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April 10, 2009

The Honorable Arnold Schwarzenegger
State Capitol Building
Sacramento, CA 95814

Dear Governor Schwarzenegger:

DOCKET

09-IEP-1G

DATE APR 10 2009

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California's biogas (methane) digester program is in trouble and it is important that you understand why and what it means for California future. As you likely know, California's dairy industry is ready to play a significant role in reducing greenhouse gas emissions to address Climate Change. As part of the AB 32 Scoping Plan and Early Action Measures, biogas digesters have been singled out as having potential to voluntarily capture and destroy up to a million metric tons of methane emissions from dairies while generating renewable base load power. That is equivalent to taking 4 million cars off the road.

California legislators and policy makers have long recognized the value of digesters to California's environment. During California's energy crisis of 2001, the legislature authorized spending up to \$15 million on biogas digesters to turn dairy methane into renewable electricity. That was done under the California Energy Commissions Dairy Power Production Program (DPPP), authorized by the legislature and administered by Western United Resource Development (WURD), and resulted in the construction of more than a dozen digesters in California, mostly concentrated in the San Joaquin Valley.

Unfortunately expanding electricity production from dairy digesters is proving infeasible. The major hurdle is regulatory. Recently adopted requirements are forcing dairies that want to produce renewable electricity from biogas to experiment with expensive and unproven NOx controls on engine generators. Called Selective Catalytic Reduction or SCR, the controls add significantly to the cost. Where existing technology can remove 95% of the NOx emissions, the new requirement is for 99%. However there has been no transition period to develop the SCR technology for biogas engines which have unique requirements. The San Joaquin Valley Air Pollution Control District (SJVAPCD) who initiated this requirement has conceded that SCR has not been proven in this application and state that in an air permit that the Air District has already issued. More importantly, a recent assessment by air pollution experts found that none of the similar applications that the SJVAPCD claimed have been demonstrated to work, are working in practice.

The only other alternative that the SJVAPCD will allow to be installed are micro-turbines. They were tried. In fact, of the 15 microturbines installed to run on dairy biogas in California, all failed. They also turned out to be much less efficient at generating electricity costing tens of thousands of dollars in down time, lost methane and electricity.

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Not surprisingly few dairymen are willing to experiment with these costly and unproven technologies and over a dozen new projects have been halted while several existing digesters have shut down; other air districts now appear to be following the SJVAPCD lead; three digesters were recently shut down in the face of similar requirements by the South Coast Air District. The Sacramento Municipal Utilities District (SMUD) has slowed development. But the implications of these requirements go beyond dairy biogas. They will affect wastewater plants and landfills looking to turn biogas into electricity.

One alternative to using biogas for electricity generation that we pioneered is to purify biogas and turn it into a natural gas substitute. Once the biogas is purified to renewable biomethane, it can be injected into the natural gas pipeline. One facility has in fact been built and is operating. However this option is in serious trouble as well. PG&E, who wrote the initial contracts for developing these facilities on dairies, says the economics no longer work as natural gas prices have fallen by nearly half since the first contracts were written. And of the two companies that are building these systems, one has laid off most staff and halted construction; the other has yet to secure financing for a second facility.

It is important to recognize that the dairies that have pioneered methane digesters spent millions of their own money and were encouraged to do so with matching grant money from the State. These early adopter dairymen, once lauded by government officials for their foresight and environmental leadership, now say their efforts were a mistake. The unmistakable message for the rest of the agricultural community is even more damaging as they see these "early adopter" dairies being severely penalized for taking the initiative.

One vestige of hope has been a new business model where private sector companies come in and finance, own and operate farm digesters to produce electricity. However, one of only two companies nationwide who provide this service has spent nearly eighteen months attempting to get a permit to build their first digester facility and had planned on building at least a dozen more. But after spending tens of thousands of dollars hiring consultants and specialists, including former air district permit staff, they are ready to abandon their efforts. The Air District recently sent them a 142 page denial letter with a request for payment in the amount of nearly \$14,000 for having reviewed the application. That is one reason several companies, tens of millions of investment dollars as well as venture capital destined to build dairy digesters, are leaving or have left California as they are scared away by our long, expensive and difficult Air District permitting process.

We recognize that the San Joaquin Air District is an extreme non attainment area for ozone and needs to be proactive in cleaning up air emissions. We understand that better than any industry and have made significant and lasting contributions to reducing air emissions from dairy facilities, as much or more than any other industry. However, the experts we have talked to say the Air District has not followed their own rules and they should not have demanded control technologies unproven to work on dairy biogas.

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We would like to propose a set of solutions to the current impasse, and with your concurrence, will set up a meeting with Susan Kennedy and several key staff members.

Very truly yours,



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Chief Executive Officer

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