December 7, 2018

Mr. James McGarry
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Re: Comments on BioMAT Program Review and Staff Proposal

Dear Mr. McGarry:

The Bioenergy Association of California (BAC) appreciates the opportunity to comment on the Commission's BioMAT Program Review and Staff Proposal. While we support some of the recommendations in the Staff Proposal, we are very concerned that the Proposal fails to address the fundamental goal of the BioMAT program, which is to spur rapid development of small-scale bioenergy projects in California. BAC urges the Commission to re-focus the Staff Proposal on the requirements of SB 1122 and other state policies to reduce wildfire and Short-Lived Climate Pollutant emissions. Given the urgency of these policies, proposals to change the BioMAT should be focused on accelerating project development rather than adding additional hurdles or focusing on cost containment for projects that have not yet been sufficiently incentivized to meet the requirements of SB 1122.

BAC represents most of the companies, agencies and non-profit organizations that are developing BioMAT projects. BAC's more than 70 members work across all sectors of the BioMAT program, including diverted organic waste and wastewater, food processing, dairy, agricultural and forest waste. BAC members have experience in all three categories of the BioMAT program, with several members having accepted Power Purchase Agreements and many more in the program queue. In addition, several BAC members participated in the Governor's Tree Mortality Task Force review of interconnection costs for BioMAT projects in Category 3 (forest waste).

BAC offers the comments below on the BioMAT Program Review and Staff Proposal to ensure that the Program meets the requirements of SB 1122 and subsequent legislation calling for accelerated development of small-scale bioenergy projects to reduce wildfire and Short-Lived Climate Pollutant emissions.

I. GENERAL COMMENTS ON THE STAFF PROPOSAL

A. Changes to the BioMAT Program Should Focus on Meeting Legislative Requirements and Intent.

BAC agrees with the BioMAT Program Review finding that participation in the BioMAT has remained low and that the program may not facilitate the market transformation that the Legislature and Governor intended when enacting SB 1122 and subsequent legislation. That means that any changes going forward should focus on increasing program participation and accelerating the market transformation that was the goal of SB 1122 (Rubio, 2012).

Senator Rubio, the author of SB 1122, stated that the purpose of SB 1122 was to "unleash a growth spurt in California's biopower market, like what has been experienced in leading biopower markets around the world."[1] The California Energy Commission clarified in its 2013 Integrated Energy Policy Report that SB 1122 was intended to "spur development of pre-commercial small bioenergy projects."[2] The state's *2012 Bioenergy Action Plan*, adopted by nine state agencies including the CPUC, also stated that "Community-scale bioenergy developers would benefit from a simple and streamlined procurement tool that offers an established price sufficient to incentivize new bioenergy development."[3]

Since SB 1122 was enacted, the Legislature has passed three additional laws to accelerate the BioMAT program, underscoring the importance of small-scale bioenergy development and the Legislature's continued direction to fulfill the program requirements from SB 1122. In 2016, the Legislature enacted SB 840, which made changes to the interconnection rules for BioMAT category 3 (forest waste) to accelerate development of those projects.[4] The Legislature also enacted AB 1923 (Wood, 2016), allowing BioMAT projects to connect directly to

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[1] Author's Statement included in Bill Analysis, Assembly Committee on Utilities and Commerce (June 22, 2012). Available at: http://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=201120120SB1122.

[2] *2013 Integrated Energy Policy Report,"* at page 59. CEC-100-2013-011-LCD.

[3] *2012 Bioenergy Action Plan*, Prepared by the Bioenergy Interagency Working Group, August 2012, at page 34. Available at: http://www.energy.ca.gov/bioenergy_action_plan/.

[4] SB 840, Statutes of 2016, Chapter 341.

the transmission grid, and AB 1979 (Bigelow), expanding BioMAT eligibility to projects that use up to 2 MW onsite for a total project capacity of up to 5 MW.[5] Notably, none of these four bills set any cost caps on the program nor did they set a program end date. Since SB 1122 was enacted, all three subsequent bills have focused on removing barriers and facilitating program implementation.

Any changes adopted by the Commission should be focused on the same goals: to facilitate and accelerate bioenergy procurement to meet the requirements of Public Utilities Code section 399.20(f)(2)(A).

B. **Importance of BioMAT to Reduce Short-Lived Climate Pollutants**

The BioMAT is also critical to meet the state's climate policies, which rely heavily on the reduction of Short-Lived Climate Pollutants (SLCP's), climate pollutants that are tens to thousands of times more damaging than the carbon dioxide emitted from fossil fuels.[6] The Air Board's plan to meet the state's 2030 emissions targets relies on SLCP reduction for more than a third of all emissions reductions required by law.[7] In order to achieve these SLCP reduction, SB 1383 (Lara, 2016) requires California to:

1) Divert 75 percent of its organic waste away from landfills (BioMAT Category 1),
2) Reduce methane emissions from dairies (BioMAT Category 2), and
3) Reduce black carbon emissions (BioMAT Categories 1, 2 and 3).

