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<td>Comments on 2017 IEPR Renewable Gas</td>
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Comments on 2017 IEPR Renewable Gas

Additional submitted attachment is included below.
July 10, 2017

The Honorable Robert Weisenmiller, Chair
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

Re: Comments on the 2017 IEPR – Renewable Gas

Dear Chair Weisenmiller:

Organic Waste Systems, Inc. (OWS) submits these comments on the policies and incentives required by SB 1383 (Lara, 2016) to significantly increase renewable gas production and use. OWS is a licensed California general engineering contractor, #1015911, and registered foreign corporation, #3689597. Our current renewable gas projects in California include preliminary engineering for Recology in Northern California and a joint venture between OWS and Waste Resources, Inc. of Gardena in LA County called Scholl Canyon Organics to Renewable Energy (SCORE). All of these projects will process the organics in municipal solid waste, including food waste, yard waste, soiled non-recyclable paper, thereby reducing landfill use and emissions while producing renewable gas for energy production and/or vehicle use.

SB 1383 requires the Commission to develop recommendations for the production and use of renewable gas, specifically that “state agencies shall consider and, as appropriate, adopt policies and incentives to significantly increase the sustainable production and use of renewable gas, including biomethane and biogas.” (H&S Code 39730.8(c), emphasis added)

To do so, OWS urges the Commission to include the recommended policies and incentives below:

1. **Provide Long-Term Market Certainty for Renewable Gas**

OWS recommends a Renewable Gas Standard (RGS) or utility procurement requirement to provide long term certainty of access to the gas market and fair pricing similar to what the Renewables Portfolio Standard provides in the electricity market. OWS also recommends a requirement for long-term contracts or a long-term guarantee of LCFS credit values to provide market certainty for renewable gas used in the transportation sector.
A. Renewable Gas Standard

An RGS or renewable gas procurement requirement should include at least the following elements:

- An increasing percentage requirement for renewable gas that enables a smooth and sustainable increase in renewable gas production and use in California.
- A requirement that prioritizes the greatest greenhouse gas and short-lived climate pollutant reductions, as required by H&S code section 39730(e). Projects producing biomethane from diverted MSW organics reduce fugitive emissions at landfills, one of the largest SLCP sources.
- A clear preference for renewable gas produced instate that helps to meet the policies set forth in H&S Code sections 39730(b) and (c), as well as the goals of AB 2196 (Chesbro, 2012) and AB 1900 (Gatto, 2012) to increase instate biogas production and use.
- A requirement for long-term (at least 10-year) contracts for renewable gas offtake agreements.
- A requirement that applies to the entire gas supply, not just gas owned by investor-owned utilities, and fully credits renewable gas that is used onsite.

B. Long-Term LCFS Values/Contracts

OWS also recommends policies to guarantee the long-term value of LCFS credits for renewable gas used as transportation fuel. LCFS credits can be a significant revenue source, but since they fluctuate significantly and obligated entities enter into short-term contracts, they are not certain enough to help finance new projects. To significantly increase renewable gas production and use as transportation fuel, the state should adopt one or more of the following policies to provide long-term certainty around the value of LCFS credits:

- Require long-term contracts for LCFS credits;
- Create a LCFS credit reserve and third party market that provides for long-term contracts and guaranteed credit values for renewable gas producers;
- Set a credit floor price that LCFS credits cannot go below over a ten-year or longer period.


Despite the adoption of numerous policies in the past five years, pipeline access remains a critical barrier to increased renewable gas production and use. Pipeline standards for biomethane continue to be discriminatory, imposing higher standards than for fossil natural gas now being used in California.

Interconnection costs are both high and unpredictable, and unregulated. Furthermore, the utilities continue to derive economic benefit from private developer investment dollars that pay for the interconnection infrastructure. Ironically, this infrastructure becomes a securitized asset of the utility, and the utility then inappropriately imposes a tax for CAIC. OWS urges the Commission to recommend:

a) expanding the methane reduction pilot projects (now limited to dairy) to include additional projects from all waste sectors;
b) rate-basing all pipeline and transmission line interconnection costs for biogas projects and issuing a determination that CAIC does not apply; and
c) acceleration of CPUC reconsideration of pipeline biogas standards, as required by SB 840, section 11.

