Date of Hearing: April 25, 2018

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY Chris Holden, Chair AB 3187 (Grayson) – As Amended April 11, 2018

SUBJECT: Biomethane: gas corporations: rates: interconnection

SUMMARY: Requires the California Public Utilities Commission (CPUC) to approve all just and reasonable costs requested by a gas corporation (IOU) for interconnecting biomethane production to the existing pipeline system, including costs for the point of receipt and for any downstream facilities required to facilitate the receipt of biomethane.

EXISTING LAW:

- 1) Establishes a \$5 million interconnection project cap for dairy cluster biomethane projects, and a \$3 million project cap for other biomethane projects, funded by a 2015 CPUC decision through January 1, 2022. (Public Utilities Code § 399.19)
- 2) Requires the CPUC to adopt policies and programs that promote the in-state production and distribution of biomethane and requires that those policies and programs facilitate the development of a variety of sources of in-state biomethane. (Public Utilities Code § 399.24)
- 3) Requires the CPUC to consider options, including whether to allow recovery in rates, to facilitate the procurement and installation of utility infrastructure necessary to achieve interconnection between the natural gas transmission and distribution pipeline network and biomethane generation and collection equipment, and of gathering lines for a dairy cluster biomethane project and to achieve interconnection with facilities that generate biomethane. (Public Utilities Code § 784.2)
- 4) Requires the CPUC to adopt pipeline access rules that ensure that each gas corporation provides nondiscriminatory access to the gas pipeline system to any party for the purposes of physically interconnecting with the gas pipeline system and effectuating the delivery of gas. (Public Utilities Code § 784)
- 5) Requires the Air Resources Board (CARB) to implement a strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. (Health and Safety Code § 39730.5)
- 6) Directs CARB to adopt regulations to reduce methane emissions from livestock and dairy manure by up to 40 percent below 2013 levels by 2030 granted the regulations are economically feasible and a market exists for the products generated by these projects. (Health and Safety Code § 39730.7)
- 7) Requires the CPUC to adopt standards for biomethane that specify the concentrations of constituents of concerns that are reasonably necessary to protect public health, ensure

- pipeline integrity and safety, and to adopt monitoring, testing, reporting and recordkeeping protocols. (Health and Safety Code § 25421)
- 8) Requires the California Energy Commission (CEC) to hold public hearings to identify impediments that limit procurement of biomethane in California, including impediments to interconnection, and to offer solutions. (Public Resources Code § 25326)
- 9) Requests the California Council on Science and Technology to undertake and complete a study analyzing the regional and gas corporation specific issues relating to minimum heating value and maximum siloxane specifications adopted by the PUC for biomethane before it can be injected into common carrier gas pipelines. (Public Utilities Code § 784.1)

FISCAL EFFECT: This bill is keyed fiscal and will be referred to the Appropriations Committee for its review of the fiscal effect of this bill. It is important to note however that the Appropriations Committee limits its analysis to the impact on overall state agency impacts and cannot assess the impacts of policy on the costs of electricity or gas service to ratepayers.

BACKGROUND:

Biogas and Biomethane – Natural gas by other names. Bioenergy is renewable energy produced from biomass wastes including forest and other wood waste, agriculture and food processing wastes, organic urban waste, waste and emissions from water treatment facilities, landfill gas and other organic waste sources. Biomass waste can be used to generate renewable electricity, liquid fuels and biogas. Current law defines "biogas" as a gas produced from the anaerobic decomposition of organic material. The result is a gaseous mixture composed primarily of carbon dioxide and methane. Depending on where it is produced, biogas can be categorized as landfill gas or digester gas. Landfill gas is produced by decomposition of organic waste in a municipal solid waste landfill. Digester gas is typically produced from livestock manure, sewage treatment or food waste.

From an environmental perspective, biogas has several advantages over conventional natural gas. Combustion of natural gas, including biogas, releases carbon dioxide (CO2) into the atmosphere. However, the combustion of natural gas destroys methane, a gas that is a much more potent GHG than is CO2. In addition to destroying methane, the combustion of biogas, for CO2 accounting purposes, is considered carbon neutral. This is because the carbon in biogas, unlike the carbon in conventional natural gas, was so recently present in the atmosphere. In addition, biogas can be used to displace the use of fossil fuels, such as conventional natural gas, thereby further decreasing its carbon intensity.