The state's *Short-Lived Climate Pollutant Reduction Strategy* (the "SLCP Strategy") calls repeatedly for increased bioenergy development and accelerated interconnection to help meet the waste diversion, dairy methane and black carbon reduction goals of SB 1383.[8] The SLCP Strategy states that:

> "Stubborn barriers remain, including connecting distributed electricity and biogas projects, which have slowed previous efforts to reduce emissions of SLCPs and capture a wide array of benefits. These barriers are not insurmountable, and now is the time to solve them. State agencies, utilities, and other stakeholders need to work immediately to identify and

[5] AB 1923 (Wood), Statutes of 2016, Chapter 663; AB 1979 (Bigelow), Statutes of 2016, Chapter .
[6] SB 1383 (Lara, Statutes of 2016); Health and Safety Code §§ 39730.5 – 39730.8.
[7] *California's 2017 Climate Change Scoping Plan,* adopted by the California Air Resources Board in November 2017. See Figure 7, page 28. Available at: https://arb.ca.gov/cc/scopingplan/scopingplan.htm
[8] *Short-Lived Climate Pollutant Reduction Strategy* ("SLCP Strategy"), released March 2017, at pages 3, 4, 28, 29, and 125. Available at: https://www.arb.ca.gov/cc/shortlived/shortlived.htm.

resolve remaining obstacles to connecting (new bioenergy) projects to the grid . . ."[9]

As the state's climate plan notes, now is the time to remove barriers to small-scale bioenergy projects, not to create additional challenges and uncertainty. Changes to the BioMAT program should be focused on helping to meet the SLCP reductions called for in SB 1383 and the state's overall climate strategy, including protecting and restorating carbon sequestration in California's forests.

C. **Importance of BioMAT to Reduce Wildfire Impacts and Costs**

SB 1122 included a forest waste category to help the state reduce wildfire risks and make our forests more resilient and sustainable. In 2015, Governor Brown issued an Emergency Order on Tree Mortality which called for accelerating the development and interconnection of forest BioMAT projects that take waste from High Wildfire Hazard Zones. Earlier this year, Governor Brown issued an Executive Order shifting the state's focus from short-term tree mortality to much longer-term forest sustainability and restoration to reduce wildfire and restore more resilient forests in California.

In early 2018, several state agencies adopted the *California Forest Carbon Plan*, which calls for increased forest fuel removal and use for bioenergy production to help reduce wildfire emissions and maintain long-term carbon sequestration in California's forests. The *California Forest Carbon Plan* made several important findings about the importance of bioenergy:

1. Biomass energy reduces particulate matter, black carbon, methane and smog forming pollutants significantly, even when including the emissions from transport of the forest waste to a biomass facility.
2. Biomass to energy is preferable to controlled burns from an air quality and climate perspective.
3. Reducing carbon losses from forests, particularly the extensive carbon losses that occur during and after extreme wildfires, is essential to meeting the state's long-term climate goals.[10]

As the chart below shows, the air quality and climate benefits of bioenergy compared to even a controlled burn of forest or agricultural waste – not to mention wildfire emissions – are enormous.

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[9] SLCP Strategy, footnote 8 above, at page 4.

[10] *California Forest Carbon Plan*, adopted by the California Environmental Protection Agency, the California Natural Resources Agency, and California Department of Forests and Fire Protection in May 2018, at pages 2 and 130.

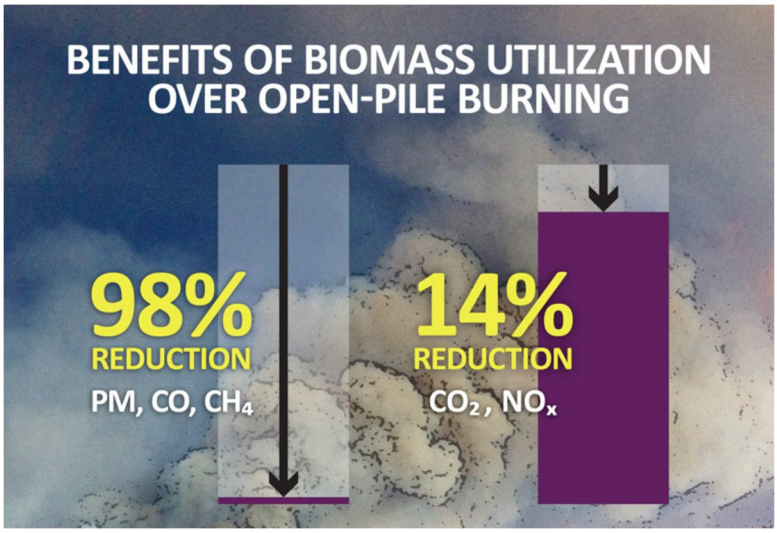

Figure 19, page 135, *California Forest Carbon Plan*

The *California Forest Carbon Plan* states that "strong policies are critical to fostering development of biomass markets. Biomass utilization could support activities to reduce hazardous forest fire conditions and support a resources-based industry in local communities."[11] *The Forest Carbon Plan* recommends that California fully implement the BioMAT program, continue public investment in new bioenergy facilities, and continue R&D into biomass conversion to energy and fuels.

