BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on the Commission’s Own Motion to improve distribution level interconnection rules and regulations for certain classes of electric generators and electric storage resources. ________________________________

Rulemaking 11-09-011
(Filed September 22, 2011)

COMMENTS OF THE BIOENERGY ASSOCIATION OF CALIFORNIA AND THE PLACER COUNTY AIR POLLUTION CONTROL DISTRICT ON THE UTILITIES’ PROPOSAL FOR INTERCONNECTION COST CERTAINTY

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The Bioenergy Association of California (BAC) and Placer County Air Pollution Control District (PCAPCD) submit these Comments on the utilities’ proposal on interconnection cost certainty (“Utility Proposal”). Increasing interconnection cost certainty will reduce the overall costs of interconnection and help California to meet its renewable energy and distributed generation goals. BAC and PCAPCD do not object to the Utility Proposal insofar as it applies, but it is limited to a narrow subset of projects that have, in general, the least complex interconnection requirements (largely Fast Track eligible projects).

We do not expect the Utility Proposal to provide any cost certainty for projects required by Senate Bill 1122 (Rubio, 2012), particularly those projects that, according to the requirements of SB 1122, must be located in rural and remote areas. The Utility Proposal also does not provide cost certainty for a wide array of other renewable energy projects that are not eligible for the Fast Track process. The Commission is expected to
adopt the BioMAT tariff and PPA templates for SB 1122 (the “BioMAT”) later this year, with the first BioMAT auctions to be held a few months later. It is critical, therefore, to adopt interconnection cost certainty measures for non-Fast Track projects without further delay.

BAC and PCAPCD urge the Commission to adopt the hybrid approach recommended in the Staff Proposal on Cost Certainty for the Interconnection Process (the “Staff Proposal”)\(^1\) with the modifications described below. The hybrid approach would include the Utility Proposal for Fast Track projects and the modified cost envelope approach in the Staff Proposal, Part B, with some modifications. The hybrid approach will provide greater cost certainty for both Fast Track and non-Fast Track projects, which will reduce the costs of interconnection overall by reducing uncertainty and risks, which are passed on to ratepayers.

The California Air Resources Board recently underscored the urgency of removing interconnection barriers for waste to energy projects, such as those required by SB 1122. As the Air Board stated in its Strategy to reduce Short-Lived Climate Pollutants (SLCP), which are the most potent climate pollutants:

“Wherever possible, and as soon as possible, we should be utilizing organic waste in order to both reduce SLCP emissions and produce maximum value from the energy and nutrients that remain in these sources. . . Utility engagement and interconnection – getting electricity onto the grid or renewable gas into the pipeline – remains an unnecessarily long and costly process in many parts of the State.”\(^2\)

Providing greater cost certainty for SB 1122 projects and other projects that are not eligible for Fast Track will help California to reduce Short-Lived Climate Pollutants and meet other important state policies.

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\(^1\) Cost Certainty for the Interconnection Process, Staff Proposal at page 2, included as Attachment A to the Administrative Law Judge’s Ruling Setting Schedule for Comments on Staff Reports and Scheduling Prehearing Conference, filed July 29, 2014.

BAC is an association of more than 50 public agencies, local governments, energy and technology firms, engine manufacturers and others working to develop sustainable bioenergy projects in California. BAC members develop and operate flexible generation, renewable energy projects using organic waste – diverted municipal organic waste, dairy and agricultural waste, forestry waste, landfill gas and wastewater treatment gas. BAC and many of its individual members have participated in the development of the ReMAT and, more recently, the BioMAT adopted pursuant to SB 1122.3 BAC members have significant experience interconnecting distributed generation projects in California.

PCAPCD is located in the foothills of the Sierra Nevada where forest health and wildfire play a pivotal role in air quality, greenhouse gas emissions and Short-Lived Climate Pollutant emissions such as black carbon. The District has been supporting cutting edge research and technology development activities that support the development of small distributed level electricity generation from wood waste that is abundant because of fuel reduction activities that are needed to reduce the risk of catastrophic wildfire. Interconnection cost issues are important to the District because they can undermine project financing and prevent the development of much-needed forest biomass projects to reduce wildfire hazards.

BAC and PCAPCD offer these comments on the Utility Proposal for interconnection cost certainty to ensure that this proceeding increases cost certainty for all projects, but specifically SB 1122-eligible projects and other projects that are not eligible for Fast Track.

