

**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)

**COMMENTS OF THE CALIFORNIA WASTEWATER CLIMATE CHANGE
GROUP ON THE REVISED DRAFT RENEWABLE FEED IN TARIFF STAFF
PROPOSAL (OCTOBER 13, 2011)**

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Introduction

Pursuant to the Commission's Rules of Practice and Procedure, and the October 13, 2011 Ruling of ALJ DeAngelis, the California Wastewater Climate Change Group (CWCCG) submits these comments on the *Revised Draft Renewable Feed In Tariff Staff Proposal (October 13, 2011)* (Staff Proposal).

Biogas energy has a unique role to play in providing clean, firm-capacity renewable electricity. Biogas power supports electrical grid stability and requires no grid system storage or dispatchable power capacity elsewhere on the transmission system for support with changes in weather. To maximize use of this reliable and renewable source of energy, CWCCG strongly supports development of a price structure that would encourage implementation of such projects by wastewater agencies that might otherwise not have the incentive to do so. The feed-in tariff (FiT) that SB 32 requires can help achieve this and support Governor Brown's call for a much greater contribution from distributed generation (DG), if properly implemented.

Key Issues

CWCCG represents agencies that treat over 90% of the municipal wastewater in California. Processes used by many agencies to treat wastewater produce useful byproducts such as biosolids and biogas that can be used as a steady and reliable source of fuel for renewable energy production. Wastewater agencies across the state are in the process of developing and implementing such distributed renewable energy generation projects, yet the expansion of DG facilities at wastewater treatment plants across California depend on the cost of implementing such projects. These plants are owned and operated by non-profit public agencies that need support to maintain financial stability of their organizations while investing the public funds that are collected for their services in support of the State's Renewable Portfolio Standards (RPS) goals.

For this reason, programs such as FiT should strike the right balance between DG that can provide the local baseload needs and large scale targeted projects that provide intermittent power, helping to balance the cost requirements for these facilities. Unfortunately, as currently proposed, the Staff Proposal will not lead to a diversified DG portfolio that could reliably support the RPS goals. The Commission must adopt a FiT that is not based on one renewable technology, and one that is applicable to a variety of technology types, based on specific avoided costs. If this means that "technology specific FiT structures" be developed, then it needs to be accomplished as part of this Rulemaking. CWCCG had previously stated that "...use of separate tariffs in place of consolidation of the tariffs for water and wastewater agencies and others could be more appropriate for some of the unique circumstances and the needs of the water and wastewater agencies in both meeting their own power needs through renewable generation, and

providing electricity to the grid.”¹ Although CWCCG has been advocating for an expedited implementation of SB 32, we respectfully recommend that CPUC take time to evaluate the implications of the Staff Proposal that will result in further delays in deployment of diverse renewable generation over the long-term. Additional time will allow the Commission to initiate efforts to develop technology differentiated basis and rates, and set up reasonable procurement goals for each technology. Only then can the Commission adhere to Principle 11 of the Guiding Principles outlined in the Staff proposal, which proposes to “ensure all RPS-eligible renewable resources are able to participate”² under the FiT program.

CWCCG limits its comments to a discussion of the following key issues further explored below, and to specific responses to the questions posed in the Staff Proposal.

1. RAM is not an Appropriate Benchmark

The Staff proposal recommends the Renewable Auction Mechanism (RAM) be used as the benchmark and basis for the FiT. However, the proposed benchmark is inappropriate and is not yet an “established” benchmark. The first auction is occurring at this time, and therefore, there is no history regarding the success and failure of the program to incorporate and attract diverse renewable energy projects. Furthermore, the prices that will be incorporated to the bid prices under this first auction will include tax incentives that are available through the end of this year as part of the American Recovery and Reinvestment Act (ARRA). These prices therefore will not reflect actual project costs, while not being a representation of diverse participants. This means that the FiT benchmark will be based on a technology, such as photovoltaics (PV), with different cost and size characteristics. The Staff would then have the Commission take the

¹ CWCCG Comments on Ruling Setting Forth Implementation Proposal for SB32 and SB 2 1x Amendments to sec.399.20, July 21, 2011.

² *Id.* at 7 (emphasis added).

results of the RAM, an auction whose results will only be known for the first time later this month, and establish those results as the pricing benchmark for the FiT.