State agencies agree that small-scale bioenergy is an important part of the state's overall wildfire reduction strategy, providing important air quality, climate change, public safety and economic benefits. Any changes to the BioMAT program should, therefore, be focused on the acceleration of forest biomass and other projects that help to reduce wildfire risks and impacts.

D. Proposals for Additional Cost Containment Are Not Appropriate When the Program Has Barely Begun.

Many of the proposed changes in the Staff Proposal are focused on cost containment in one form or another. This is misguided for several reasons. First and most important, as noted above, the program has fallen far short of the Legislature's goal of transforming the small-scale bioenergy industry in California. As the Program Review notes, program participation has remained low. Instead of focusing on ways to increase program participation – which is the fundamental goal of the program – the Staff Proposal focuses on the competition needed for

[11] Id. at page 2.

prices to adjust.[12] Increasing program participation should be the first priority at this point since the program is so far behind the Legislature's goals. Ensuring that prices can move up and down should only be the focus when far more projects have entered the queue and are signing contracts and actually being developed. Focusing on price elasticity at this point is not at all helpful to advancing the fundamental program goal of accelerating market development (and competition, which requires more market participants).

Second, neither SB 1122 nor any of the subsequent legislation to revise it has contained a cost cap or other language suggesting cost limitations or balancing tests. This makes sense since, as the Commission's original Decision on SB 1122 noted, the number of megawatts required by SB 1122 is only a tiny fraction of the utilities' overall RPS obligation and there is already a cost containment mechanism in the RPS itself.[13]

Third, the Legislative Analyst's Office has found that the state's investments in organic waste diversion, dairy and forest projects are among the most cost-effective of all its climate related investments,[14] probably because these projects reduce the most damaging climate pollutants (Short-Lived Climate Pollutants).

Fourth, the price in BioMAT Category 1, which includes nearly half of the 250 total program megawatts, has never increased above the starting point, so there is no reason to institute further price controls for this Category.

Fifth, the price of forest BioMAT projects is trivial in comparison to the cost of catastrophic wildfires, which are affecting utility ratepayers and shareholders significantly. According to Bloomberg Intelligence, PG&E's wildfire liabilities alone may be $20 to $30 billion dollars and the value of PG&E's shares has dropped precipitously as a result.[15] Each year, the utilities pay millions of dollars in wildfire damages and those costs are quickly increasing. Converting forest fuel and other vegetation to energy will save ratepayers and shareholders money in the long run by reducing the risk and severity of wildfires.

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[12] Bioenergy Market Adjusting Tariff (BioMAT) Program Review and Staff Proposal, released October 30, 2018, on page 7.

[13] D. 14-12-081, issued December 26, 2014 in R.11-05-005, at page 63.

[14] California Legislative Analyst's Office, *Administration's Cap-and-Trade Report Provides New Information, Raises Issues for Consideration,* presented to Assembly Budget Subcommittee #3 on April 20, 2016. The LAO's report found that Cap & Trade investments in organic waste projects, dairy projects and forest projects are the most cost-effective of all Cap & Trade investments, about one-tenth of the average cost of the overall program investments per ton of carbon reduction.

[15] See, J. D. Morris, *2nd Glitch Before Fire Reported by PG&E,* San Francisco Chronicle, November 20, 2018.

E. The Commission Should Adopt Additional Incentives for BioMAT Projects to Meet the Requirements of SB 1122 and Other State Policies.

Instead of looking for cost-containment measures for the small (and inadequate) number of BioMAT projects in development, the Commission should adopt additional incentives to accelerate program implementation and help reduce costs to rate-payers. In particular, BAC recommends that:

1. The Commission allocate 20 percent of Electricity Program Investment Charge (EPIC) funding to BioMAT projects until all 250 MW have been procured;
2. The Commission allocate ten percent of the electric utilities' Cap & Trade revenues to the BioMAT since BioMAT projects reduce the most damaging climate pollutants and can be lower carbon than other forms of renewable energy; and
3. The Commission coordinate with CalRecycle, California Department of Food and Agriculture and CalFire to ensure that they allocate Cap & Trade funding to projects that help to meet the BioMAT requirements (although, even if they do not, SB 1122 still requires the utilities to procure 250 MW of small-scale bioenergy).

II. RESPONSE TO SPECIFIC QUESTIONS IN STAFF PROPOSAL

1. <u>Do you support the proposal to reduce the market depth requirement from five to three for unaffiliated applicants? Why or why not?</u>

Yes. The requirements to get into the BioMAT queue are significant, costly, and time consuming, specifically the completion of the System Impact Study, which often takes the IOUs significant more time than identified in Rule 21. This study can cost more than the $10,000 deposit and with the high costs of interconnection, results in substantial Financial Security postings of approximately 20% of the total interconnection costs (which have been as high has $4 million to $6 million or higher). With the exception of Category 3 projects, a BioMAT applicant is not allowed to leave the Rule 21 queue and remain eligible for a BioMAT contract, forcing an Applicant to decide whether or not to post significant funds (which may ultimately be partially expended if Rule 21 forces the Applicant to sign a Generator Interconnection Agreement or be removed from the Rule 21 queue) or not participate in the program at all. Given the level of effort to enter the queue currently, it is unlikely that developers will even being the process of participating unless they are comfortable with the existing price.