A. Bioenergy Projects Face Greatest Cost Uncertainties.

Several BAC members have developed distributed generation projects in the past few years and have faced wildly fluctuating cost estimates over the course of a single project’s development and between different projects of similar types and circumstances. Two BAC members have faced interconnection cost estimates in PG&E

territory that have varied as much as ten-fold over the course of the projects’ development. While these projects are sometimes in more rural regions of the state, this high degree of variability is not limited to rural projects. Los Angeles County Sanitation Districts (LACSD), a large public agency with more than a decade of experience developing distributed scale bioenergy projects, has had a similar experience in an urban area in Southern California Edison’s territory. For an 8 MW landfill gas project, LACSD wanted to change from a Rule 21 behind-the-meter agreement to a WDAT to allow for up to 2 MW of export. Following an original estimated facilities cost for a 12 kV interconnection in 2006 of $300,000, Southern California Edison (SCE) later increased its estimate to $4,000,000 – an increase of 13 times more than the original estimate. The cost of the interconnection was eventually reduced to $1,374,000 in 2008, still more than 4.5 times the original estimate. In addition, the overall process to construct and upgrade the interconnection facilities took 6 years.

This degree of uncertainty is crippling for private developers and discouraging for public agencies that are working with the state to achieve its climate and clean energy goals. In several cases, developers have only been able to obtain more reasonable interconnection cost estimates – that are two to four, rather than ten to thirteen, times the original estimates – when elected and appointed officials have intervened with the utilities on the projects’ behalf. This is neither efficient nor good policy.

As the Staff Proposal notes, greater cost uncertainty increases project risks and costs not just to developers, but to ratepayers as well. The Staff Report notes that:

Cost estimate changes and time delay uncertainties create uncertainty in an applicant’s ability to plan a business. Moving through a complex process without being able to communicate cost certainty to collaborating parties increases project costs all around. These increased project costs potentially are negatively impacting ratepayers who, as off takers in a PPA, may end up paying higher energy costs resulting from this uncertainty.4

4 Staff Proposal, footnote 1 above, at page 3.
These risks are especially high with small-scale bioenergy projects required by SB 1122 because many bioenergy projects are more complicated and/or farther from load or substations.
Interconnection costs are based on data that only the Utilities possess; therefore, it is critical for developers that cost estimates are representative of actual costs.

**B. Interconnection Cost Uncertainty Threatens Implementation of SB 1122.**

Senate Bill 1122 requires the utilities to procure 250 MW of distributed generation bioenergy from projects that are 3 MW and smaller.\(^5\) It requires that those MW be divided as follows:

1) 110 MW from diverted municipal organic waste, wastewater treatment, co-digestion and food processing waste;
2) 90 MW from dairy and other agricultural waste; and
3) 50 MW from forest waste.\(^6\)

The Legislature and Brown Administration included these specific categories very intentionally to ensure that SB would stimulate and commercialize small-scale bioenergy projects in all different sectors of organic waste because each sector provides specific and substantial benefits.\(^7\) While interconnection costs are uncertain for all categories of SB 1122, because none is eligible for Fast Track, costs are especially uncertain for projects in categories 2 and 3, which are in more rural and sometimes remote regions of the state. The Legislature and Administration understood that, however, when SB 1122 was enacted and required the Commission to adopt rules that address the operational characteristics of small-scale bioenergy projects.\(^8\)

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5 SB 1122 (Rubio), Statutes of 2012; D. 14-12-081.
7 See, 2012 Bioenergy Action Plan, adopted by the Inter-agency Bioenergy Working Group, which included the CPUC and 8 other state agencies as well as the Governor's Office. Available at: http://www.energy.ca.gov/bioenergy_action_plan/.
Since the Commission is expected to adopt the BioMAT tariff later this spring, it is critical to adopt interconnection cost certainty measures for non-Fast Track projects without further delay.

C. The Utilities’ Proposal Only Targets Fast Track Projects.

The Utilities’ Proposal only addresses a small subset of the least complex projects, largely characterized by projects that have passed Fast Track. As the Staff Proposal noted:

The [Utility] Proposal attempted to approach cost certainty in a way that would not result in cost shifting, and would promote the interconnection of projects with the lowest overall interconnection costs. If a Fast Track project does trigger a distribution grid upgrade, those upgrades are often less expensive and less significant than non-Fast Track Projects. Fast Track projects that do not require significant upgrades are easier to estimate accurately.9

The Staff Proposal notes unambiguously that the Utilities’ proposal only applies to interconnection costs for the simplest of projects and does not provide any benefits to larger or more complicated projects or to projects that are farther from load or substations.10 The Utilities’ Proposal will certainly not help SB 1122 projects to reduce interconnection cost uncertainties and will, therefore, put bioenergy developers and ratepayers at risk.