The Staff Proposal suggests “...RAM represents the most relevant market segment that the Renewable FIT generators are avoiding since RAM is available for projects between 500 kW to 20 MW.”³ This logic in the Staff Proposal ignores the Commission’s stated intent when it adopted the RAM:

“RAM evolved from the Commission’s inquiry into expanding the existing feed-in tariff program for generators 1.5 MW and below, pursuant to Public Utilities Code Section 399.20 and Decision 07-07-027. However, RAM is distinct from a feed-in tariff as that term has traditionally been used. While it is a streamlined contracting mechanism and utilizes a standard contract, RAM relies on market-based pricing, utilizes project viability screens, and selects based on least cost rather than a first-come, first-served basis at an administratively determined price.”⁴

Long before the Commission adopted the RAM, the Legislature recognized the unique circumstances for small projects when it expanded the FiT from 1.5 MW to 3 MW. As stated in Section 399.20(c) “Small projects of less than three megawatts that are otherwise eligible renewable energy resources may face difficulties in participating in competitive solicitations under the renewables portfolio standard program.” The Legislature did not intend for projects under 3 MW to compete in auctions. It is therefore difficult to see how using the results of an auction process in which those technologies are not expected to participate would provide an adequate benchmark.

2. Product Categories and Contract Terms

The Staff Proposal suggests that the FiT offer three market prices based on different types of renewable resources under 3 MW: baseload, peaking as-available, and non-peaking as-

³ Staff Proposal, p. 9.

⁴ D.10-12-048, p. 1.

available. CWCCG understands that consolidating various technologies into three categories may offer administrative simplicity. However, biogas can be delivered baseload, or stored and delivered at the time of day when the state needs the energy. The current product categories do not take into account this storing capacity. “Peaking as Available” reflects the intermittent and non-controlled profile of solar, which produces energy when the solar energy is available. To encompass this unique storing benefit of many biogas projects, we encourage the CPUC to extend the baseload category to “baseload and storable” and change the FiT calculation allowing for projects with additional benefits and potentially lower capacity factors. Furthermore, RAM provides the utilities the ultimate ability to reject any and all bids submitted in a category. It is important to set the priorities so that this does not result in opportunities being limited for technologies which may be perceived as “small” or “higher cost” even though technologies such as biogas-to-energy may provide substantial locational, environmental and GHG emission reduction benefits. For example, PG&E has suspended further contract additions to its Small Renewable Generator (E-SRG) wait list, since it is already fully subscribed, largely by solar projects.⁵ It is concerning that unless separate avoided cost prices and procurement targets are established by technology type, biogas technologies will be disadvantaged or excluded entirely under the Staff Proposal.

The Staff Proposal also proposes adopting a \$20/kW development deposit for projects less than 1 MW and a \$50/kW development deposit for projects between 1 MW and 3 MW. This is contrary to the Commission’s policy for development deposits established in D.10-12-048, which provides for the lower deposit for projects under 5 MW. The Commission should not create additional hurdles and barriers for small distributed generators.

⁵ See, e.g., <http://www.pge.com/b2b/energysupply/wholesaleelectricssuppliersolicitation/standardcontractsforpurchase/>.

The Staff Proposal appropriately continues the excess sales option established in the first FiT decision, D.07-07-027. The Commission must retain this feature of the contract, which is critical for customers with access to renewable fuel stocks that exceed their onsite electricity demands.

3. FiT Price Calculation Adders

We have presented that RAM is not a suitable benchmark for various reasons above. However, since the Proposed Rule and the questions posed by the Staff assumes RAM is the basis of the FiT, our discussion and responses are geared to discuss the FiT calculation assuming a fair “base” price will be used representing the unique conditions of biogas as a renewable energy resource.

Staff Proposal suggest that the FiT be determined based on RAM baseprice plus avoided costs (transmission, distribution, losses). CWCCG generally agrees with the listed avoided cost items, but notes that the avoided costs calculated in this manner do not take all the benefits or impacts of the projects. For example, a DG project could provide substantial environmental benefits as well as cost deferral or avoidance due to reduced and eliminated GHG emissions as well as avoided T/D/L costs due with onsite use of the energy, yet the full benefits of this project will not be accounted for in the FiT calculation, given the benefits or impacts could vary depending on the technology and the location.

4. Other Adders

CWCCG in general supports the idea that a “pre-commercialization adder” or similar could be introduced in support of the biogas capture in California, specifically at wastewater treatment plants where the costs incurred by the publicly owned utilities to enhance, capture, store, and use biogas are (1) achieved using newer technologies that are being improved and

further developed as their use at facilities increase, and (2) above and beyond the original purposes of the individual agencies and their ratepayers yet could provide significant benefits to the California energy budget and RPS goals. Recognizing the cost impacts of the emerging nature of the biogas technologies, as also recognized under the SGIP⁶, this adder would serve to offset the costs.