Biogas can be used directly to produce electricity or can be converted to biomethane by removing carbon dioxide and other impurities. Current law defines "biomethane" as biogas that meets the standards, adopted by the CPUC in keeping with statute, for injection into a common carrier pipeline. Biomethane can replace fossil sources of natural gas in homes and factories and compressed or liquefied as natural gas used in vehicles. Biomethane can also be used to produce renewable hydrogen in fuel cells.

CPUC Biomethane Standards and Subsidies – Current law directs the CPUC to adopt policies and programs that promote the in-state production and distribution of biomethane. In response to

statutory mandate, the CPUC, in 2014, adopted health and safety standards that limit the amounts of certain constituents determined to be harmful to either human health or pipeline integrity in pipeline injected biomethane. The standards were to address the reluctance of gas corporations to inject biomethane into natural gas pipelines.

The CPUC acknowledged that its biomethane standards would increase the costs of a biomethane producer who seeks to inject biomethane into pipeline system. In response to these concerns and legislative mandates, the CPUC adopted a \$40 million ratepayer-funded program to offset a portion of gas producer costs of connecting to utility pipelines. As modified by 2016 legislation, program funding will pay up to 50 percent of a biomethane project's interconnection cost, up to \$3 million per project. The CPUC noted that the capped subsidy would "limit the financial exposure of utility ratepayers." To-date, the CPUC has not received any applications for the biomethane subsidy program. However, one landfill gas project is reported to be preparing to apply and five daily biomethane projects are also possibilities.

COMMENTS:

1) Author's Statement. The author states that the cost of interconnection to a common-carrier pipeline is one of the most significant barriers to increased biogas production. These costs include necessary studies, permitting and regulatory review, land acquisition, design and construction, equipment and materials procurement, and gas flow metering. An industry survey found that interconnection costs can range from \$1.5 million to \$3 million, depending on location (rural or urban), and proximity to a utility pipeline. In practice, individual projects have been given estimates of \$5 million for a one-mile pipeline. A project in Tulare County received an estimate of \$1.5 million for a 100-foot interconnection.

These investments historically have had difficulty attracting the upfront investment needed for the capital-intensive development of necessary pipeline infrastructure due to market uncertainty. Until a competitive market develops, in order to meet California's ambitious waste diversion and carbon reduction goals, the cost of building biogas infrastructure must come down for the project developer.

AB 3187 will authorize gas corporations to rate base the investments required to interconnect biomethane production to existing common carrier pipelines. By allowing the reasonable recovery of costs through utility rates, these projects will be able to realize their statewide GHG reduction benefits on a larger scale and in a shorter timeframe.

2) Subsidy Expansion. Facilitating a market for biomethane gas development and interconnection to the pipeline has been deemed a priority by the Legislature. Several bills have been adopted – three in the 2015-16 legislative session – to facilitate projects interconnecting to natural gas pipelines. One bill included direction to the CPUC to double the subsidy for biomethane interconnection costs from \$1.5 million to \$3 million per project. Cluster dairy projects were authorized for up to \$5 million per project. This bill removes the caps expanded in 2016 even though the original \$40 million authorized by the CPUC has not been touched.

Before those funds are exhausted, the CPUC was directed to evaluate the current monetary incentive programs for renewable gas production and pipeline interconnection

and consider whether it is prudent reasonable to continue those incentives. The assessment does not appear to have been commenced but the projects are also not complete. This bill jumps ahead of that evaluative process and appears to not only provide funding to cover "interconnection costs" but also gathering lines, biogas conditioning/upgrading equipment, and monitoring and testing which is commonly referred to as "pre-injection costs." Moreover, the bill mandates the CPUC to "approve, or modify and approve" and could be interpreted to limit the CPUCs authority to decide on an IOUs request for cost recovery because it doesn't state "deny." All of these costs would be included in the rates of all customers.