As discussed in the Staff Proposal, the current prices are at the lower half of the estimates provided by Black & Veatch. The low participant level suggests that Black & Veatch's estimates were realistic and only a few optimized projects are able to participate; limiting the ability of the BioMAT program to serve as a transformational catalyst in the industry. Allowing for the price to fluctuate more easily will help encourage participation and protect ratepayers from overpaying.

2. Do you support proposal 2 to revise when the BioMAT offer price moves up, moves down, and stays the same? Why or why not?

No, BAC strongly opposes the proposal for price decreases, which would create significant additional uncertainty and risk for project developers who have no control over whether other projects will accept a price. Project development requires a long lead time, usually more than a year before projects can enter the BioMAT queue. Most if not all projects cannot risk having the price cut by $4 while they are preparing to enter the queue. This will be a serious impediment to project financing and further restrict a market that is already far too small, reducing competition and slowing implementation even more.

3. Should the Commission transition to a fixed price feed-in-tariff instead of the price adjusting mechanism? Why or why not?

BAC would support a fixed price feed-in tariff, which is what SB 1122 was intended to create, so long as the prices for each feedstock category are fixed at or above their current levels to increase program participation. A fixed price would provide market certainty, which is hugely important for project financing and development. The current prices have in effect acted as a fixed-price feed-in tariff since there has not been sufficient market depth to move projects, suggesting that the offered prices are not particularly lucrative to developers (otherwise Applicants would flood the program as they did with the $89/MWh price for solar in the ReMAT). Given the level of market participation, the current BioMAT structure is close to a balanced and fair price. If the prices are lower, it will reduce participation even more (to nearly zero) and if the prices are raised, it will encourage additional participation. Alternatively, leaving the pricing mechanism the same would functionally create a fixed price system without the delays of a new process.

a. If so, how should the market price(s) be determined?

If the Commission moves to a fixed-price contract as a way to increase participation in the program – which is critical to meet the requirements of SB 1122 – then the price should be at least as high as the current offerings in each category, and should probably be somewhat higher. Given that staff found no reason to believe there has been collusion, the current prices should

appropriately represent the marketplace and we have to conclude that they are not high enough to trigger the market transformation intended by SB 1122. If staff is worried about prices moving too high without additional changes to the pricing program, staff may consider another soft cap that is more directly based on the Black & Veatch estimates. For example, the Commission could adopt soft price caps (review points) of: $155/MWh for Category 1 facilities (medium range for facilities not at existing biogas producing facilities), $218/MWh for dairies (low range, since several dairies have already accepted a price), $204/MWh for other agriculture (medium range), and $219/MWh for Category 3 (medium range).

b. <u>If so, should the price(s) be periodically reviewed and revised? If yes, how should it be reviewed and how often should it be reviewed?</u>

If a fixed price is chosen, it should be reviewed every two years or more often to ensure that the price is sufficient to stimulate the number of projects necessary to meet the requirements of SB 1122 and lead to market transformation as the Legislature and Governor intended.

4. <u>Should the Commission transition to a renewable auction mechanism (RAM) instead of the price adjusting mechanism? Why or why not?</u>

No. The BioMAT system is not broken, it just needs repair. Totally revamping the pricing mechanism would cause significant delays and uncertainty when changes should, instead, be focused on attracting more participants and accelerating the rate of procurement to meet the requirements of SB 1122. The largest impediment to the success of the program has been the utilities' timelines and costs for interconnection studies, which delay many participants and discourage applications. Having the auction periods every two months is valuable to the industry, allowing Applicants to apply when ready instead of waiting 6 months to a year if they miss a RAM auction deadline.

Staff identified many challenges with implementing the new program, as listed in the sub-questions to this prompt. Addressing these would considerably delay the program and should be rejected.

a. <u>If so, how much capacity should be offered in each RAM solicitation? Do you think there should be specific capacity targets for each BioMAT category? Please explain.</u>

The Commission should not pursue a RAM option, which will cause further delays and make it less likely that the program meets the requirements of SB 1122.

b. <u>If so, do you agree that RAM solicitations should be held annually? If not annually, how often should RAM solicitations be held? Please explain.</u>

Same answer as in question a.

c. If so, how should bids be evaluated?

Same answer as in question a.

d. If so, how should ratepayers be protected from high prices that could result from uncompetitive solicitations?

The fundamental problem with the BioMAT program at this stage is not the high cost to ratepayers since so few PPA's have been signed and even fewer projects have begun construction. The problem that all changes should be focused on solving is how to increase participation and accelerate the rate of procurement so that the utilities meet the requirements of SB 1122 on a much more timely basis than is likely with the current program. The impact so far on ratepayers has been less than de minimus and will continue to be so unless changes are made to accelerate project development. If and when there is a much greater number of participants in the BioMAT program, it would be appropriate to reconsider effects on ratepayers, but that is simply not the problem at this point.

