

**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 PROPOSED DECISION REVISING FEED-IN TARIFF
PROGRAM, IMPLEMENTING AMENDMENTS TO PUBLIC UTILITIES CODE
SECTION 399.20 ENACTED BY SENATE BILL 380, SENATE BILL 32 AND
SENATE BILL 2 1X, AND DENYING PETITIONS FOR MODIFICATION OF
DECISION 07-07-027 BY SUSTAINABLE CONSERVATION AND SOLUTIONS
FOR UTILITIES, INC. (March 20, 2012)**

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Introduction

Pursuant to the Commission's Rules of Practice and Procedure, and the March 20, 2012 Ruling of ALJ DeAngelis, the California Wastewater Climate Change Group (CWCCG) submits these opening comments on the *Proposed Decision Revising Feed-In Tariff Program, Implementing Amendments to Public Utilities Code Section 399.20 Enacted by Senate Bill 380, Senate Bill 32 And Senate Bill 2 1x, and Denying Petitions for Modification of Decision 07-07-027 by Sustainable Conservation and Solutions for Utilities, Inc. (March 20, 2012)* (Proposed Decision).

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 and implementation program that would encourage investment in biogas generation projects by wastewater agencies that might otherwise not have the incentive to do so.

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 these projects at wastewater treatment plants across California depend on the cost of implementation. These plants are owned and operated by non-profit public agencies that need a reasonable measure of certainty to justify the investment of 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 Feed-in Tariff (FiT) should strike the right balance between distributed generation (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. 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

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

implications of the Proposed Decision 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 previously outlined in by the CPUC Staff, proposing to “ensure all RPS-eligible renewable resources are able to participate”² under the FiT program.

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

1. Proposed Term Limits Could be Obstructing Some Renewable Energy Product Types

The Proposed Decision stipulates a 12-month observation period to begin reallocating capacity between the product types after the expiration of 12 program months. We believe that the 12-month period is too short as it is not representative of the typical biogas project development period. We propose the following in place of this requirement:

a. Increase the 12-month observation term to 2 years to allow a more reasonable observation period for technologies that have more complex project development and permitting requirements compared to others.

b. Require a predetermined number of projects proportional to the customer base of each utility within their service areas. These predetermined numbers of projects should also take the potential capacity for each technology under each product type use of the FiT within the said service areas. In the event that after the observation period there are not enough projects in the queue for one of the IOUs to trigger the price adjustment, then the price could then be set at the average of the other two IOU’s in the same product type category (e.g., baseload) until there are

² Renewable FIT Staff Proposal – Revised Draft. Energy Division Staff Proposal, October 13, 2011. p.7.

five projects in the queue. At that time, the price in that one IOUs territory would revert to the average of the price for the subject product type, establishing a true market based price.

c. Provide flexibility to conduct project swap at the state level if there are not enough number of projects put forth within the service area of each utility during the observation period.

2. Treating all Renewable Energy Technologies Equally Is Disadvantageous for High-Potential Newer Technologies

CWCCG had previously stated that why biogas is a unique “local” and “strategically located” energy resource for California’s energy portfolio³. The Proposed Decision treats all technology options (e.g. solar, wind, biogas, etc.) equally by setting the same time limits for all project types. We recommend that the developmental nature of some of the technologies and still growing experience of project developers, including the wastewater agencies, with the technologies be recognized to adhere to the Energy Division’s Guiding Principles for the FiT program as referenced earlier. Recognizing the cost impacts of the emerging nature of the biogas technologies was also recognized under the SGIP⁴ to offset these unique costs. This will be key to avoid false starts and the unnecessary reallocation of the generation capacity between product types, as well as preventable CPUC staff time to be expended on early reallocation processes. These can be avoided by allowing longer time in the earlier years of the program to let the technologies to mature, regulatory agencies to develop the necessary structure to provide due oversight to the projects, preventing projects like biogas from renewable organic sources (e.g. sewage, organic wastes, etc.) be cancelled due to the undue time burden.

Startup considerations for bio-based renewable energy projects (e.g., biogas generation

³ Comments of the California Wastewater Climate Change Group on the Revised Draft Renewable Feed In Tariff Staff Proposal (October 13, 2011).

⁴ Decision 11-09-015 September 8, 2011.

from sewage, organic waste, etc.) are different than those for other renewable energy product types. These differences exist even among baseload products (e.g., biogas versus geothermal). The system startup requirements (i.e.; guaranteed full capacity requirements) need to be adjusted to reflect the ramp-up time required to establish stable operation following successful startup of bio-based projects. We propose that a minimum of 6-months be allowed before the guaranteed full capacity requirement takes effect, and these projects be qualified on installed capacity during this brief startup period. The system allows this since the capacity requirements are set to adjust month-to-month.

Similarly, the permitting and environmental requirements of some of the renewable projects such as biogas projects can be significantly greater or complex than others. Monetary burden of these requirements need to be incentivized to encourage a diverse renewable portfolio for the State. For the same reasons, the 18-month+6-month period allowed under the FiT program to complete project development, design, construction, startup and permit compliance demonstration (i.e., inception to full capacity operation) may be difficult for some of the biogas projects, resulting in an unnecessary elimination of such projects due to unfavorable pricing, and reduction of the renewable energy potential of the State.

3. Cost Basis of RAM is not Suitable for All Product Types

The Proposed Decision 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. RAM does not represent the baseload type product experience. Whatsmore, environmental quality and permitting requirements set forth by the Air Quality Management Districts and State Water Resources Control Board to protect the water and air quality strictly impacts the biogas based technologies. This burden are not reflected in the

prices of any of the other renewable energy projects, hence the RAM price would not have been representative, even if there were other examples. The cost of compliance with environmental regulations needs to be taken into account in the price by CPUC.

