowledge, except for those matters which are stated on information and belief, and as to those matters, I believe them to be true.

I am making this verification on TURN's behalf because, as an attorney in the proceeding, I have unique personal knowledge of certain facts stated in the foregoing document.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on January 16, 2014, at San Francisco, California.

<u>\_\_\_\_/s/\_\_\_\_</u>

Marcel Hawiger Staff Attorney