BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Implementation and Administration of the California Renewables Portfolio Standard Program.

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

SUSTAINABLE CONSERVATION COMMENTS ON PROPOSED DECISION REVISING FEED-IN TARIFF AND RELATED ISSUES

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FOR Sustainable Conservation

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I. Introduction

In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission"), Sustainable Conservation 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.* ("Proposed Decision"). Sustainable Conservation is pleased that the Commission has finally taken steps to implement SB 32, two and a half years after it became law. Unfortunately, the feed-in tariff mechanism put forward in the Proposed Decision is in our opinion unlikely to be successful. Specific comments include:

- The Proposed Decision, as written, may bring more small solar projects into California's resource mix, but it is unlikely to lead to diversity in the renewable resource portfolio, which instead is likely to be comprised mainly of intermittent resources under current procurement policies. The Commission should state as a guiding principle that the feed-in tariff program should encourage participation of diverse resources.
- The Proposed Decision would use a "market price" which in the case of biogas technology is non-existent. The Commission must use a different method for determining baseload prices in order to encourage participation by baseload technologies in solicitations in significant numbers.
- The Commission is not, with this Proposed Decision, complying with the directives given in the authorizing legislation, Senate Bill 32.

II. Biopower Is Forecast To Provide An Insignificant Percentage Of RPS Resources

Recent reports from the investor-owned utilities on their progress in meeting Renewable Portfolio Standard goals show that the percentage of farm-scale biogas is nearly zero, and is not expected to increase any time soon under the current policies and programs. For PG&E, using current and forecasted data, biopower by 2020 will comprise just over 8% of PG&E's total renewable procurement. Of that digester gas, landfill gas, and municipal solid waste, which current are just over 1% of total procurement, will be about the same.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Biomass	21.15%	22.18%	17.87%	15.56%	13.93%	12.99%	11.67%	10.92%	9.75%	7.12%
Digester Gas	0.14%	0.03%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
Biodiesel	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Landfill Gas	0.60%	0.60%	0.54%	0.45%	0.98%	1.03%	1.00%	1.06%	1.10%	1,14%
Muni Solid Waste	0.79%	0.16%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Biopower Subtotal	22.68%	22.97%	18.42%	16.02%	14.93%	14.03%	12.68%	12.00%	10.86%	8.27%

PG&E RPS Procurement: Biopower as Subset of Overall Renewable Procurement¹

Southern California Edison has fewer digester gas projects in its RPS portfolio, as is shown below. SCE has 1/10 of one percent of its RPS procurement coming from digester gas. Last year 5% of SCE's renewable energy came from biopower overall, the vast majority of that being landfill gas; by 2020 just 2% of SCE's renewable energy is forecast to come from biopower.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Biomass	2.26%	2.76%	2.47%	2.22%	1.99%	1.93%	1.77%	1.84%	1.93%	1.47%
Digester Gas	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.00%	0.00%	0.01%	0.01%
Biodiesel	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Landfill Gas	3.25%	3.04%	2.82%	2.53%	2.27%	2.20%	0.61%	0.63%	0.65%	0.61%
Muni Solid Waste	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Biopower Subtotal	5.51%	5.81%	5.30%	4.76%	4.27%	4.14%	2.39%	2.48%	2.58%	2.09%

¹PG&E RPS Procurement Report, March 1, 2012.

² SCE RPS Procurement Progress Report, March 1, 2012.

San Diego Gas & Electric has an even worse record on utilizing biogas. While landfill gas is forecast to peak at close to 8% of SDG&E's RPS procurement in 2012, by 2020 it is forecast to be down to just over 2%. Digester gas drops from less than one percent in 2011 to zero in 2013, and municipal solid waste is not used at all. The only reason biopower is near 17% in 2011 and 21% in 2012 is because SDG&E's overall renewable procurement for 2012 drops. Starting in 2013, SDG&E forecasts it will significantly increase the amount of solar PV (from 2,364 MWh to 3,493,532 MWh), and nearly double the amount of wind heading in to 2020.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Biomass	10.46%	12.82%	7.16%	5.29%	5.06%	4.78%	4.78%	0.14%	0.14%	0.15%
Digester Gas	0.61%	0.63%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Biodiesel	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Landfill Gas	5.78%	7.73%	3.10%	2.28%	2.40%	2.27%	2.01%	2.14%	2.32%	2.33%
Muni Solid Waste	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Biopower Subtotal	16.85%	21.17%	10.26%	7.58%	7.47%	7.05%	6.79%	2.28%	2.46%	2.48%