3) Cart Before the Horse. This bill reaches far beyond the prior legislative authority to increase the project cap on biomethane interconnection projects. However, the committee is not aware of any basis for this expansion other than there will be a lot of demand and it will be expensive. The market may need a boost now but an unlimited, expanded, permanent mandate in statute is not supported by the record at this time. Of particular concern is locking in permanent subsidies which may not be warranted as a competitive market grows. Additionally, the CPUC currently has the mandate to facilitate the procurement and installation of these pipelines, including recovery in rates. Before the CPUC has been able to evaluate costs and experiences of other pilot projects, it seems premature to mandate rate recovery of all costs when project funds have not been tapped.

In its last decision on the program, the CPUC indicated it would open a future proceeding to further assess the program but has not yet done so. The statute requires review before the funds are exhausted but that "deadline" seems rather elusive and does not provide certainty of review for the industry. But rather than jumping ahead of the pilots and evaluation associated with the 2016 legislative package as this bill does, the committee may wish to consider modifying the trigger for CPUC review and instead require the CPUC to open the proceeding to consider interconnection options no later than July 1, 2019.

- 4) Related Legislation. SB 1440 (Hueso) requires the CPUC, before July 1, 2019, to establish a biomethane procurement program. Specifically, this bill establishes goals IOUs to collectively procure, on an annual basis, a proportionate share of a statewide total of 32 billion cubic feet of biomethane from sources that have a first point of interconnection with the pipeline system. This bill also sets goals for the procurement of biomethane produced from other specified sources. Status: Pending hearing in Senate Appropriations Committee
- 5) Prior Legislation.

AB 1900 (Gatto) directed the CPUC to identify landfill gas constituents, develop testing protocols for landfill gas injected into common carrier pipelines, adopt standards for biomethane to ensure pipeline safety and integrity, and adopt rules to ensure open access to the gas pipeline system. (Chapter 602, Statutes of 2012)

AB 2196 (Chesbro) ensured that biogas qualifies for RPS credit, provided its production, delivery and use meet certain conditions. (Chapter 605, Statutes of 2012)

AB 2313 (Williams) Increased the monetary incentive amounts available to biomethane projects and directed the CPUC to consider whether to allow recovery in utility rates the costs of utility infrastructure for biomethane interconnection with the natural gas pipeline network. (Chapter 571, Statutes of 2016)

SB 360 (Cannella, 2015) would have authorize the CPUC to consider providing the option to all gas corporations to engage in competitive bidding and direct investment in ratepayer financed biomethane collection equipment in California. The bill died in this committee.

SB 687 (Allen, 2015) would have established a renewable gas standard in California. The bill died in the Senate Committee on Appropriations.

SB 1383 (Lara) required state agencies to consider and, as appropriate, adopt policies and incentives to significantly increase the sustainable production and use of renewable gas, including biomethane to meet the state's climate change, renewable energy, low-carbon fuel, and short-lived climate pollutants goals, including black carbon, landfill diversion, and dairy methane targets. (Chapter 395, Statutes of 2016)

SB 840 (Committee on Budget and Fiscal Review, required the CPUC to reevaluate its requirements and standards for biomethane to be injected into common carrier pipelines. (Chapter 341, Statutes of 2016)

SB 1122 (Rubio, Chapter 612, Statutes of 2012) required IOUs to collectively procure at least 250 MW of generation eligible for the RPS from bioenergy generation project, including biogas projects.

REGISTERED SUPPORT / OPPOSITION:

Support

Ameresco
California Grocers Association
Cambrian Energy
DMT
Dry Creek Landfill Inc.
DVO Inc.
Enerdyne Power Systems, Inc.

Energy Vision
Energy Vision
Montauk Energy

Morrow Renewables

New Phase Energy LLC Republic Services Inc.

River Birch LLC

Rudarpa

Specialized Biogas Services

The Coalition For Renewable Natural Gas

WM Renewable Energy

Support If Amended

Clean Energy

Opposition

None on file.

Oppose Unless Amended

Agricultural Energy Consumers Association The Utility Reform Network

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