

Comments of the Gas Technology Institute (GTI)

On Biomethane Delivered Via the Natural Gas Pipeline For California's Renewable Portfolio Standard

Docket No. 11-RPS-01; Docket No. 02-REN-1038

11-RPS-01

DOCKET

02-REN-1038

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California Energy Commission

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Re: Docket No. 11-RPS-01

and

Docket No. 02-REN-1038

RPS Proceeding

1516 Ninth Street

Sacramento, CA 95814-5512

Via Email: docket@energy.state.ca.us

Subject: Docket Nos. 02-REN-1038 and 11-RPS-01, RPS Proceeding

Dear California Energy Commission:

The Gas Technology Institute (GTI) respectfully submits its comments in the matter of the California Energy Commission's (CEC) workshop on the Use of Biomethane Delivered via the Natural Gas Pipeline System for California's Renewable Portfolio Standard (RPS). GTI is a not-for-profit Research and Development (R&D) organization. For 70 years, GTI has been a leader in the development and deployment of technology solutions that contribute to a secure, abundant, clean and affordable energy future. As such, we provide economic value to the energy industry and its customers, while supporting government in achieving its policy objectives. To date, GTI programs have resulted in nearly 500 products, 750 licenses, and more than 1,200 associated patents.

GTI has been working with the CEC for over 10 years to develop new energy technologies that are cleaner, cheaper, and more efficient and to provide technical and analytical information that can assist decision makers when addressing current and new energy policy. One recent area of interest to GTI has been the emergence of a renewable natural gas (RNG) market. GTI has published one report regarding RNG from dairy manure and will be publishing a second by the end of this year focused on RNG produced from landfills. Currently, California is leading the nation in utilizing RNG delivered through our nation's pipeline system to in-state generators to help the state meet its 33 percent RPS.

With the nation's most aggressive RPS, California should encourage many means to meet this target. For years wind, solar, geothermal, biomass and others have provided the electricity for the RPS. Since the bulk of the "low hanging fruit" has been picked, and many sources provide much less than 50 percent capacity, it is prudent for the State of California to develop policies that have flexibility and can utilize many forms of renewable fuels to meet its ambitious goals. RNG from renewable sources like dairy digesters and landfills can be a reliable source of renewable fuel that can power the cleanest and most efficient electricity generation facilities in the California. In fact, RNG was rated the lowest carbon-producing fuel through the CEC's proceedings for the Low Carbon Fuel Standard.

Currently in-state electricity produced from RNG delivered through the nation's natural gas pipeline system is a means to meet California's RPS. The rules governing the purchase and transportation of RNG delivered to in-state electricity producers were developed by the CEC and done in a thoughtful and scientific manner. CEC has balanced the need for information regarding the RNG transfer and purchase while understanding that RNG, like natural gas, is a fungible product that can be delivered through our nation's pipeline system utilizing the same tracking, storing and nominating rules covering natural gas purchases and transportation. This is a valuable and productive rule that assists the state to achieve its RPS goals. There are some who believe that RNG produced out-of-state should not qualify for incentives because it would displace renewable power produced in-state. This is not the case. Out-of-state RNG displaces in-state fossil fuel consumption.

RNG is a cost-effective way to increase the state's renewable power supply and the current RPS rules encourage the continued development of an RNG market critical to future California RPS goals, which will likely continue to be increased. Additionally, electricity produced from RNG can provide firming (higher capacity factor) for intermittent resources such as electricity produced from solar or wind. Some will suggest that electrons generated from RNG produced out-of-state, should not be provided the same policy benefits as other renewables, however, the renewable electrons to meet the RPS are being generated in California. RNG should not be treated differently than other renewable fuels like wood chips simply because it has the advantageous capability of being transported through our nation's natural gas pipeline system. If wood chips from construction waste from Nevada were utilized in an electricity-producing bio-gas facility in California, existing law would consider those electrons produced in California. The same should hold true for RNG delivered into the state. Additionally, because RNG has such extremely low carbon life-cycle emissions, electrons produced by its combustion should receive the most favorable RPS incentives.

The benefits for California ratepayers by utilizing RNG delivered through the natural gas pipeline system include a lower-cost renewable electron, which also dramatically reduces carbon emissions. Having a fungible, dispatchable, storable renewable fuel provides a tremendous advantage in a future where more and more intermittent renewable electricity sources will be deployed. This will create an easier pathway for integration of in-state wind and solar as California's RPS goals continue to become more ambitious, helping to develop additional green jobs in the state.

Because it is likely that RNG will play a meaningful role in assisting California in numerous clean energy mandates and policies, it is critical that as the RNG industry is just getting started changes in existing California policy do not mortally wound its potential. The companies currently deploying RNG projects across the nation have invested tens of millions of dollars and are the same companies that will develop California-based RNG projects. Unfortunately, current regulations and laws as well as other in-state barriers make it extremely difficult to develop RNG projects in California. Changing the incentive rules for electricity generated from out-of-state RNG will not encourage in-state projects, because various barriers will still exist. Changing the incentive structure now will only harm the companies that are producing the existing quantities of RNG. These are the same companies which are working to reduce, change or eliminate the current in-state barriers to RNG production. Creating more onerous regulatory and incentive rules now, would only be counterproductive.

GTI is in the final stages of producing a report which will quantify the degree to which RNG from landfill gas can produce a product that meets California needs for injection into the existing natural gas pipeline infrastructure. The results of this Guidance Document can assist in addressing existing barriers and in formulating solutions that will likely lead to more in-state production and pipeline injection of RNG.

For these reasons,

1. California's ambitious 33 percent RPS,
2. a California energy future where more renewable fuel will be needed to meet more ambitious renewable electricity and low carbon transportation fuel mandates,
3. RNG's flexibility of use because of transportation and storage capabilities,
4. RNG's electric power firming advantages as part of an energy policy, which includes an expanded role for wind and solar and which is also designed to reduce fossil fuel use,
5. the opportunity to use a low cost renewable fuel (RNG,) when firing combined cycle generators thus producing renewable electrons at highest efficiencies, and
6. RNG's very low carbon footprint ,

GTI recommends no change to the existing rules covering the eligibility and level of incentives for renewable electricity generated from out of state produced RNG that is delivered through our nation's natural gas pipeline infrastructure.

Please contact me if you have any questions or require further information.

Sincerely,

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