SDG&E RPS Procurement: Biopower as Subset of Overall Renewable Procurement³

The data from the most recent RPS procurement reports shows that the utilities continue to rely on intermittent resources – solar and wind – to meet their mandated RPS targets. This means the utilities, and the State, are overlooking the ability of a baseload renewable resource, thereby diversifying the renewable resource portfolio. Some of these project are even carbonnegative, which is something the Legislature, the Governor, and the environmental community all value. The State will not be able to achieve the distributed generation targets in Executive Order S-06-06 at this rate.

The feed-in tariff is supposed to be one tool to achieve those distributed generation targets. As discussed below, it does not appear that the full range of technologies will be represented. The Commission should adopt a pricing mechanism that will allow California to

³ San Diego Gas & Electric, RPS Procurement Progress Report, March 1, 2012

diversity its renewable portfolio. Diversification is good advice in the financial markets, and it should be in the renewable energy market as well.

III. Adopted Principles to Guide the Program Should Include Resource Diversity

The Proposed Decision recommends five "guiding principles" for the feed-in tariff:

- 1. Establish a feed-in tariff price based on quantifiable ratepayer avoided costs that will stimulate market demand;
- 2. Contain costs and ensure maximum value to the ratepayer and the utility;
- 3. Ensure administrative ease and lower transaction costs for the buyer, seller, and regulator;
- 4. Use existing transmission and distribution infrastructure efficiently; and
- 5. Establish project viability criteria to increase probability of successful projects within the program.

The Proposed Decision overlooks the value of resource diversity. Sustainable Conservation and others have presented the value of a diverse portfolio in numerous pleadings for years. Sustainable Conservation reiterates its proposal that the Commission include as guiding principle that "Diverse resources are able to participate in the program." Absent explicit direction from the Commission, the utilities are on track to build out renewable portfolios that consist almost entirely of intermittent resources. They then will no doubt request cost recovery for steps they must take to balance load. It would be much less costly for the utilities to develop more diverse renewable portfolios that include baseload technologies. This has the additional benefit of satisfying Governor Brown's goal of 12,000 MW of distributed generation by 2020. It is worth noting that the California Energy Commission, in the 2011 *Bioenergy Action Plan*, cites the many benefits of Bioenergy and the important role of this technology in meeting the State's energy and economic development goals.

IV. "ReMAT" Pricing Mechanism is Not Representative

The heart of the Proposed Decision is a new pricing mechanism for the feed-in tariff, the "Renewable Market Adjusting Tariff" ("Re-MAT"). It is not clear that this methodology has been used elsewhere, or if it has, what the results have been. Without reiterating the mechanics of this proposed pricing mechanism, the end result is that every month, each utility must evaluate the price it is offering for three different product types. This means that each utility must evaluate and potentially establish new prices 36 times per year. The Proposed Decision claims that this system will meet the proposed principle of ensuring administration ease and lowering transaction costs. Sustainable Conservation disagrees. Setting a price for different renewable technologies, even six or seven technologies, once a year means fewer prices to examine and a tariff that is intuitively simpler to understand than the elaborate pricing scenario proposed. Changing prices potentially every month does not make the tariff easy for small generators to know with certainty what the price will be. Generators will be tracking bids twelve times per year, in some instances across three utilities, for a total of 36 different prices to track. From the perspective of a farmer for whom the opportunity to install a biogas digester is one of myriad business decisions, tracking an annual technology-based price is much easier - and much more likely to occur – than tracking a price that changes monthly.

