V. JOHN WHITE ASSOCIATES

September 10, 2010

Sarah Michael
Special Advisor to Vice Chair Boyd
California Energy Commission
1516 Ninth Street, MS 34
Sacramento, CA 95814-5512

Re: CEC RPS Eligibility Report

Dear Ms. Michael:

On behalf of Biomass One LP, I submit the following answers to the questions you posed on August 24, 2010:

1. Does Biomass One LP believe that the investment in the new turbine and replacement boiler fan equipment (81% of the total depreciable plant) qualifies it for RPS certification because it meets the 80% threshold?

Biomass One, LP does not believe that the investment in the new turbine and improved boiler air handling equipment qualifies for RPS certification simply because it meets the 80% capital expenditure threshold. The program guidelines currently in effect clearly define "repowering" as "boiler replacement". Biomass One believes the repowering language should be amended to certify existing facilities that have or will make material (>80%) investment in process improvements that improve fuel efficiency, output or emissions. We respectfully submit that the objective of repowering a facility should be to achieve something beneficial to the renewable energy policy. We suspect that at the time the "boiler replacement" convention was under discussion, the parties did involved at the time did not fully appreciate the potential impact on tangible performance that could be achieved through modifications to turbines, cooling water systems and water economization. In the case of Biomass One, boiler replacement would yield no quantifiable improvement to quantifiable utilization. That is to say, neither fuel efficiency, output, parasitic loads or emissions would be improved beyond what had already been achieved with the investments made in 2009. Worse yet, it is possible that the existing policy could induce other in-state and out-of-state existing plants to simply proceed with boiler replacements in order to qualify for the RPS, without any tangible benefits. Arguably, the unnecessary tear down and reconstruction of a carbon steel biomass boiler would have negative consequences from a carbon emissions or natural resource utilization standpoint.

2. Does Biomass One LP believe that the definition of biomass repowering for RPS certification should focus on efficiency gains rather than dollar investment? If so, what should be threshold for efficiency gains?

Rather than limit the scope of tangible improvement to efficiency, there are multiple policy benefits that could be captured with a well-crafted change in language. Plants that expend capital to modernize their "process" can realize gains over several kinds:

1. Efficiency improvements that reduce the volume of fuel required to generate the maximum power capacity of a facility, thereby freeing up existing and future volumes of biomass resources to make feasible incremental capacity from the same renewable fuels resource;

2. Efficiency gains that facilitate expansion of existing facilities, adding generation on a more cost-effective, and environmental friendly resource utilization basis than construction of new plants;

3. Emissions improvements that may be accomplished in parallel serve to improve the overall air quality impact of existing facilities and are deserving of RPS support (also to keep in mind, efficiency improvements, by their very nature, reduce carbon, particulate, NOX and other trace emissions on a per megawatt hour basis.) A higher energy utilization from existing fuel volumes means more usable electricity per unit of emissions.

We have not considered specific language changes to the RPS Eligibility Report at this time but we would welcome the opportunity to dialogue further on matters surrounding this issue. There is a lot at stake, since the permanent closure of an operating facility either in-state or in an out-of-state jurisdiction that is a net exporter of energy to California, reduces the amount of renewable energy that California receives, power being fungible. The loss of a biomass facility increases the potential for wild fires if that plant had been receiving in-woods logging residues or thinnings. The southern Oregon "Biscuit" fire of 2002 spread its particulate emissions consequences as far south as San Francisco. Wild fires produce hundreds of times more particulate pollution than burning in a boiler. In addition, every megawatthour of existing biomass generation that is lost is replaced, necessarily, by a marginal fossil fueled base-load or peaking generator that must be dispatched at a higher level to accomodate the shortfall, given the generation makeup of the California grid and the WSCC.

3. Are there specific language changes to the RPS Eligibility Report that you will be recommending to address your point and would like us to consider in advance of the workshop?

In response to your final paragraph, it could be possible for either/or language to work, although, to be fair and protect the interests of ratepayers, the investment should be restricted to "process" investments such as:

1. Fuel processing, especially drying

2. Improvements to the combustion itself that result in lower excess air while staying within the bounds of air emission regulations

3. Suspension firing of sawdust or gasification to increase boiler capacity

4. Combustion, including air handling/management/control and boiler fuel distribution

5. Increased or better heat transfer surfaces that reduce the temperature of the stack

6. Increases in superheat from increased or better superheaters, independent superheaters or reheat cycles

7. Increases in steam turbine efficiency

8. More efficient or larger cooling towers or condensers that either reduce parasitic load or increase the vacuum experienced by the steam turbine

9. Improved air pollution control equipment such as SNCR, CO catalysts, electrostatic precipitators or wet scrubbers that enable more throughput while staying within the bounds of air emission regulations

I thank you in advance for considering these comments and look forward to following up you in the very future. If you have any questions or concerns in the meantime, please contact me at (916) 447-7983.

Sincerely,

V. John White
Principal
V. John White Associates