While the dairy industry continues to shrink in California, the organic waste produced by the State’s increasing population continues to rise and the vast majority continues to go to landfills. It is crucial that policies are enacted to encourage projects which process the broadest range of these wastes to produce renewable gas while significantly reducing short-lived climate pollutant emissions.

There is precedent for rate-basing interconnection costs for both electricity and pipeline transmission. Large-scale renewable power projects are allowed to rate-base transmission upgrade costs, which is the largest part of interconnection costs on the electricity side. SB 1383 also requires the CPUC to rate-base interconnection for no fewer than five dairy pilot projects and AB 2313 requires the CPUC to consider rate-basing pipeline biogas interconnection more generally.

OWS urges the CPUC to finalize the contract with the California Council on Science and Technology, as required by SB 840, so it can review and recommend revisions to the siloxanes and BTU requirements for pipeline biogas.


California has invested billions of dollars in renewable power, low emission vehicle technologies, smart grid, energy storage and other clean energy technologies. These investments have brought down the costs of renewable generation and energy storage and helped many clean energy technologies to become cost competitive. Significantly increasing renewable gas production and use will require increased investments as well to commercialize technologies and help to drive down costs over time.

OWS recommends increased investments in renewable gas across several programs:

- Increase the allocation of GGRF funds to renewable gas production, particularly the Low Carbon Transportation Fund and Organics Diversion
- Increase the allocation of ARFVTP and EPIC funds to renewable gas;
- Increase funding for ultra-low emission natural gas trucks that run on renewable CNG made from biogas;
- Increase Self-Generation Incentive Program funding for renewable gas generation and use.

4. Changes Needed to the BioMAT and RPS Programs.

A recent paper by the National Academy of Sciences makes clear that bioenergy provides important grid stability benefits in combination with the use of intermittent renewables like wind and solar. However, neither the RPS nor the BioMAT program have been successful at increasing biogas production to provide baseload and/or dispatchable generation power that will be increasingly valuable as California moves toward and beyond 50 percent renewables.
In addition to rate-basing interconnection costs, OWS recommends a number of changes to these programs to increase biogas use in the electricity sector:

- Fully account for the increasing value of baseload and/or dispatchable generation power in comparing different generation technologies;
- Account for the greater urgency of reducing short-lived climate pollutants to rate-payers and the public;
- Increase the megawatt totals in the BioMAT and limit the “handbrake” provision that stops the entire program if one category reaches the price cap;
- Make onsite generation of equal value to exported power if the generation is baseload and/or dispatchable generation.

5. Determining Priority End Uses.

SB 1383 requires the Commission to consider cost-effective strategies and priority end uses for renewable gas, consistent with various state policies to promote renewable energy and reduce climate pollutants. OWS urges the Commission to consider priority end uses in the short-medium- and long-term, as the highest and best use of renewable gas may change over time. At present, biogas provides the greatest carbon and air quality benefits when it is used to replace diesel in heavy duty trucks. According to ARB’s analysis, renewable CNG or electricity produced from organic waste and used in vehicles can provide many times the greenhouse gas reductions compared to the reductions from electric vehicles using grid power or vehicles using other low carbon fuels. When used in ultra-low emission natural gas trucks, renewable CNG can cut air pollution by more than 90 percent.

Determining the highest and best use of renewable gas will most likely lead to different conclusions for different feedstocks in different locations and over different time periods. Therefore, OWS urges the Commission to identify the factors that affect the cost-effectiveness and relative climate and air quality benefits of different end uses of renewable gas and to develop a decision-making tool (roadmap) to help determine the highest priority end use for particular renewable gas sources. This will be far more helpful to project developers and decision-makers than a fixed determination of the best end use that fails to account for changes over time, between feedstock types and locations.

Thank you for your consideration of these comments.

Sincerely,

[Signature]

Luc De Baere
President
OWS, Inc.