D. The Commission Should Adopt the Staff Proposal Part B, with Modifications, to Provide Greater Cost Certainty for Non-Fast Track projects.

BAC and PCAPCD urge the Commission to adopt the Staff Proposal, Part B, to provide cost certainty for non-Fast Track projects, with the modifications described below. BAC and PCAPCD support the utilization of a Cost Envelope (Massachusetts Model) over IREC’s Fixed Cost Proposal and Clean Coalition’s Cost Decoupling Proposal, to allow for greater accuracy and fair cost allocation as individual project evaluations determine

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9 Staff Proposal, footnote 1 above, at page 8.
10 Id. at pages 8-9.
the cost of interconnection. BAC also supports Sustainable Conservation’s proposal\(^\text{11}\) to allow public access to interconnection cost data (while appropriately guarding confidential information) to allow project developers to make informed decisions about potential interconnection costs before engaging with utility evaluations.

BAC and PCAPCD support the Staff Report’s recommendation to include the Massachusetts Standards for Interconnecting Distributed Generation within the Rule 21 framework, specifically section 7:\(^\text{12}\)

“The Company [Utility] will, in writing, advise the Interconnecting Customer in advance of any cost increase for work to be performed up to a total amount of increase of 10% only. All costs that exceed the 10% increase cap will be borne solely by the Company. Any such changes to the Company’s costs for the work shall be subject to the Interconnecting Customer’s consent. The Interconnecting Customer shall, within thirty (30) days of the Company’s notice of increase, authorize such increase and make payment in the amount up to the 10% increase cap, or the Company will suspend the work and the corresponding agreement will terminate.

Final Accounting. Upon request by the Interconnecting Customer, the Company within ninety (90) business days after completion of the construction and installation of the System Modifications described in an attached exhibit to the Interconnection Service Agreement, shall provide Interconnecting Customer with a final accounting report of any difference between (a) Interconnecting Customer’s cost responsibility under the Interconnection Service Agreement for the actual cost of such System Modifications, and (b) Interconnecting Customer’s previous aggregate payments to the Company for such System Modifications. To the extent that Interconnecting Customer’s cost responsibility in the Interconnection Service Agreement exceeds Interconnecting Customer’s previous aggregate payments, the Company shall invoice Interconnecting Customer and Interconnecting Customer shall make payment to the Company within forty-five (45) days. To the extent that Interconnecting Customer’s previous aggregate payments exceed Interconnecting Customer’s cost responsibility under this agreement, the Company shall refund to Interconnecting Customer an amount equal to the difference within forty-five (45) days of the provision of such final accounting report.”

\(^{11}\) Id. at page 9

\(^{12}\) Massachusetts Standards for Interconnecting Distributed Generation, D.P.U. 09-03-A, Exhibit E, Detailed Study Agreement at Section 7
The inclusion of this proposed language will allow developers to evaluate their true cost exposure\textsuperscript{13} and thereby promote the development of renewable energy by providing important capital cost information needed for project financing.

E. Recommended Modifications and Additions to Staff Proposal

BAC and PCAPCD recommend the following modifications and additions to the Staff Proposal to ensure it provides the appropriate level of cost certainty at different phases of the interconnection process, measures to costs that fall outside the cost envelope, and measures to ensure that interconnection costs are consistent with SB 1122.

1. Ensure greater certainty after the System Impact Study.

Eligibility for SB 1122 requires a completed System Impact Study; therefore some level of cost certainty is appropriate at this stage, when developers select their PPA price. In addition to the Staff Proposal for non-Fast Track projects, BAC and PCAPCD urge the Commission to adopt a greater cost certainty level upon completion of a System Impact Study to reflect the increased level of study detail. BAC and PCAPCD recommend allowing for up to 25 percent cost variation after a System Impact Study and no more than 15 percent variation after the Facilities Study. We understand these values to be consistent with current cost estimate practices with the existing Detailed Study Process framework.

2. Allow waivers of the non-Fast Track Project cost limitation in cases where both the utility and applicant agree on a revised cost estimate.

BAC and PCAPCD support the ability of utilities and applicants, upon mutual agreement, to develop revised cost estimates when working with new technologies. While BAC supports the general recommendation to allow an exception to the 10 percent limitation when both the utility and the developer agree to it, BAC would not limit the application of this exception to only those situations that involve a “new technology” or “novel project” as staff proposes. Instead, BAC recommends that a cost waiver be

\textsuperscript{13} Comments of the Interstate Renewable Energy Council, Inc. on Amended Scoping Memo and Ruling Requesting Comments, October 25, 2012, p.8
available when new information about a project is identified that alters the project cost in a manner that exceeds the 10 percent buffer. The waiver request, in writing to the Director of Energy Division, must be received within 20 calendar days of discovering this cost issue and should detail and describe the challenges, proposed solution, and identify why the new information was not made available for consideration during the study process. BAC believes this type of waiver provides greater flexibility for the utilities and avoids the challenge of defining “novel projects or technologies”, particularly when most renewable energy projects use traditional generator or inverter technologies.