This is intended to be for a predetermined initial period, to enable the industry to mature. Over time, the biogas industry will be able to develop projects at costs competitive with other renewable sources, while reflecting biogas's unique benefits. How biogas as a "local" and "strategically located" energy resource could benefit the goals of the Commission is further explained under Section VI of our response letter as it relates to the specific questions posed in the Staff Proposal.

5. Finalizing Interconnection Requirements under Rule 21

The Staff Proposal recognizes the ongoing work in the R.11-09-011 docket to establish Rule 21 as the interconnection standard for projects participating in the FiT. The Staff Proposal would require all generators interconnect under Rule 21 once the revised procedures are in place. This is a result for which CWCCG advocated. We encourage the Commission to expeditiously complete its work related to Rule 21, because the planned outcomes and procedures that will be established in R.11-09-011 will have significant bearing on the FiT.

Responses to Questions Posed In the Staff Proposal

RAM Pricing

1. How should the CPUC set the price if an IOU does not execute any contracts in one or more product categories? For example, the IOU could use the price from another one of its product categories.

No comment at this time.

⁶ Decision 11-09-015 September 8, 2011.

2. How should the CPUC adjust the transmission part of the total RAM price if the generator only has a Phase I or System Impact Study, since the results of these studies are usually an overestimate of actual transmission costs?

This is another reason why the RAM is not an appropriate benchmark for the FiT, and a different basis is needed for the biogas projects. Because these projects are interconnecting at the distribution level, there should not be any transmission costs incurred.

Pricing Adders

3. If the CPUC adopts the locational adder, what should the CPUC do to increase the probability that a distribution system upgrade will be deferred?

No comment at this time.

Besides a locational adder, staff is not proposing other adders to the FIT price. If parties believe the Commission should consider other adders, then parties should address the following issues when suggesting an adder:

The requirements in SB 32 point to the Legislature’s intent to consider additional factors:

399.20(d)(1) The payment shall be the market price determined by the commission pursuant to Section 399.15 and shall include all current and anticipated environmental compliance costs, including, but not limited to, mitigation of emissions of greenhouse gases and air pollution offsets associated with the operation of new generating facilities in the local air pollution control or air quality management district where the electric generation facility is located.

(2) The commission may adjust the payment rate to reflect the value of every kilowatthour of electricity generated on a time-of-delivery basis. (emphasis added)

SB 32 also states the Legislature’s intent to prioritize renewable generation that “is strategically located and interconnected to the electrical transmission and distribution grid in a manner that optimizes the deliverability of electricity generated at the facility to load centers.”⁷ This aligns with CWCCG’s position that renewable generation at the wastewater treatment plants generally located at the population centers, hence, in close vicinity to the load centers should allow these

⁷ § 399.20(b)(3).

facilities to be made an integral component of the California's energy portfolio. This would be enabled by recognizing and monetizing these unique benefits of biogas as part of the FiT structure.

4. Does the technology have an incremental avoided cost compared to a RAM project in the same product category? If so, explain why.

Yes. Biogas generated at the wastewater treatment plants, with or without additional organic wastes brought to the facility to increase the biogas generation, increases with the wastewater treatment capacity of the plant, which directly correlates with the increase in population and commercial activity within the service area of the treatment plant. The demand for energy within the same service area (i.e., load) also increase at the same rate. By being able to generate more biogas to continue to serve and offset the energy demand at the load centers, the avoided costs of transmission and losses are incrementally avoided at the same rate. This unique advantage of biogas is of larger importance considering the ability to store biogas before it is converted to energy, which is not the case with many other renewable energy sources such as solar or wind.

5. Is the adder avoiding a ratepayer cost? In staff's view, any additional FIT adder should avoid a ratepayer cost and not a more general societal cost since the statute requires that ratepayers be held indifferent to the FIT payments.

Yes. Any adder that recognizes the unique benefits of biogas as a local renewable energy resource defers further investment in the transmission system, hence, avoiding the ratepayer costs. This is due to the reasons outlined in our response to the question 4, and due to the ability to avoid capacity expansion to meet peak loads through the ability to store biogas and peak shaving through onsite usage of part of the biogas energy without having to load the existing transmission system. Also, the avoided ratepayer cost of the proposed "pre-commercialization

adder” could be structured to account for reduction of future electricity costs through enabling technology development. The ratepayers are in effect making an investment by creating a new source of energy that will be competitive in the future, with unique benefits.

6. Can the adder be quantified? If so, suggest a method and the data sources for quantifying adder. Reference previous filings if applicable.

Yes. Final SGIP decision is one example of flat-rate incentivization of the biogas technologies.

We intend to respond to this question at the next opportunity.