5. Should the Commission consider changes to the BioMAT definition of "unaffiliated applicants" to better ensure that projects with common developers count as affiliated for the purpose of determining market depth? Why or why not?

No. With the current rules, there has not been any indication of market collusion. The BioMAT program has safeguards in place to react to collusion if it is found, therefore protecting ratepayers with the current system. Until collusion has been found, there is no need to change the program for a low likelihood risk with low potential cost impacts.

a. If so, please explain what the changes should be.

There is no need for change.

6. As noted in Staff's observations on page 7, BioMAT offer prices are now sufficiently high to encourage price acceptance and project development within each category. This raises a concern that even small price adjustments in the future could lead to ratepayer overpayment for projects willing to execute contracts at lower PPA prices, and offer prices that are too low for other projects that need higher PPA prices. For example, a project developer willing to execute a contract for an additional $4/MWh would receive an $8/MWh windfall if the offer price increases by $12/MWh. Should the Commission consider changes to simplify the price adjustment mechanism and allow for more granular pricing (e.g. revise the

price adjustment amount to $4 per MWh, rather than the current system of $4, $8, and $12)? Please explain.

The premise of this question is mistaken: Although Applicants have accepted prices in each category, very few PPA's have been executed, market depth is not increasing, and the market transformation required by SB 1122 is nowhere on the horizon. In addition, since the price has been accepted in each category, the next price movement (up or down) would be $4/MWh. If there is market depth and no one takes the price, it suggests the price was not significantly high. The concerns expressed in this question – and throughout the Staff Proposal - appear overstated given that it would take 3 consecutive price periods with sufficient market depth to result in a $12/MWh jump. However, to ease concerns about overpayment, BAC would support the removal of the $12/MWh jump. Note that suggested new soft caps in response to Question 3a are still substantially above the current market prices ($28/MWh for Cateogry 1, $31/MWh for Category 2 dairy, $18/MWh for Category 2 other agriculture, and $20/MWh for Category 3). If the price movement is limited to only $4/MWh, this could result in long wait times for projects that have more "average" (per the Black & Veatch report) price needs.

7. Are there any other program pricing proposals that the Commission should consider? If so, explain the proposal and how it would be consistent with Public Utilities Code section 399.20.

BAC urges the Commission to reconsider including an inflation adder. The fixed cost structure requires Applicants to make significant assumptions about inflation over a 20-year period, which no one can be expected to do accurately. An inflation adjustment adder would allow Applicants to be confident that pricing will change with inflation, eliminating the risk of high inflation (and the cost of the developers assuming that risk) that the ratepayer is currently burdened with. This should lower prices. A price adjustment down would be appropriate for the starting price if an inflation adder were included. BAC would be happy to suggest a mathematical way to calculate the starting price adjustment.

8. Do you support proposal 3 to adopt BioMAT queue management procedures for the BioMAT program? Why or why not?

No. These measures appear punitive. Once an Applicant accepts a price, the IOU and the Applicant quickly review the application, easily finding any error by which an Applicant may have fallen out of eligibility. Within weeks, this should be easily found that the next Applicant in line (if available) would be easily notified. Without knowing the background for the SCE updates [OR DO WE?], BAC would assume that many Applicants may not realize they have fallen out of eligibility and therefore are not intentionally doing so. Penalties would discourage

participation and the goal of these changes are to accelerate the program and participation.

9. Do you support the proposal to set a 30-day deadline to execute contracts after the program participant accepts the offered price and provides all necessary information to the IOU? Why or why not?

Yes. The Commission should also set deadlines to revise System Impact Studies and reach other milestones once a PPA has been executed. On numerous occasions, the IOUs have spent months without executing contracts, often while simultaneously closing communication between the Applicant and the IOU so that the Applicant does not know what is happening. This has been a major impediment to the successful implementation of the program. As a Standard Contract, there should not be any negotiation. BAC recognizes that sometimes it takes time to gather all of the relevant documents and commends staff for selecting the 30-day timeline based on the date by which the Applicant has provided all necessary information. It must be noted that this may encourage the IOUs to enact delays in the timeline to review the provided information, but BAC would like to address this issue only as it arises instead of trying to figure out a fix before the problem has occurred.

10. Do you support the proposal to extend the current program end date for an additional five years, from February 2021 to February 2026? Why or why not?

There should be no program end date until the utilities have procured 250 MW of small-scale bioenergy, as required by state law. SB 1122 does not contain any end date. If the Commission wants to avoid having the program go on indefinitely, then it should adopt additional incentives and deadlines to accelerate project development and market competition. Ending the program before the utilities have procured 250 MW would violate state law.

If the Commission feels it must adopt a program end date, then it should establish a procurement timetable, with interim megawatt targets and enforceable deadlines, to ensure that the utilities have in fact procured 250 MW by the end date. Given the pace of the program to date, without significant additional incentives and deadlines there is no way that the utilities will procure close to 250 MW by 2026.

