California Biomass Energy Alliance

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California Energy Commission
Dockets Office, MS-4
Re: Docket No. 12-IEP-1D
1516 Ninth Street
Sacramento, CA 95814-5512

RE: Comments on the April 12, 2012, Lead Commissioner Workshop on Evaluating and Capturing Benefits of Renewable Energy for California
Docket#: 12-IEP-1D

The California Biomass Energy Alliance ("CBEA") is pleased to provide the following comments in response to the questions and issues raised during the Lead Commissioner Workshop on Evaluating and Capturing Benefits of Renewable Energy for California.

CBEA is the trade association of the State's 33 biomass electric generating facilities distributed across 19 counties, with a combined generating capacity of over 600 MW of reliable, baseload, renewable power that can be counted on and scheduled. Biomass power is approximately 1½% of the overall power generated in the State, and 17½% of all the renewable power, all of which is under contract with the State's three Investor Owned Utilities. California's biomass power industry is creating living wage jobs and growing the green economy.

Renewables as a group provide a common set of valuable environmental and public health benefits by virtue of the fact that they displace the use of fossil fuels for power generation. These benefits are essentially equivalent for all renewables, and are not related to specific renewable resources or technologies. Securing these benefits is the major goal of California's RPS and other renewables programs.

In addition to the common benefits of renewables, some renewables provide additional benefits that are specific to those renewables. In particular, bioenergy systems provide valuable waste-disposal benefits that are specific to the kinds of wastes and residues that are being diverted from traditional waste-disposal options. Our remarks are focused on the waste-disposal benefits that are associated with the conversion of solid-biomass fuels to electricity in the state's biomass power plants.

Solid biomass fuels are materials that are diverted primarily from three kinds of disposal or disposition fates: landfill disposal, open burning, and accumulation as overgrowth material in the state's forests. *Landfill disposal* of fuel-quality biomass materials leads to emissions of

noxious odors and greenhouse gases, and rapid consumption of limited landfill capacity. *Open burning* leads to emissions of conventional air pollutants (particulates, NOx, CO, and hydrocarbons) that are 10 – 100 times greater than the emissions of these pollutants from the biomass power plants. *Leaving overgrowth material in the state's ecologically-stressed forests* leaves the forests at high risk of massively destructive wildfires, impedes the functioning of watersheds, and has other negative effects on the forests. Using solid-biomass wastes and residues for energy production avoids the negative impacts associated with conventional disposal options.

Questions # 7 and #8 under Panel 2 on Page 3 of the Workshop Agenda ask:

> 7. How can public policy better incentivize social benefits from renewable energy?
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> 8. What non-energy programs can provide revenue streams to help capture social benefits from renewable energy for California (e.g., grants to improve forest heath and reduce wildfire hazard, income generated from fertilizers and fiber resulting from anaerobic digestion, the sale of fly ash to cement manufacturers)?

These two questions are absolutely crucial to the future of biomass power generation in California. Of course, in answer to *Question Number 7,* the straightforward way to incentivize the social benefits is to compensate the generator of the benefits. The original 1996 electricity deregulation legislation in California, AB 1890, included the following language (§ 389 in the original legislation):

> The Secretary of the California Environmental Protection Agency, in consultation with interested stakeholders including relevant state and federal agencies, boards, and commissions, shall evaluate and recommend to the Legislature public policy strategies that address the feasibility of shifting costs from electric utility ratepayers, in whole or in part, to other classes of beneficiaries. This evaluation also shall address the quantification of benefits attributable to the solid-fuel biomass industry and implementation requirements, including statutory amendments and transition period issues that may be relevant to bring about equitable and effective allocation of solid-fuel biomass electricity costs that ensure the retention of the economic and environmental benefits of the biomass industry while promoting measurable reduction in real costs to ratepayers.

Thus the concept of cost shifting to allow biomass generators to capture the value of the waste-disposal benefits of biomass-power generation from the beneficiaries of the benefits has been around for at least 16 years. Unfortunately, what we have learned is that there is no simple consensus to accomplish this goal, however laudable it might seem. Landfill operators, for

example, who are trying to meet the diversion goals of AB 939 are greatly benefited by nearby biomass facilities that can take their solid wood waste as fuel. However, not one single landfill operator or jurisdiction in the state has been willing to voluntarily charge even a small fee to help offset the cost of the diversion program in order to reduce fuel costs to the biomass plants, and allow them to continue accepting the fuel. Thus, in answer *Question Number 8* above, the fact is that in 16 years of effort, there has been no success at all in accomplishing the cost-shifting that would help to compensate biomass generators for the social benefits of biomass, separately from the electric ratepayers who purchase the power.

In considering the issue of cost shifting, it is important to deal with the issue of just who the beneficiaries of the benefits are. This is not a trivial matter. For example, the most direct beneficiaries for the diversion of agricultural residues from open burning to power plant fuel are the farmers who have been ordered to stop open burning their trimmings. However, the entire population of the state's Central Valley benefits from the diversion by virtue of having cleaner air to breath, and the entire population of the state benefits by retaining access to federal expenditures for highways and other programs when the state complies with the requirements of the Federal Clean Air Act.

The situation is similar with the benefits of other forms of diversion: there may a limited group of direct beneficiaries, such as the waste generators and, in the case of fuels made from the residues produced by forest-thinning operations, land owners, but the benefits of reduced air pollution, reduced landfilling of usable wastes, and reduced risks of destructive wildfires generally extend at least regionally, and ultimately to the entire population of California. To the extent that the entire population shares in the waste-disposal benefits of biomass power generation, there is no more appropriate way to provide compensation than from the entire population, and that can be accomplished in two obvious ways, through state taxes, or through payments for the electricity from ratepayers. Considering the current state of the California state budget, the most logical source of funding for the benefits is electric ratepayers.

In addition to these unique waste-disposal benefits, solid-fuel biomass power generation provides benefits to the electricity grid that are associated with the fact that it is a schedulable, baseload generation option that is capable of delivering electricity with capacity factors exceeding 90 percent, and availabilities in excess of 95 percent. It also can provide limited dispatch services to the grid, although that comes at the cost of reducing the amount of RPS-qualified energy that is delivered. These are electric benefits that are clearly accruing to electricity consumers.

When the public-goods charge was instituted for renewables and other purposes in 2003, one of the stated goals of the program was to provide seed money for a limited period of time for existing renewable generators of various kinds that would allow them to become cost

competitive by the end of the funding period. For example, the state's existing solar-thermal generators were able to use the funding to invest in new mirrors and equipment that made the generators more efficient to operate well beyond the time during which the funding was made available. While funding of this kind can work well for technologies whose costs are almost entirely capital in nature, it does not work for technologies like biomass whose costs are heavily weighted to the category of variable-operating costs.

Moreover, the waste-disposal benefits of biomass are related to the ongoing, lifetime use of the fuel, and its diversion from conventional disposal. It is expensive to collect, process, and transport the fuel, which are operations that are ongoing during the entire operating lifetime of the facility. Thus, it is perfectly appropriate, from a public-policy perspective, to provide compensation for the benefits of the diversion that are coincident with the diversion; in other words, during the lifetime of the operation of the facility.

CBEA and its member companies look forward to exploring these issues with you further in preparation of the *2012 Integrated Energy Policy Report Update*. The timing of this analysis couldn't be more perfect as the biomass industry almost in its entirety has its original SO4 contracts expiring throughout this next decade. Solutions in properly valuing and paying for this important renewable power will be a key to the existence of California's biomass industry in the future.

Thank you for your kind attention and consideration of these comments.

Sincerely,

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