California Biomass Energy Alliance

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Clerk of the Board
Air Resources Board
1001 I Street
Sacramento, California 95814

Re: ENERGY EFFICIENCY AND CO-BENEFITS ASSESSMENT OF LARGE INDUSTRIAL FACILITIES

Dear Air Resources Board:

The California Biomass Energy Alliance ("CBEA") has no position on this proposed regulation but is concerned with the precedence it is setting. The proposed regulation would apply to stationary sources that emit GHG emissions of greater than 0.5 MMTCO2e annually, which includes both biomass (biogenic CO2) and non-biomass (anthropogenic CO2, or "fossil") GHG emissions. By combining CO2 and CO2e emission, however, this regulation would be inconsistent with state and federal policy which appropriately recognizes the GHG emissions benefits of the biomass power generating industry.

Because essentially all of the renewable biomass power industry fuel is comprised of clean wood chips, all of the GHG emissions from the renewable biomass power plants' fuel combustion are in the form of biogenic CO2, except for very small amounts of combustion related to N2O and CH4. The Pacific Institute carried out a study that showed that biomass-fueled power generation has a total net negative GHG emission profiled.[1] This specifically means that overall emissions of GHG would be greater if the biomass power plants did not operate and the renewable biomass power generation did not occur. By use of the biomass waste materials as boiler fuel, the alternate (or in some cases, the usual) methods of disposal of the materials are avoided. These alternate methods of disposal include landfill disposal, open-burning of agricultural residues, and leaving on the forest floor of residues from logging, thinning, or other forest-management activities where the material decomposes or eventually burns in a prescribed burn or a wildfire. Every one of these alternate methods of disposal generates and emits substantial quantities of methane, a far more potent GHG than is carbon dioxide, the normal product of combustion. By

1 http://www.pacinst.org/reports/Bioenergy_and_Greenhouse_Gases/Bioenergy_and_Greenhouse_Gases.pdf

avoidance of this methane generation, renewable biomass power generation produces a net reduction in greenhouse gases than would otherwise occur.

The California Public Utilities Commission recognized this avoidance of GHG emissions by biomass power generation in its decision on compliance with the California "Emission Performance Standard" by different types of power generation. The CPUC decision stated:

> *"In particular, the record shows that electric generation using biomass (e.g., agricultural and wood waste, landfill gas) that would otherwise be disposed of under a variety of conventional methods (such as open burning, forest accumulation, landfills, composting) results in a substantial net reduction in GHG emissions. This is because the usual disposal options for biomass wastes emit large quantities of methane gas, whereas the energy alternatives either burn the wastes that would become methane or burn the methane itself, generating CO_2. Since methane gas is on the order of twenty to twenty-five times more potent as a GHG than CO_2, and since methane has an atmospheric residence time of twelve years, after which it is converted to atmospheric CO_2, trading off methane for CO_2 emissions from energy recovery operations leads to a net reduction of the greenhouse effect."* [2]

EPA and other federal agencies, states and international groups have recognized the carbon neutrality of biogenic carbon in greenhouse gas evaluations. Examples of programs and policies that recognize biogenic emissions as carbon neutral include:

- EPA's National Greenhouse Gas Inventory, which excludes biogenic emissions;
- EPA's recently promulgated Renewable Fuel Standard revisions, which recognize landfill gas as an advanced biofuel and biogenic components of renewable biomass;
- EPA's GHG Mandatory Reporting Rule, which segregates biogenic and anthropogenic emissions in its report formats;
- The U.S. Department of Energy's GHG accounting protocols; and
- The United Nations Intergovernmental Panel on Climate Change (IPCC) inventory guidelines that exclude biogenic emissions from GHG inventory accounting.

California is actively and aggressively seeking to reduce anthropogenic GHG emissions and promote renewable energy production through a Renewable Portfolio Standard, waste diversion and reuse goals, and the like.

If ARB contends that including biogenic sources of CO2 emissions in the total CO2e emissions is an appropriate surrogate it should also acknowledge this important distinction.

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[2] California Public Utilities Commission, Decision D.07-01-039, January 25, 2007

We appreciate your attention to this matter and look forward to working with ARB as it moves forward with this regulation.

Sincerely,

W. Phillip Reese, Chairman
California Biomass Energy Alliance

cc: Lisa Williams