The Proposed Decision claims the Re-MAT pricing methodology meets requirements for being market-based. Specifically, it says "a price set by the market avoids the need for a timeconsuming and contentious examination of costs." (Proposed Decision, p. 36) Yet, the "market" from which this price is derived does not, at this time, contain any biogas data. The Re-MAT would be based on prices coming from the Renewable Auction Mechanism ("RAM"), the first solicitation of which happened in November. The utilities recently filed advice letters seeking approval of results from that auction. The results show that the RAM is not attracting a significant amount of bids from baseload projects, nor is it not attracting a significant amount of bids from projects under 3 MW.

The three utilities in aggregate received a total of 241 bids. Only 6 bids out of 241, or two percent, were for baseload technologies. Only one of those bids was awarded a contract, and it is a geothermal project. Very few of the bids received were for projects under 3 MW. No biogas projects were awarded contracts.

PG&E received only 4 bids from baseload projects out of a total 117 valid bids: 2 geothermal (one of those won), 1 landfill gas, 1 biomass fuel. Ultimate winners in PG&E's solicitation were 1 geothermal (14 MW), 2 solar PV (each 20 MW), 1 wind (9 MW).⁴

SCE received 92 bids; 91 were solar PV, one was small hydro. The seven winning bids in SCE's solicitation were all solar PV, ranging in size from 2 MW to 20 MW: two at 20 MW, one at 12 MW, one at 9 MW, and three at 2 MW.⁵

SDG&E will award two RAM contracts, both for solar PV projects with a total capacity of 15 MW. SDG&E received 32 bids. 30 were solar PV, 2 were biogas. Only two projects were under 3 MW; the majority of bids were 5-10 MW and 15-20 MW.⁶

These first round results cannot be cited as proof of a robust market for baseload technology. Were the Commission to adopt the Proposed Decision, the basis for feed-in tariff pricing for all baseload technologies would be one geothermal bid that is significantly larger – 14 MW – than the allowed maximum feed-in tariff project size of 3 MW. Putting aside the different cost structures for different baseload technologies, one bid simply is not a market indicator.

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⁴ PG&E Advice Letter 4020-E.

⁵ SCE Advice Letter 2712-E.

⁶ SDG&E Advice Letter 2343-E.

The Re-MAT would allow a utility to move allocated capacity out of product category after twelve months if no contracts are awarded. This again will disadvantage biogas and other baseload technologies, looking at the initial RAM results.

V. The Proposed Decision Disregards the Authorizing Legislation

The Proposed Decision claims that the Re-MAT does not need a specific adder for environmental compliance costs because it is based on the results of an auction for renewable resources, and bidders to that auction will have included environmental costs. This ignores the fact that the utilities' biogas resources are virtually none at this time, as discussed above. Even if there were a robust sample of baseload bids on which to base the price,

The Proposed Decision notes that specific environmental compliance costs may not be reflected in the prices that are bid to the RAM, which is the basis for the Re-MAT starting price. The specific example cited is costs for compliance in an air quality management district. This is dismissed, however, by saying no party presented data on those costs. This is disingenuous. To say that the parties, rather than the Commission, had the responsibility to establish environmental compliance costs is to stand the law on its head. State law, as enacted by SB 32, is quite clear that it is the responsibility of the Commission to establish the price for the feed-in tariff, and that that price "*shall* include all current and anticipated environmental compliance costs..." [emphasis added]. Therefore, it is an integral part of the responsibility of the Commission's price-setting duty as established by state law to obtain whatever information it needs in order to determine what those environmental costs are, and then incorporate them into the feed-in tariff as mandated by the Legislature. The Commission has not only the ability and the authority to request that parties provide specific data on environmental costs – it also has the legal duty to do so, and it is failing to discharge that duty.

The Proposed Decision similarly dismisses most of the other factors that were directed in SB 32 to be included in the feed-in tariff. The Proposed Decision states "we now know that the State's renewable energy market has matured and prices have decreased." (Proposed Decision, p. 53) This may be true for some renewable technologies, but others are still maturing. The Commission has recognized this in its proceeding to look at the Energy Program Investment Charge ("EPIC"), R.11-10-003. "Despite substantial technical potential in the state, bioenergy resources remain challenged by a number of factors including relatively high costs relative to other technologies, and permitting and regulatory challenges, particularly impacting onsite power generation using biomass feedstocks in light of local air quality concerns, among other issues."⁷ The Commission then recommends that funds be allocated to bringing these resources to greater market. Using EPIC as a vehicle to construct these facilities would be wise however they still will require a viable way to sell energy. The feed-in tariff presumably should be that vehicle. Unfortunately, the current construct does not lend itself to including baseload resources.

