STATE OF CALIFORNIA
BEFORE THE
CALIFORNIA ENERGY COMMISSION

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| In the matter of:<br><br>Implementation of Renewables Portfolio Standard Legislation<br><br>and<br><br>Implementation of Renewables Investment Plan Legislation | Docket No. 03-RPS-1078<br><br>Docket No. 02-REN-1038<br><br>**Guideline Revisions for RPS Implementation and Renewable Energy Program** |

# COMMENTS OF SHELL ENERGY NORTH AMERICA (US), L.P.

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focus on Section 3 of Attachment B: "Biogas Delivery via Injection into the Natural Gas Pipeline System."

## I.

## INTRODUCTION

Biogas is an important renewable fuel source that is well-placed to help California meet its aggressive renewable energy procurement goals. Biogas offers a number of logistical and practical advantages compared to other forms of renewable energy. Load-serving entities' use of biogas to meet their 33 percent RPS procurement target by 2020 should be encouraged.

Biogas provides the same flexibility as all other natural gas supplies, yet provides the environmental benefits associated with a renewable resource. The benefits of biogas include the following:

- Biogas production is uniform and consistent, in contrast to other intermittent forms of renewable energy;
- There is a vast integrated network of natural gas pipelines in North America to facilitate efficient transportation of biogas to California once the biogas is processed to meet pipeline quality specifications;
- Unlike electricity, biogas can be stored, thereby allowing biogas to be used to match peak loads; and
- Transporting biogas across the natural gas pipeline system allows companies to use existing natural gas-fired generation facilities to convert the renewable fuel into renewable electricity, which enables an efficient continued use of existing capital and infrastructure.

Shell Energy supports the Commission Staff's proposed changes to the eligibility requirements for biogas as outlined in the Guidebook (Section II.B.2). The proposed changes clarify the definition of biogas, clarify the means by which biogas can be delivered to RPS-eligible electric generation facilities, and clarify the requirements for transportation of biogas over interstate pipeline systems to pipelines that serve RPS-eligible electric generation facilities.

Shell Energy supports the Commission Staff's proposed clarification that includes "landfill gas" within the meaning of biogas. See Guidebook at p. 17. Shell Energy supports the proposed change that requires biogas to be injected into a "natural gas pipeline system that is either within the WECC region or interconnected to a natural gas pipeline system in the WECC region that delivers gas into California" or "delivers to the electric generation facility if the electric generation facility is located outside California . . . ." Id. at p. 19. Shell Energy also supports the clarifications that address the requirement that all biogas that is injected into a natural gas pipeline system must be "designated" for use at a specific power plant or to a pipeline system. Id. at p. 18.

Although it supports the specific clarifications highlighted in the Commission Staff's proposed changes to the Guidebook, Shell Energy does not support further modifications to the RPS eligibility requirements for biogas. No reasonable justification exists to impose further restrictions or limitations on biogas eligibility for RPS compliance. Shell Energy responds below to questions about possible limitations on the use of biogas for RPS compliance.

## II.

## RESPONSES TO COMMISSION STAFF QUESTIONS

Shell Energy responds to the specific questions in Attachment B, Section 3 as follows:

**A. Should the Energy Commission consider further restricting the location of eligible biogas production facilities to participate in California's RPS? If so, please suggest reasonable and verifiable parameters.**

The Energy Commission should not further restrict the location of eligible biogas production facilities. In order for California to meet its aggressive renewable energy procurement goals, as many sources of biogas as is practical should be allowed to qualify. Information reported by the U.S. Environmental Protection Agency shows that approximately 80 percent of the "candidate" landfill-to-energy projects in the 48 contiguous states are located outside the Western Electricity Coordinating Council ("WECC"). If eligibility for RPS compliance were to be limited to biogas production facilities located within the WECC, the biogas facilities available for RPS eligibility would be substantially restricted.

Biogas production facility locations that can be used to meet California's RPS requirements are already economically restricted based on the cost of transportation and the cost of processing the gas to meet pipeline gas quality specifications. Artificial geographic restrictions would be arbitrary, and would unfairly limit the availability of biogas for RPS compliance.

