



3379 Somis Road PO Box 8 Somis, California 93066 (805) 386-4343

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California Energy Commission
Dockets Office, MS-4
1516 Ninth Street
Sacramento CA 95814

Re: Docket No. 09-IEP-1G

Commissioners:

Thank you for the opportunity to participate in this on-going analysis of the biomass power industry and its future development in California. CBEA and its member companies have a proven track record of success in financing and developing biomass and others renewable power projects that are delivering renewable electrons to California's homes and businesses today. We intend to develop more renewable projects to help California achieve its objective of obtaining at least 33% of total retail electricity sales per year from eligible renewable energy resources by December 31, 2020. Through our experience with California's RPS programs past and present, we have gained valuable insight about how best to get viable renewable projects financed, developed and operating in California.

CBEA would first like to identify the top issues affecting the maintenance and development of the biomass industry in California today before we attempt to answer some of the question posed for the Workshop.

1. Securing a sustainable revenue source for the biomass industry

California's existing biomass plants are running today under a variety of different types of contracts with the IOUs. The Renewable Energy Program staff has a firm grasp of the range and applicability of these contracts. What these contracts have in common – whether they are fixed price, SRAC or other – is they are, across the board, insufficient to sustain the existing biomass plants. The existing biomass plants, with only a few exceptions, get lumped together with all other Qualifying Facilities (QFs) in the state which include other renewables (wind, geothermal, the solar thermal SEGs), and natural gas-fueled cogeneration facilities. When contract prices are negotiated for QFs, there is no special consideration for the added benefits of the biomass QFs, which include reliable baseload power with reduction of GHG emissions and other emission reduction co-benefits. What you have is a biomass industry dominated by contracts that are based on the cost of natural gas at the time the QF contracts are negotiated, when the cost to run the biomass plants is far higher. Over the years this has resulted in an industry that cannot survive without the CEC's Renewable Energy Program Existing Account.

The economics of the existing biomass plants is not a new issue. It is one that the CEC has struggled to understand and address with what is within its means to do. The Public Goods Charge (PGC) collection, however, is scheduled to conclude in 2011. Now is the time for the State to address this pending crisis in the biomass industry. CBEA believes this can be accomplished a couple of different ways, but one place to start is at the CPUC. The CPUC currently has an open proceeding whose scope includes addressing the Governor's Executive Order (S-06-06) regarding biomass-to-electricity. The CPUC could reengage this issue by posing additional questions for consideration, including how to value the existing biomass fleet post-2011. There is absolutely no way the State will ever come close to meeting the Governor's calls for 20% of renewable energy to come from biomass until this one issue is resolved.

2. Reforming the RPS program by removing the MPR

In addition to protecting the renewable base in California, the State wants to continue to build new generation. It will continue to flail at that task until the RPS program is modified and the MPR process deleted. The current MPR process adds unnecessary complexity to the administration of the program. It complicates the financing of projects that require Above-Market Funds (AMF), and it interferes with the competitive-procurement process that is intended to be at the heart of the program. This makes it difficult to develop renewable-energy projects in California.

Additionally, the MPR does not reflect the cost to actually build and operate a renewable power plant. It is based on the price of a natural-gas-based power generation, a different product with a history of significant (and sometimes wild) price fluctuations, often based on market speculation. It is illogical and artificial to base the cost of procuring renewable energy on the cost of natural gas because the cost to develop and operate a renewable powerplant is unrelated to the cost of natural gas. The MPR also fails to recognize one of the important attributes of renewables, which is that they bring a strong measure of price stability to the marketplace that counters the volatility that is inherent in markets for conventional energy sources.

CBEA supports applying traditional regulatory "just and reasonable" standard tests to contracts for renewables. This change in the RPS program provides the best chance for establishing efficiency and competition to the California RPS program and, more importantly, will remove many obstacles to the development of renewable power in California.

3. Resolving the uncertainty in the definition of renewable biomass.

Currently there are discussions at the federal level as Congress debates a national renewable energy program involving the definition of renewable biomass, as well as what constitutes carbon neutrality with respect to biomass. Parallel debates are taking place in California at the Air Resources Board as they relate to the Low Carbon Fuel Standard and the AB 32 Cap & Trade program. The debate is focused on whether or not certain types of wood waste should be considered renewable and / or carbon neutral. Today California's biomass power plants use over 7 million tons of wood waste annually that would have been generated

whether or not biomass power plants exist to take the waste. Most of this wood waste would otherwise be landfilled or opened burned as there doesn't generally exist a more environmentally or economically beneficial option. In addition, the biomass industry has been a partner in promoting the treatment of 60,000 acres of forest land annually that would otherwise remain in highly wildfire-prone condition.

Developers looking at expanding, restarting, or building a new biomass plant today are left with significant fuel-source questions. Is that underbrush cleared from the forest considered renewable if it came from federal lands? If a farmer takes down a grove of trees used as a wind break to make room for another crop, is that wood waste renewable? Are the wood cutoffs from a furniture manufacturing plant renewable? The answers to these questions will have a significant impact of the future of the biomass industry in California. Depending on the answers, many tons of in-state biomass feedstock as identified by the CEC most assuredly becomes less or unavailable to the biomass power industry. How much more is not yet known. Most importantly, though, if that waste is not transported to a biomass facility, the alternate fates are less preferable from both a criteria pollutant and GHG emissions perspective.