Furthermore, the prices that will be incorporated to the bid prices under this first auction include. The RAM prices included the tax incentives that were available through the end of last year as part of the American Recovery and Reinvestment Act (ARRA), and hence does not reflect actual project costs, including the environmental compliance 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.

Commission's stated intent when it adopted the RAM was:

“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.”⁵

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.

⁵ D.10-12-048, p. 1.

Whatsmore, environmental quality and permitting requirements set forth by the Air Quality Management Districts and State Water Resources Control Board to protect the water and air quality strictly impacts the biogas based technologies differently. 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)”

CWCCG appreciates the reference to the earlier FiT filings that reflected the Market Price Referent (MPR) as a basis of the price determination, which were based on implementation and environmental compliance of a 500 MW natural gas-fired combined cycle gas turbine⁶, as not being the correct basis for this FiT program. We respectfully request that it also be recognized that the compliance burdens mentioned above are not reflected in the prices of any of the other renewable energy projects under the RAM either. Hence, the RAM price basis will not be representative of true costs as intended in SB 2 1X, even if there were diverse product types represented under the RAM auction. Although the Proposed Decision recognizes the SB 2 1X requirements “...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 (§ 399.20(d)(1)).⁷” it also

⁶ Proposed Decision, p.8.

⁷ Proposed Decision, p.13.

states that “...no party presented evidence that their proposals addressed specific ‘environmental compliance costs.’ Rather parties presented evidence on the general environmental societal values...,” therefore the proposal that recommend evaluation and establishment of such environmental costs “...are not supported by the plain language of the statute.⁸” CWCCG respectfully recommends that the Commission not expressly dismiss the need for inclusion of such cost components, as directed in the statute which “...refers to certain costs that the Commission must consider in setting a tariff price and provides, in pertinent part, as follows: ‘The payment...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’.”⁹ CWCCG and other parties had previously expressed interest in assisting the Commission with development of such cost basis.

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.”¹⁰ 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 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.

⁸ Proposed Decision, p.34.

⁹ Ibid.

¹⁰ § 399.20(b)(3).

4. Ability to Store Energy for Baseload Product Types Need to be Recognized

CWCCG understands that consolidating various technologies into three product type categories may offer administrative simplicity. However, biogas based electricity can be delivered baseload, or it could be stored and delivered at the time of day when the peak energy demands are experienced. The current product categories do not take into account this storing capacity. CWCCG recommends that the ability to store biogas to meet peak load requirements be recognized, by allowing on-peak pricing for specialty baseload type projects such as biogas. Essentially, the generation and availability can meet peak requirements with biogas projects, although all biogas projects are currently being assigned to the “baseload” category under the Proposed Decision.

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 combined with the ability to store is great technological advantage, which is not the case with many other renewable energy sources such as solar or wind.

5. Reasonable Flexibility is Needed for a Robust Program

Wastewater treatment facilities have a significant on-site demand for electricity, therefore a majority of generator output is typically used for these onsite loads, with the excess electricity being exported to the grid. Changes to the treatment plant can lead to increases or decreases in the onsite demand, making it possible that the exported amount may change in the future

depending on the generation and onsite load balance for a particular biogas facility. Considering the evolving nature of the energy markets and demands where long term contracts with 10- to 20-year terms are being stipulated under the FiT program, sufficient ability to adjust the contract terms to provide flexibility for increased or decreased demands, future compliance issues and such that could impact the ability of the existing projects to continue to be viable under the originally established contract terms.

CWCCG notes that Part 3.2 of the Proposed Standard Form Contract makes a stipulation that "...Seller shall have the option to update the Delivery Term Contract Quantity Schedule one (1) time to the extent such a change is necessary based upon any adjustment to the Contract Capacity based on the Demonstrated Contract Capacity and the definition of "Contract Capacity," within ten (10) Business Days of Buyer's Notice of such adjustment to the Contract Capacity or the date of the Engineer Report, as applicable, which adjusted amounts shall thereafter be the applicable "Contract Quantity" that this refers to an adjustment to the contract quantity that occurs soon after startup of the facility once the capacity of the generator has been demonstrated." CWCCG requests that a provision be added allowing for an adjustment to be made one (1) time for other changes, such as a significant increase in the onsite load of the facility which may impact the contracted capacity.

6. Finalizing Interconnection Requirements under Rule 21

The Proposed Decision 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, yet directs the generators to follow existing Rule 21 requirements until the interconnection issues are finalized. 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 program implementation.

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 FiT structure that could be applied for the purpose of expanding the use of environmentally-friendly renewable energy solutions which the wastewater treatment industry 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 9th day of April, 2012 in Santa Ana, California.

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By

A handwritten signature in cursive script, appearing to read "Zeynep Erdal", is written over a horizontal line.

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 PROPOSED DECISION REVISING FEED-IN TARIFF PROGRAM, IMPLEMENTING AMENDMENTS TO PUBLIC UTILITIES CODE SECTION 399.20 ENACTED BY SENATE BILL 380, SENATE BILL 32 AND SENATE BILL 2 1X, AND DENYING PETITIONS FOR MODIFICATION OF DECISION 07-07-027 BY SUSTAINABLE CONSERVATION AND SOLUTIONS FOR UTILITIES, INC. (March 20, 2012)" 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 9th day of April, 2012, in Santa Ana, California.



By: Zeynep Erdal