VI. The Commission Should Reconsider a Reservation for Biogas

The Proposed Decision dismisses the recommendation of Sustainable Conservation and other parties to reserve a portion of the capacity under SB 32 for biogas technologies. The arguments supporting a biogas reservation were put forward in filings submitted in the summer and fall of 2011. The rationale provided for rejecting this proposal is that allocating capacity to three different product types, including baseload, "...could be viewed as a set-aside that is consistent with § 399.20(d)(2)(C)." (Proposed Decision, p. 75) The Proposed Decision further offers that bioenergy and other baseload technologies will be competing against each other under Re-MAT, rather than against the larger universe of intermittent renewable technologies, so this is akin to a reservation. This rationale might work in theory, but in reality there is not at this time a

⁷ Attachment A to Assigned Commissioner's Phase 2 Scoping Memo, February 10, 2012, p. 22.

market of small baseload renewable technologies participating in the solicitations, as discussed above with the results of the first RAM.

VII. Excess Sales Option Is Important

Sustainable Conservation for years has championed the excess sales option. The Proposed Decision rightly maintains this as an option for the feed-in tariff.

VIII. Generators Are Provided Proper Options for Interconnection

The Proposed Decision denies Sustainable Conservation's Petition to Modify D.07-07-027 in light of the interconnection settlement that has been ongoing since last summer and which was submitted to the Commission last month. If the settlement is approved, there should be better clarity about costs, timelines, and responsibilities for interconnection. Under the settlement, all interconnection will occur under Rule 21, which is subject to the jurisdiction of the CPUC, rather than the Federal Regulatory Energy Commission. The Proposed Decision properly allows generators to interconnect under Rule 21 if they so choose until the Commission rules on the settlement. Assuming it is, once the Rule 21 settlement is adopted by the Commission, further work remains to be done in the interconnection rulemaking to improve the functionality for small FiT generators.

The Proposed Decision's definition of "strategically located" is a reasonable approach and is more appropriate than the preferred location proposal made by SCE. Sustainable Conservation notes that, unlike PV resources which require little more than a good southern exposure, farm-based bio-gas resources generally need to be located on or very near farms, which are not typically sited in high load areas. The definition of "strategically located" could prove problematic for farm-based bio-gas projects. These facilities must be built near the farms where their fuel source is; they do not have the ability to "locate sites that have a low likelihood of transmission impacts." Sustainable Conservation does not expect that most would require transmission upgrades – just expensive (and non-refundable) distribution upgrades. While this is not optimal, it is preferable to SCE's proposal.

IX.Conclusion

The Proposed Decision is disappointing to parties that for years have been waiting for a viable tariff under which they can sell energy to the utilities. After promising in the RAM decision, D.10-12-048, that "the RAM is not a FiT," the Commission is now poised to base the feed-in tariff on the RAM. The RAM is not seeing participation by baseload resources. Rather than adopt pricing mechanisms that have been successful in numerous other jurisdictions, and which parties have demonstrated are allowable under State and Federal policies, the Commission is instead adopting an untested mechanism. The Commission should step back and reconsider the program put forward in the Proposed Decision. Otherwise, California's portfolio of distributed renewable resources will be comprised almost entirely of intermittent technologies, depriving California of the reliability and environmental benefits that baseload technologies offer.

Respectfully submitted,

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April 9, 2012

Verification

I am the representative for the Sustainable Conservation. Sustainable Conservation is absent from the County of Alameda, California, where I have my office, and I make this verification for Sustainable Conservation for that reason. The statements in the foregoing document 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.

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

Executed April 9, 2012, at Oakland, California.

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Jody London FOR Sustainable Conservation