11. Do you support the proposal to extend a project's Guaranteed Commercial Operation Date by 12 months if it fails to interconnect by the PPA's Guaranteed Commercial Operation Date due to delays beyond the Seller's reasonable control? Why or why not?

BAC does not support this proposal in most cases. This change would in effect allow the utilities 24 months to interconnect projects during which time projects would have no revenues and could easily fail (having already made all the capital and other investments needed). BAC would support this proposal if, and only if, the utility is required to demonstrate to the Commission unforeseen and justifiable reasons for the delay and why it cannot be avoided. It has been clear that the interconnection timeline has been an issue both for interconnection studies and the interconnection itself. The Applicant has little control over the timeline and the reasons for delay are not transparent. If unforeseen circumstances arise, the utility should have to inform the Commission and ask the Commission for permission to delay on a case by case basis. Only if the Commission agrees, should further delay be allowed and if it is, then BAC supports the 12 month extension of Guaranteed COD.

12. Do you support the proposal to remove the three MW cap on payments via BioMAT PPAs for facilities larger than three MW? Why or why not?

No. This cannot be done without a change in statute. BAC does not believe that the 3 MW cap is the reason for the program's slow progress and that seeking a legislative change on this issue would be a distraction from much more pressing barriers such as price, incentives and timelines/delays.

a. Do you believe that the Commission can implement this change under existing statutory authority, or would legislation be required to enable BioMAT PPAs for capacities greater than three MW?

Public Utilities Code 399.20 is focused on 3 MW or smaller projects. This cannot be changed without legislation.

13. Do you support the proposal to allow incremental generation from existing units to be eligible for the BioMAT program? Why or why not?

Yes. This will encourage participation and help satisfy the goals of utilizing biomass feedstock.

14. Do you support the proposal to temporarily set an 80% HHZ fuel requirement for Category 3? Why or why not?

BAC agrees with the Sierra Nevada Conservancy that limiting Category 3 to HHZ feedstock would be a mistake. SB 1122 only requires that forest fuels be the product of sustainable forestry, which was intended to encourage proactive forest fuel removal, use of fuels removed for defensible space (vegetation clearing around homes and infrastructure, regardless of whether they are in bark beetle infested areas) and fuels removed for forest restoration projects. The Legislature considered a similar question in the context of SB 840 – whether to limit the

interconnection changes to HHZ projects – and rejected that limitation since the whole forest category is only 50 MW total and was intended to help California get ahead of the wildfire crisis, not just respond to it in HHZ's.

In addition, the HHZ fuel designation is temporary and updated periodically, so is not a fixed definition (or map) that project developers can rely on over the 20-year life of a BioMAT contract.

Limiting Category 3 feedstock will also increase costs as it will reduce options for eligible feedstock. Category 3 projects seeking eligible feedstock from the local area will work with land owners to evaluate feedstock availability on a two to three year horizon. If the definitions for eligibility or the CALFIRE definitions of HHZ change, it will be very difficult for an operator to responsibly manage the feedstock supply and will result in significantly higher feedstock pricing.

a. <u>If not, how should the Commission ensure that the goals of the Governor's May 2018 Executive Order are met?</u>

The Governor's May 2018 Executive Order is not limited to HHZ's. On the contrary, it broadens the state's focus the HHZ's that resulted from the Tree Mortality Crisis, to a statewide approach that is more proactive and focused on sustainable forest management for the long term, not just reacting to the bark beetle epidemic, which is what the HHZ's focus on (in a limited number of counties).

The Commission could offer an additional incentive for the use of HHZ fuel, such as $X/MWh price adder. This would incentive the use of HHZ fuel where it is economically available, but not force a developer to use HHZ fuel. This could be added to the fuel attestation form and could be paid over set time intervals (e.g. once a quarter or once a year) to allow for a proportional calculation. For example, if 60% of the feedstock used in a quarter, the price adder would be applied to 60% of the delivered energy during that same time period.

b. <u>If not, would you support lowering the offering price for projects that do not commit to using at least 80% HHZ fuel? Please explain.</u>

No, BAC would strongly oppose this proposal. The current prices are based on market participation without HHZ fuel requirements, meaning the price was set for projects that were not forced to use at least 80% HHZ fuels. Therefore, BAC does not believe there is any rationale to reduce the price offered to those Applicants not committing to 80% HHZ fuels. Instead, an incentive (like the price adder mentioned above) should be granted to encourage the use of HHZ fuels.

15. Should the Commission also consider a geographic component to the requirement that facilities be "strategically located" to better ensure that BioMAT projects are optimized to meet the state's wildfire and greenhouse gas reduction goals (e.g. require Category 3 projects to be located in areas of the state most in need of hazardous fuels treatment, with the highest levels of tree mortality, or located in areas of state that do not already have other nearby facilities that could utilize the wood)? Please explain.