North America's natural gas transportation network and the North American electric power grid operate differently. North America's power transmission system is segregated into two major alternating current power grids: the Eastern Interconnection and the Western Interconnection. A third power grid – the Texas Interconnection – serves the majority of Texas. These systems operate at a synchronized frequency, but for the most part the systems operate independently, despite a limited number of direct current ties that are in place.

By contrast, North America's natural gas transportation network is an integrated system that is not isolated by region. Interstate and intrastate pipelines are interconnected much like North America's highway network. Just as it is possible to drive from New York to Los Angeles on an interconnected highway system, it is equally possible to physically transport natural gas across the continent. Transportation-related costs (i.e. tolls to use the pipeline grid and compression costs to move the gas) limit the distance over which biogas can be transported. Because these transportation-related costs effectively limit the available supply of biogas to meet California's RPS requirements, there is no reason to impose regulatory limits on the geographic location of "eligible" biogas facilities.

**B. <u>If other restrictions should be considered, what should those restrictions be?</u>**

No additional restrictions are necessary. The natural gas industry has a well-established transportation system, including an established scheduling and accounting protocol, that allows producers, end users, storage providers and transport providers to track biogas supply from the source to the end-use customer's burnertip. This system facilitates efficient transportation of biogas, as well as accurate accounting for biogas quantities, once the gas is processed to pipeline specifications.

**C. <u>Should the use of storage facilities be disallowed in the delivery of biogas to an RPS-eligible biogas electricity generating facility? If yes, why and under what conditions?</u>**

The use of storage facilities should <u>not</u> be disallowed in the delivery of biogas to an RPS-eligible electric generating facility. Prohibiting the use of storage for biogas delivery would undermine one of the key benefits of biogas supply.

Unlike electricity, for which there are few commercially-attractive storage technologies available, biogas can be stored to help meet peak load requirements. Storage services, including

short-term "parking" service, are available on the California intrastate pipeline systems of PG&E and SoCalGas. Storage services are available on interstate pipeline systems as well.

The natural gas industry has widely accepted accounting protocols that allow businesses to inject natural gas into storage and withdraw natural gas from storage for consumption at a later date. This temporal, physical flexibility helps to dampen natural gas price swings. In particular, storage injections and withdrawals can mitigate price volatility between low demand and high demand seasons. The use of storage facilitates the transformation of biogas into a "firm" renewable resource that can be relied upon to meet the peak load needs of California consumers.

Storage services and "parking" services require the same type of scheduling and accounting as is required for deliveries on the natural gas pipeline system. The existing protocols ensure the accurate tracking of biogas from the source, into and out of storage, to the ultimate end-user. In order to verify the accuracy of biogas accounting, the Energy Commission should require biogas suppliers and/or end-users to attest that to the extent they utilize storage and/or parking services, they have complied with these established storage scheduling and accounting protocols.

**D. <u>Should the use of natural gas storage facilities to store biogas in a natural gas pipeline system be treated differently than the transportation of biogas through a natural gas pipeline system? If yes, please explain.</u>**

No. As long as the existing natural gas accounting system, which has been in use and relied upon for decades, is used to track the movement and storage of biogas, tracking will not be a problem.

## III.

## CONCLUSION

Shell Energy supports the Commission Staff's proposed changes to the "biogas eligibility" section of the Guidebook. The proposed changes provide useful clarifications that

will assist biogas producers, sellers and purchasers in complying with the requirements for RPS eligibility.

Shell Energy does not support further restrictions on biogas eligibility for RPS compliance, however. There is no legitimate basis for imposing a geographic limit on biogas facility eligibility. Neither is there a legitimate basis for precluding the eligibility of biogas that is delivered to a natural gas storage facility or that utilizes a pipeline company's short-term "parking" services.

Among renewable resources, biogas has the unique benefit of delivery flexibility through the use of storage. Because biogas can be used to meet peak load requirements and to mitigate price volatility, Commission policy and the Commission's RPS eligibility Guidebook should encourage the use of biogas for RPS compliance.

Respectfully submitted,

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