



**SMUD**

SACRAMENTO MUNICIPAL UTILITY DISTRICT  
The Power To Do More.<sup>SM</sup>

*P.O. Box 15830, Sacramento, CA 95852-1830; 1-888-742-SMUD (7683)*

September 9th, 2009

Syd Partridge  
Climate Action Reserve

Dear Mr. Partridge:

Thank you for the opportunity to comment on the Draft Organic Waste Digestion Project Protocol. We appreciate the efforts of the Climate Action Reserve staff and your workgroup members to address this challenging topic area, and we recognize the difficulties inherent in creating a standardized approach that will address the diversity of project types that exist today and are being considered in the future. We offer these brief comments based mainly on the discussion at the workshop held in Sacramento on August 26<sup>th</sup>, and on our experience to date with organic waste digestion projects.

The SMUD Board is a strong supporter of utilizing local biomass to generate renewable electricity, to solve local environmental problems and to reduce the greenhouse gas emissions associated with organic waste. SMUD provided incentives for the development of two anaerobic digesters on dairy farms in Sacramento County and is collaborating with the Sacramento Regional County Sanitation District on a pilot test of the co-digestion of grease and liquid food processing waste with sewage sludge. SMUD is interested in the development of additional digestion capacity in the region because of the proven energy generation and commercial success of anaerobic digestion projects in other countries and their potential to divert a significant amount of organic waste from landfill.

To that end, the California Energy Commission recently released a report on the Combined Heat and Power Potential at California's Wastewater Treatment Plants. This report indicated that there is market potential to develop approximately 100 megawatts of power from sludge at the wastewater treatment plants, and that this potential could be increased to as much as 450 megawatts by adding biodegradable waste from the state's dairies, food processing plants, restaurants and rendering plants<sup>1</sup>. Sludge co-digestion projects utilize existing infrastructure and excess capacity, and thus offer municipalities a cost-effective way to help achieve greenhouse gas emissions reductions, relative to the construction of a stand-alone digester.

However, while interest in sludge co-digestion is growing, it has only been implemented at a small number of wastewater treatment plants in California. Co-digestion of fats, oils and grease (FOG) waste, liquid food processing waste and food waste requires changes in collection and disposal practices and investment in that existing infrastructure to bypass primary and secondary treatment (the source of fugitive emissions today), process and utilize the resulting increased methane gas capture. Such changes present financial barriers as well as institutional and technological barriers, making them strong candidates for creation of valid greenhouse gas offsets. The availability of greenhouse gas emissions offset revenues could help provide the financial incentives necessary for these projects to overcome these financial, institutional and technological barriers and be developed throughout the state, thereby helping to realize some of that significant generation potential.

Our main concerns regarding Version 1 of the Draft Protocol are the very conservative limits placed on the Project Definition and Eligible Waste Streams. We would like to see the Project Definition expanded to include co-digestion with sewage sludge in addition to co-digestion with manure.

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<sup>1</sup> Combined Heat and Power Potential at California's Wastewater Treatment Plants, Draft Staff Paper, Pramod Kulkarni, July 2009

Regarding Eligible Waste Streams, the elimination of FOG waste and liquid food processing waste is problematic, as it will render most of the wastewater treatment plant projects ineligible, and will also limit the potential for co-digestion on farm. While collection practices for FOG and liquid food processing waste must be adjusted to support co-digestion projects, they often require less adjustment than the co-digestion of food waste which in nearly all California jurisdictions will require the wholesale development of new collection programs. Thus, we believe that FOG and liquid food processing waste are more suitable waste streams to minimize the costs of co-digestion projects. The Draft Protocol's requirement that a waste stream has to have been disposed of at a landfill in order to establish a baseline is inappropriate for this type of waste stream, and thus overly limiting.

We support the inclusion of a Local Food Waste Diversion Mandate Exception since, as indicated above, local mandates are often necessary to inspire source separated food waste collection. However, the 12 month cutoff following passage of a local food waste law is far too short, given the time required to plan, fund and implement these projects. We believe the exception should allow for at least a three and a half year window of eligibility following the passage of a local food waste mandate.

Lastly, we are concerned that the curtailment of the project crediting period due to future regulations may not provide the necessary certainty to be able to rely on this funding stream to finance a project. Given this project risk, these types of projects may have significant difficulty being developed. We would encourage the Reserve to consider mechanisms to ensure some level of crediting certainty to ensure that good projects can be funded today, rather than waiting for potential future regulations.

Again, thank you for the opportunity to comment on the Draft Protocol. We look forward to the next phase of the protocol development process.

Sincerely,



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