No. The entire state of California is susceptible to wildfire, drought, and invasive pests like the bark beetle that result in the need for forest and other vegetation removal. The Governor's 2018 Executive Order makes clear that the state needs to focus statewide and be much more proactive to prevent wildfires and other disasters. Additionally, the price adder (per Question 13a) would help incentive development in areas with HHZ fuel, but not mandate it.

A geographic limitation to areas without nearby facilities would be detrimental to Category 3. Many areas that do not have existing facilities are void of infrastructure for a good reason, such as topography (many steep hills limiting cost-effective access to feedstock), proximity to land ownership that does not support fuel treatment (e.g. National Parks). It is safe to assume that areas without good infrastructure exist because the accessibility to wood or timber in the region is generally (but not always) challenging and expensive.

Without any geographic limitations, there are limited Category 3 participants. Further restricting eligibility will not help the program. Additionally, BAC assumes that most of the participants in Category 3 are already in areas with HHZ fuels within the feedstock supply radius (since most of forested landscape in California has HHZ fuels nearby).

16. Do you support the proposal to allocate BioMAT procurement costs through a non-bypassable charge to all California ratepayers? Justify your response with statutory or other legal reasoning.

BAC would support a non-bypassable charge to all California ratepayers, but this would require a change in statute and is simply not a priority at this point given how few projects are participating in the BioMAT program. The Commission should focus on changes that will accelerate project development first, and then consider ratepayer protections only when the program is working as intended to transform the small-scale bioenergy sector. At this point, focusing on ratepayer costs is little more than a red herring.

a. If yes, how should BioMAT procurement costs be allocated? Provide explanation and justification for your proposal.

These questions are premature until the program offers sufficient price, incentives and timeline enforcement to truly spur the development of small-scale bioenergy projects.

b. If no, please explain why not.

Same as answers to questions (a) and (b) above.

c. If no, do you have an alternative proposal to ensure that all California ratepayers pay for the benefits provided by the BioMAT program?

Same as answers to questions (a) and (b) above.

17. As noted in Staff's observations on pages 11-12, BioMAT is connected to the policy efforts of other State and Federal agencies. How could the Commission coordinate more closely with other agencies to streamline bioenergy development, increase consistency across related programs, and reduce costs for market participants and ratepayers?

First and foremost, the Commission needs to streamline and accelerate the BioMAT process to grow the small-scale bioenergy industry, as required by SB 1122. Once the Commission makes the changes needed to accelerate project development, it should encourage other agencies to help fund BioMAT projects with Cap & Trade funds, EPIC funding and other sources of funding. Other state agencies' programs—CALFIRE, CDFA, Energy Commission, and CalRecycle—can help support projects with grant funding to reduce capital costs, but BioMAT contracts and interconnection are the most critical aspects of project development needed to build a long-term market for small-scale bioenergy, as intended by SB 1122.

a. What actions should the Commission take to better coordinate/maximize funding from federal agencies to support BioMAT program goals?

The Commission should focus first on its own authority to allocate funding from the electric utilities' Cap & Trade revenues and the Electricity Program Investment Charge (EPIC), both of which could be used to support BioMAT projects and which the Commission controls. The Commission could also support federal tax incentives for small-scale bioenergy projects and increased funding from USDA and the US Forest Service. Focusing on federal incentives, however, is a much lower priority than allocating funding from existing state programs that the Commission oversees and can easily allocate a portion of to support the BioMAT.

18. Achieving pollution and GHGs reductions was an original goal of BioMAT. However, whether or not individual projects reduce net lifecycle emissions depends on project-specific factors. Do you think that the Commission

should establish a requirement that facilities reduce emissions as a condition for BioMAT eligibility? In your response, please explain how such a program requirement would complement or not complement the work of other state or local agencies that regulate or provide grants to BioMAT-eligible facilities.

The Commission should not require GHG quantification or proof from individual BioMAT projects. SB 1122 contains no requirements related to GHG emissions and adding such a requirement would only add another impediment to a program that has barely gotten off the ground after many years of delay. In addition, the United States Environmental Protection Agency has classified climate emissions from bioenergy production as carbon neutral ("biogenic") because the underlying organic material would otherwise release methane or black carbon if it is not used for energy production (depending on whether it is landfilled, left to decompose, or burned).

The California Air Resources Board has determined that the carbon intensity of biomethane from diverted organic waste (BioMAT Cateogry 1) and dairy waste are actually carbon negative because they destroy methane and displace fossil fuel use. SB 1383 (Lara, 2016) also makes clear that organic waste diversion and dairy methane are critical to the state's overall climate strategy and the state's 2030 climate relies heavily on the reduction of methane – a potent greenhouse gas – to achieve the state's climate goals.

Both the California Association of Air Pollution Control Districts and the Placer County Air Pollution Control District have found that biomass energy (using forest or agricultural waste) reduces greenhouse gas emissions – particularly black carbon, the most damaging climate pollutant – by 99 percent.[16] The California Air Resources Board found that biomass energy reduces black carbon and methane emissions by 98 percent compared to open burns or wildfire.[17] As noted in section I-C, above, the *California Forest Carbon Plan*, adopted by CalEPA, the California Resources Agency and CalFire, states unequivocally that forest biomass energy reduces greenhouse gas emissions and black carbon significantly, and is preferable to controlled burns from a climate and air quality perspective.