CBEA strongly supports the CEC's current definition of biomass as noted in its Renewable Energy Program RPS Guidebook. If this definition is not maintained, the availability of feedstock becomes potentially critical to achievement of the Governor's Executive Orders goal. Our preference is for a definition of renewable, carbon-neutral biomass that is as general and inclusive as possible.

4. Establishing carbon offsets for biomass.

Research shows that energy production from biomass resources results in significant reductions in biogenic greenhouse-gas emissions associated with the disposal of the biomass. These reductions result from the avoidance of biomass disposal by burial or open burning, both of which produce larger quantities of emissions of greenhouse gases (more reduced carbon, or CH₄) than efficient combustion in a power plant.

Fire-safe treatments in California's overgrown forests contribute to a decrease in atmospheric concentrations of biogenic greenhouse gases on a long-term basis by increasing the amount of sustainable biomass residing on the land. Although the initial effect of thinning an overgrown forest with conversion of the thinnings into energy is to add biogenic carbon to the atmosphere, over time the treated forest has a higher net growth rate than the overgrown forest, and when fire or infestations occur, the treated forest retains a much greater percentage of the biomass than the overgrown forest, which experiences much more intense and destructive losses. On a long-term basis more biomass is stored in a healthy forest than in a stressed, at-risk forest.

Demonstrable and certifiable reductions in biogenic greenhouse-gas emissions associated with in-state biomass energy production should be able to be credited with tradable emissions offsets usable in the AB 32 Cap & Trade program, based on the net reduction in in-state emissions associated with the avoided conventional disposal of the biomass. Such

offsets could be the long-term solution to the biomass industry's chronic search for supplemental revenues.

One thing is clear: It is essential to ensure that biogenic carbon emissions from biomass to energy facilities in CA are treated separately from fossil carbon emissions in a Cap & Trade system developed under AB 32, and that biogenic emissions do not require GHG emissions allowances as will be required of fossil CO₂(e) GHG emissions. If biogenic carbon emissions are required to obtain GHG emission allowances for a biomass to energy facility to operate under CARB's Cap & Trade regulation, every biomass power plant in the state will shutdown and cease operations.

Questions for Public Comment

Q7. While there is some competition for biomass feedstock in California today, there is expected to be greater competition in the future with the development of a biofuel industry for transportation fuels. CBEA however does not believe anything can or should be done to mitigate the competition for fuel between the transportation and electricity sectors, other than ensuring the biomass industry is healthy and thriving as noted in the recommendations above. The market will be the determining factor in where the feedstock will go. Energy production is the lowest-valued application for biomass, so the market sends material that can be used for higher-valued uses to those uses, and the materials that have no higher-valued use are used for energy production.

In the future we see there being a synergy between a cellulosic ethanol plant and a biomass power plant. It would be economically advantageous for a cellulosic ethanol plant to co-locate with the biomass power plant to 1) take advantage of the fuel supply infrastructure; 2) have a on-site provider of steam and electricity, and; 3) have an inexpensive disposal option of the by-product lignin which can be used as fuel in a biomass plant. The problem is that at the present time both options, electricity production and fuels production, are marginally profitable at best.

Q8. The question here shouldn't be what impact competition for feedstock has on the biomass power industry. The question should be what the state could do to open up access to the available feedstock. Theoretically the more that is available, the cheaper it is likely to be, helping the compost and landscape mulch, animal bedding, and biomass and biofuel industries alike.

There are several options for the state to be proactive in this area. A few ideas include: 1) providing financial incentives or regulations to encourage or require that feedstock not be disposed of in a landfill or open burned in the fields or in the forest, 2) prohibiting the use of woody material as alternative daily cover, 3) encouraging the federal government to do a better job in its fuel reduction strategies in the forest, and, 4) opposing incorrect, inappropriate, unnecessary, and counterproductive definitional restrictions on biomass feedstock.

Q14/Q16. The recommendations noted in the beginning should be considered the answer to the questions about the major barriers to creating a self-sustaining biomass industry in

California, and what could help improve the economics of collection and transportation costs.

Q15. One regulatory barrier making it difficult for new biomass plants to become operational and reasonable to pursue is the availability and cost of emission reduction credits in non-attainment areas of CA. Although the biomass boilers must comply with the requirements of BACT (Best Available Control Technology, equivalent to US EPA's LAER), some residual amounts of regulated criteria pollutants are emitted after applying BACT. "Offsets" for these emissions must be provided in accordance with State and Federal law in order for a permit to be issued. Throughout California, offsets are scarce and extremely expensive, and in many areas, especially in Southern California, simply cannot be obtained. Recognition of the avoidance of open-burning of agricultural and forest waste biomass by its use as power plant fuel could in many instances provide the required offsets.

Q17. We appreciate the continued interest in availability of feedstock around the state. We don't think anything has changed in the available feedstock in California for the last 20 years. We know there's plenty out there. We know there are other markets for this feedstock. The market has and will always dictate where this feedstock goes. The solutions identified in question 17 to meet the potential need of biomass power are clearly not enough. Resolving the accessibility to feedstock alone is not enough if you do not resolve the revenue shortage the industry faces.

Thank you for considering the views of California's biomass power industry. Please contact me if you have any questions or would like to discuss this further.

Sincerely,

A handwritten signature in black ink that reads "Julee Malinowski-Ball". The signature is written in a cursive, flowing style.

Julee Malinowski-Ball
Public Policy Advocates
916-441-0702
julee@ppallc.com