



**Pacific Gas and  
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1516 Ninth Street  
Sacramento, CA 95814

**DOCKET**  
**09-IEP-1G**

DATE MAY 05 2009

RECD. MAY 05 2009

**Re: 2009 Integrated Energy Policy Report – Biopower in California**

Docket Office:

Please find attached PG&E's comments on the workshop held April 21, regarding  
"2009 IEPR – Biopower in California".

Please contact me should you have any questions. I can be reached at 415/973-  
4185.

Sincerely,

Kathy Treleven

Attachment



Comments of Pacific Gas and Electric Company  
Regarding the California Energy Commission's  
Joint IEPR and Renewables Committees' Workshop On Biopower  
April 21, 2009  
Docket No. 09-IEP-1G

Pacific Gas and Electric Company (PG&E) appreciates the opportunity offered by the California Energy Commission (CEC) to participate in its investigation of various issues challenging the advancement of biomass-related electricity production and gas injection processes, and will follow the CEC's developing report in this area throughout the IEPR process. PG&E has a limited number of comments related to the topics discussed throughout the workshop or touched upon in the questions associated with the notice. These comments are in the areas of: supporting the existing biomass power plants currently delivering renewable energy to California customers; encouraging the progress of small AB 1969-related renewable plants; and addressing certain bio-gas pipeline injection issues.

Retaining existing biomass power plants

PG&E is working hard to meet its renewable energy targets, and part of meeting that challenge is to retain existing renewable resources for California customers. The possible loss of some existing QF biomass plants under power purchase agreements with PG&E is an area of concern. PG&E evaluates our current contracts with renewable providers and works actively to assist renewable generators to get – and keep – projects online, including contract renegotiations to address cost increases. Since the RPS program was implemented, PG&E has renegotiated several contracts. However, a contract represents a give-and-take among the parties and sometimes agreements on contract amendments cannot be reached. Additionally, the CPUC retains authority to approve or reject contract amendments, including price reopeners, and has required documentation from counterparties to justify the proposed price increase. PG&E remains committed to achieving a successful contract renegotiation whenever feasible.

Since 2002, PG&E has entered into contracts or amendments to purchase or increase purchases of renewable energy from nine different existing or repowered biomass plants. The combined annual generation from these commitments equals approximately 670 GWh or 0.8 % of PG&E's bundled retail sales (out of a total biomass portfolio of 42 PPA's totaling nearly 2400 GWh per year<sup>1</sup>). PG&E intends to continue pursuing future opportunities to retain existing biomass resources in its RPS portfolio.

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<sup>1</sup> Assumes a 60% capacity factor for the 574MW of nameplate biomass capacity.

## AB 1969 Contracts

Contrary to the statement within question 5 (no facilities have signed up for the AB 1969 feed in tariff), PG&E has 13 contracts that have so far signed up, since the contracts became available in early 2008. These small renewable resources total over 9 MW, and although many are landfill gas, resources also include wind and hydro.

## Biomethane-to-Pipeline Injection and Gas Quality Issues

PG&E fully supports the development of renewable energy projects in California. Biomethane-to-pipeline injection projects sourcing various types of biomass, such as dairy, agricultural, and food waste, can be constructed economically to capture harmful greenhouse gases for delivery via pipeline to power generating plants. We agree with the San Joaquin Valley Air Pollution Control District in that, in many cases, biomethane injection is an environmentally superior alternative to using biogas for onsite power generation. This section of our comments will address the following items: (i) gas quality; (ii) landfill gas (LFG) injection into pipelines; and (iii) biomethane injection into distribution system pipelines.

### (i) Gas Quality:

According to PG&E's California Public Utilities Commission (CPUC)-approved gas quality tariff, Gas Rule 212, PG&E is currently authorized to accept biogas sourced from agricultural and animal waste into its gas pipeline system. As biomethane is a manufactured gas with which we have limited operational experience, PG&E will thoroughly test such gas for customer and pipeline safety prior to permitting it to be injected into its gas transmission system. Initial research and ongoing testing of these new gas supplies is very costly. PG&E is in the process of developing testing protocols for the various sources of feedstock and will seek appropriate funding to ensure compliance with its gas quality tariffs.

### (ii) Landfill Gas (LFG) Injection Into Pipelines:

Acceptance of LFG into the pipeline system is specifically prohibited by PG&E's gas quality tariff, Gas Rule 21<sup>3</sup>. The changes to California gas utilities' gas quality tariffs prohibiting LFG injection originated in AB 4037, Chapter 932, Statutes of 1988 Landfill Gas - Toxicity (aka Hayden's Law), which (i) required the CPUC to adopt a rule or order to specify the maximum amount of vinyl chloride that may be found in landfill gas;

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<sup>2</sup> See Section C.13 "Biogas" at <http://www.pge.com/tariffs/doc/GR21.doc>

<sup>3</sup> See Section C.14 "Landfill Gas" at <http://www.pge.com/tariffs/doc/GR21.doc>

(ii) prohibited a gas corporation from knowingly and intentionally exposing any person to gas that contains a chemical known to cause cancer or reproductive toxicity without first warning the person; (iii) required testing of landfill gas at the point of distribution and requires review of those tests by the air pollution control district and the Department of Health Services.

If LFG is to be injected into gas utility pipelines in California, relevant statutes would need to be changed, and the issue would have to be implemented through the CPUC. If those hurdles are passed, the gas would have to be fully tested on a per site basis (at the project developer's cost) as the feedstock will differ at each landfill.

(iii) Biomethane Injection Into Distribution System Pipelines

It is PG&E's policy that biomethane is only permitted to be injected into the gas transmission pipeline system, and not into the distribution pipeline system. There are two reasons for this policy: market demand and protection of our customers.

First, distribution system pipes are generally much smaller than transmission pipes, and will not have available capacity or customer demand to accept the volume of gas created by the biomethane-to-pipeline injection project. With regard to dairy manure feedstock projects, the distribution system in the hot valley areas where dairies are normally located usually does not have sufficient customer demand to provide a market for the biomethane, so in times of low demand, the biomethane project would be effectively shut in as there is no market.

Second, until an extensive body of knowledge is acquired regarding constituents of concern contained in biomass feedstocks and combinations of co-digested feedstocks, PG&E requires that biomethane projects inject into our gas transmission pipeline system. The significant volume of gas flowing through the transmission system will eliminate any potential of known or unknown constituents of concern flowing directly into our customers' homes or businesses.