3. Accounting for Costs Outside the Cost Envelope.

It is critical that the utilities improve and standardize their interconnection cost estimates. The cost envelope approach provides a larger range than most sectors (i.e., construction) would tolerate for cost of work estimates, particularly when the factors affecting interconnection costs are largely or completely within the utilities’ control and expertise. The occurrence of actual costs that end up outside the cost envelope should be rare indeed, and the burden should be on the utilities to justify costs that end up below or above the cost envelope range.

In the rare case when actual costs do end up above or below the range provided by the cost envelope, it should be the responsibility of the utility to make up the difference, either by refunding excess charges to the project developer or by paying any charges that exceed the cost envelope. Although a cost balancing account could also be established for over- and under-charges, a cost balancing account will not encourage the utilities to provide more accurate cost estimates. It is imperative that the utilities develop more accurate and predictable cost estimates. Holding them responsible for costs that exceed the cost envelope should encourage greater accuracy and predictability of interconnection costs.

4. Interconnection Costs and Timing Must be Consistent with SB 1122.

The timing and deposit requirements for interconnection pose additional cost uncertainty for SB 1122 projects. The ReMAT and BioMAT programs do not account for the long-standing timelines associated with interconnection through Rule 21. To
facilitate timely interconnection and movement through the interconnection queue, Rule 21 requires adherence to strict timelines to move from application to the general interconnection agreement. Both ReMAT and BioMAT require the completion of the first phase of the interconnection study (System Impact Study or Phase I Studies). Upon completing these studies, a BioMAT project may have to wait several months to reach a price that is acceptable. In that time, to maintain Rule 21 queue position, the project would have had to post two financial security postings equal to 35% of the total interconnection cost. This is a significant financial requirement for a developer that does not know if they will receive a PPA. Therefore, developers are forced to pay up front for interconnection without certainty of a PPA, or lose their Rule 21 queue position and have to start over again once acquiring a PPA.

To avoid excessive upfront costs and serious pre-development risk, BioMAT projects should be allowed a longer time in the interconnection queue based on their status in BioMAT or be provided a mechanism to quickly return to their position in the Rule 21 process unless the utility can demonstrate that circumstances have changed.

5. Monetary penalties are appropriate for utility failure to resolve interconnection issues proactively and in a timely manner.

BAC supports the use of monetary penalties for failure to proactively resolve interconnection issues proactively and in a timely manner. BAC proposes monetary penalties for interconnection issues be consistent with Guaranteed Energy Production Damages in the ReMAT power purchase agreement resulting in damages equal to 75 percent of the contract price (in $/MWh) for time lost due to IOU caused interconnection delays.14

BAC recognizes that eligibility for ReMAT or the SB 1122 BioMAT both require some utility interconnection study.15 Therefore, without a PPA at this stage in project development, a different monetary penalty structure such as a fixed fee structure may be appropriate to account for delays in the study process which may adversely affect a

15 System Impact Study or Fast Track
project developer waiting for the completion of the study process to enter into the ReMAT queue.

6. Utilities Have All the Information to Determine Costs

The Utilities are the only agencies that have the information required to make an informed and accurate assessment of interconnection costs. For projects under 5MW, developers pay a $10,000 deposit for a System Impact Study requesting that the Utilities evaluate their interconnection circumstances and provide a cost estimate based on the findings. It is critical that the Utilities are accountable for reasonable estimates and it is unreasonable for developers to bear the risk of significant changes to interconnection cost estimates when they have no access to the information needed to determine these costs.

CONCLUSION

BAC urges the Commission to adopt the Staff Proposal Part B, with the modifications described above, in addition to the Utility Proposal for interconnection cost certainty. The Staff Proposal Part B will provide greater cost certainty for non-Fast Track projects, including projects required by SB 1122. Doing so will help meet the requirements of SB 1122, as well as California's other clean energy and distributed generation goals.

DATED: May 22, 2015

Respectfully submitted,

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VERIFICATION

I am a representative of the non-profit organization herein, and am authorized to make this verification on its behalf. 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 under the laws of the State of California that the foregoing is true and correct.

Executed this 22\textsuperscript{nd} day of May, 2015, at Kensington, California.

\hspace{1cm} /s/ Julia A. Levin

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