Given these strong conclusions from the agencies responsible for implementing the state's climate change policies, there is simply no reason to require individual projects to demonstrate that they are reducing greenhouse gas emissions and

[16] CAPCOA Policy Statement on Biomass Power Plants, released December 2016, at page 1. Available at: http://www.capcoa.org/wp-content/uploads/2016/12/CAPCOA_Biomass_Policy_Dec_2016.pdf.
[17] *California Forest Carbon Plan*, footnote 10 above, at page 135, figure 19.

many reasons not to require this, including the lack of a requirement in SB 1122 and the added costs and complexity of this sort of reporting.

a. Would you support a proposal requiring that in order to be eligible for BioMAT, a project must demonstrate that it will result in net GHG emissions reductions based on the GHG quantification methodologies and accompanying calculator tools developed by CARB that are discussed on pages 12-13, or a customized calculator tool developed by the CPUC? Please explain.

No, for the same reasons as the answer above.

b. Are there other established emissions quantification tools or methodologies that the Commission should consider to establish that BioMAT projects will result in net emission reductions? Please explain.

SB 1122 does not require this and adding this requirement would only add costs and delays to projects. The Legislature, CalEPA and the California Air Resources Board have made very clear that small-scale bioenergy projects cut greenhouse gas and Short-Lived Climate Pollutant emissions significantly. No more quantification should be required at this point.

19. Are there additional actions the Commission should take to address program barriers and expand program participation? Please explain your proposal(s) and provide rationale.

BAC urges the Commission to allocate Cap & Trade funding and EPIC funding to support BioMAT projects. In particular, BAC urges the Commission to:

1. Allocate 20 percent of Electricity Program Investment Charge (EPIC) funding to BioMAT projects until all 250 MW have been procured;
2. Allocate ten percent of the electric utilities' Cap & Trade revenues to the BioMAT since BioMAT projects reduce the most damaging climate pollutants and can be lower carbon than other forms of renewable energy; and
3. Coordinate with CalRecycle, California Department of Food and Agriculture and CalFire to ensure that they allocate Cap & Trade funding to projects that help to meet the BioMAT requirements (although, even if they do not, SB 1122 still requires the utilities to procure 250 MW of small-scale bioenergy).

BAC also urges the Commission to set additional deadlines and interim procurement targets to ensure that the utilities are on track to procure 250 MW as required by SB 1122. All other changes should focus on accelerating project development and procurement.

BAC also urges the Commission to allow BioMAT participants additional flexibility to amend the Guaranteed Energy Production ("GEP") performance requirement and penalty for under delivery. Specifically, BAC seeks the ability for the Applicant to either reduce the GEP more frequently (e.g. annually) without financial penalty or alternatively allow the Applicant to be free to deliver any amount less than the GEP without penalty. Currently the Applicant can supply GEP +10%/- 20% without penalty. However, the current rules prohibit additional distribution of power to a co-located site host below the threshold of 20% below GEP [NEED TO DOUBLE CHECK AND MAKE SURE THIS IS 20%, NOT 30% BELOW]. The IOUs routinely comment on the BioMAT prices being above market rates, so BAC believes this should be attractive to the IOUs by allowing other interested parties to purchase this power if it is advantageous to them.

BAC also urges the Commission to explicitly authorize the use of electricity generated from BioMAT projects for vehicle fueling in accordance with the Low Carbon Fuel Standard. Other RPS projects receive LCFS credits when providing power for vehicle charging, and authorizing this explicitly for BioMAT projects could help to reduce the costs to electricity ratepayers by providing additional revenue sources.

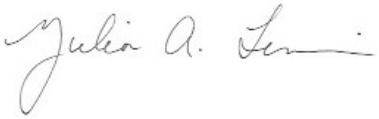
20. <u>Do you anticipate any challenges transitioning from the existing BioMAT program to a program that incorporates any of the changes under consideration? Explain the challenge(s) and provide a proposal to address the challenge(s).</u>

Some of the staff recommendations should be able to be implemented seamlessly. However, other recommendations include changes to the program that would result in prolonged periods of public hearings, significant delays and increased uncertainty and/or costs. BAC opposes these changes, including:

- Changes that make price decreases more likely and less predictable.
- The adoption of a RAM-style solicitation
- Changing MW limits beyond the change already authorized by AB 1923
- Changes to BioMAT queue management
- Changes to adopt another artificial program end date without regard to whether the program has met the statutory requirement to procure 250 MW of small-scale bioenergy
- Limiting Category 3 to HHZ fuels, in violation of SB 1122
- Requiring accounting of greenhouse gas reductions
- Any other changes, through the Commission or proposed legislation, that increase uncertainty or risk, cause delays in program implementation, or extend utility timelines to execute PPAs and interconnect projects.

Thank you again for the opportunity to provide comments on the Staff Proposal.

Sincerely,



Julia A. Levin
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