Pricing Trigger:

7. Identify the strengths and weaknesses for each party’s proposal listed in the staff proposal, and make a recommendation addressing the following issues:

- a. Level of subscription that triggers price decrease*
- b. Amount that the price should be decreased*
- c. Time period without any or minimal subscription that the price should be increased*
- d. Definition of minimal subscription*

No comment at this time.

FIT Contract

8. Do parties agree or disagree with the Agricultural Energy California Association’s proposed modifications to PG&E’s contract?

No comment at this time.

9. If you seek additional modifications to PG&E’s contract or any other contract filed in the record, identify the term, proposed change, and rationale in a matrix format. To ensure your recommendation receives full consideration, provide documentation or attestation to support your rationale. In addition, if you propose a modification, you should state if the language is from a previously approved contract and provide the citation. When reviewing contract language, staff considers the following guiding principles to determine if a change is warranted:

- a. Term properly allocates risk between buyer, seller, and the regulator*
- b. Term minimizes transaction costs between buyer and seller*
- c. Term is financeable and provides regulatory certainty*

No comment at this time.

Resource Adequacy

10. How should the CPUC implement PU Code § 399.20 (i), which states: “The physical generating capacity of an electric generation facility shall count toward the electrical corporation’s resource adequacy requirement for purposes of Section 380?”

No comment at this time.

11. Should this issue be addressed in other planning proceedings, such as the LTPP and RA proceedings? To what extent is there overlap with the Distribution Interconnection Settlement process? What is an appropriate interim approach. If you support addressing this issue in other, more appropriate proceedings, provide a rationale and an interim proposal to address this language before it is addressed elsewhere.

CWCCG believes that the Commission should address all issues related to the FiT in this docket.

Parties currently participating in this docket have a specific interest and understanding of the issues surrounding FiT, a contract vehicle for customers who have the ability to install distributed generation. These parties may not have the right resources to monitor numerous CPUC proceedings.

Implementing Strategically Located:

12. How should “strategically located” be defined and implemented?

“Strategically located” must be an inclusive term that accommodates the resources that provide capacity at peak demand on a distribution circuit. For example, as we have discussed earlier, wastewater biogas projects are expected to be located closer to load centers within small or large population centers. Other biogas projects may be more remotely located, yet they need to be accommodated as renewable energy resource centers.

13. Comment on the strengths and weaknesses of each option listed in the staff proposal. If you have an alternative proposal, explain the rationale and the data sources required to implement it.

No comment at this time.

CSI/SGIP/NEM Refund Options

14. Over what time period should incentives be refunded? What is the rationale for your time period versus the alternatives presented in the record?

No comment at this time.

15. Which incentives should be refunded and why?

No comment at this time.

16. At what interest rate should incentives be refunded and why?

No comment at this time.

Conclusion

CWCCG appreciates the opportunity to bring forth the unique role biogas energy plays in providing clean, reliable and firm renewable electricity, and wants to ensure that this value is recognized through a specific tariff and/or a set-aside target for biogas electricity within the program cap to appropriately incentivize clean, reliable in-state electricity generation.

CWCCG had previously recommended that technology-specific rates for different types of renewable resources be utilized, in-line with the need for a mechanism to ensure that diverse resources are represented in the program so that biogas projects can flourish alongside solar and wind. We look forward to working with the Commission to collaboratively develop a definition of “technology specific rates” and how they could be applied for the purpose of expanding the use of environmentally-friendly renewable energy solutions which the water and wastewater agencies could offer. The public agencies owning and operating municipal wastewater treatment facilities are required to justify expenditure of ratepayer dollars used to expand their on-site biogas production capacity to generate electricity from the constant stream of available, naturally produced biogas. Such biogas-fueled distributed generation facilities can provide firm-capacity baseload power with storage capabilities, and the feed-in-tariff and price calculations should

recognize this value. In order to eliminate the inconsistencies existing in the current feed-in tariff structure, prices need to be set at appropriate levels that recognize real avoided costs and truly incentivize renewable distributed generation.

Respectfully submitted this 2nd day of November, 2011 in Santa Ana, California.

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By



For the California Wastewater Climate
Change Group

VERIFICATION

I am a consultant representing the California Wastewater Climate Change Group and am authorized to make this verification on its behalf. I have read the foregoing "Comments of the California Wastewater Climate Change Group on the Revised Draft Renewable Feed in Tariff Staff Proposal (October 13, 2011)" and am informed and believe that the matters stated therein are true. I declare under penalty of perjury that the foregoing is true and correct.

Executed this 2nd day of November 2011, in Santa Ana,
California.

A handwritten signature in cursive script, appearing to read "Zeynep Erdal".

By: Zeynep Erdal