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California Energy Commission
Dockets Office, MS-4
RE: Docket No. 02-REN-1038 and Docket No. 11-RPS-01
RPS Proceeding
1516 Ninth Street
Sacramento, CA 95814-5512

RE: Docket No. 02-REN-1038 and Docket No. 11-RPS-01 – RPS Proceeding: Written Comments on the Use of Biomethane Delivered via the Natural Gas Pipeline System for California's Renewables Portfolio Standard

Dear Commissioners:

On behalf of Clean Energy Renewable Fuels ("Clean Energy"), I respectfully submit the following comments in response to the Staff Workshop on the Use of Biomethane Delivered via the Natural Gas Pipeline System for California's Renewables Portfolio Standard.

Clean Energy Renewable Fuels believes that the existing rules governing the use of biomethane delivered to an electric generating facility via the natural gas pipeline system for California's *Renewables Portfolio* Standard, as set forth in the *Renewables Portfolio Standard Eligibility Guidebook, Fourth Edition (RPS Guidebook)* should be maintained. We support and agree with the comments of the Coalition for Renewable Natural Gas that specifically respond to the Commission's questions in Attachment A and Attachment B of the August 16, 2011 notice regarding the Pipeline Biomethane Workshop.

We also would like to take this opportunity to respond to a number of the points that were made during the September 20th Workshop and set out the reasons why we believe that maintaining the existing rules is in the best interest of California energy consumers.

1. **There is no statutory basis for changing the existing rules.** During the Biomethane Workshop one commentator appeared to take the position that SB X1-2 (Chapter 1, Statutes of 2011, First Extraordinary Session) altered the way that use of "pipeline biomethane" should be treated in the RPS program. There is no statutory basis for this position and we respectfully submit that the arguments put forth in support of this position are specious.

SB X1-2 amends certain provisions in Public Resources (P.R.) Code Sections 25740 through 25751, and amends and/or adds Public Utilities Code Sections 399.11 through 399.31. P.R. Code Section 25741(a) and Public Utilities Code Section 399.12(h)(1) were cited in support of the position that SB X1-2 mandates a change in the rules regarding pipeline quality biomethane. P.R. Code Section 25741was added in 2003, and amended in 2006, 2007 and 2008, ***but Subsection (a) of Section 25741, the definition of "renewable electrical generation facility", has remained unchanged from enactment through today***. There is nothing in SB X1-2 that implies any legislative intent to change the existing rules regarding use and delivery of biomethane via the natural gas pipeline system. Also cited in support of changing the existing rules regarding pipeline biomethane was Public Utilities Code Section 399.12(h), which was in fact added as a new subsection of P.U.Code Section 399.12(h)(1), which defines "Renewable Energy Credit." P.U. Code Subsection (h)(3) adds a *de minimus* concept applicable to all renewable fuels that excludes use of nonrenewable fuels that exceed a *de minimus* amount from the calculation of renewable energy credits created by converting a renewable fuel to electricity. The term pipeline biomethane appears nowhere in any of the statutory references cited.

At least two commentators at the Workshop asserted that, in the wake of SB X1-2, the term "use" should be reinterpreted in a strict manner that would require biomethane to be delivered to an electrical generation facility via a dedicated pipeline and not in the pipeline grid (where the biomethane would be co-mingled with conventional natural gas and the molecules impossible to trace). As noted above, there is absolutely nothing in the language of SB X1-2 that calls for a new and restrictive interpretation of the term "use" as it has been interpreted in the context of California's RPS since 2002, and there is nothing in the legislative history to indicate that this was contemplated by the legislature in passing SB X1-2. In fact, there is no evidence whatsoever that this issue was even contemplated by the legislature in the passage of SB X1-2. There is no provision in the statute calling for a new interpretation or revision of the existing regulations of the Commission as they relate to delivery and use of biomethane. The Commission's rules on the use of biomethane delivered via the natural gas pipeline have existed in their present form (with some minor modifications) for at least three years and the legislature has certainly had the opportunity to act clearly and decisively to change the rules if it felt they needed to be changed - and it has not done so.

We agree with Kate Zocchetti of the Commission's Renewable Energy Office in her assessment that SB X1-2 is silent on whether biomethane must be used on the site of the fuel's production to generate electricity for purposes of the RPS and that SB X1-2 does not specify how these fuels, if produced offsite, should be delivered to a power plant for purposes of generating electricity. Any assertion to the contrary is factually incorrect. Adopting a new and restrictive interpretation of the term "use" would have profound consequences for the biomethane industry both within and outside of the State of California and it would be an enormous mistake to make such changes in the existing rules absent a clear legislative directive.

2. **Changing the Rules to Disqualify Power Generated from Pipeline Delivered Biomethane from Bundled REC Treatment Will Harm California Energy Consumers.** If the Commission changes the existing rules so as to limit or prevent California load-serving entities from procuring pipeline biomethane and generating Bucket No. 1 renewable power, it would result in increased rates for California consumers, less diversity in California's renewable portfolio, increased dependence on fossil fuel, increased greenhouse gas emissions associated with California's energy consumption, and the potential destruction of the emerging California biomethane industry. In fact, those who would change the existing rules regarding pipeline quality biomethane proposed a new interpretation of the term "use" that would make it impossible to develop biomethane projects that could sell their product to California load serving entities even if the project is located within the State of California unless the project has a dedicated pipeline to the power generation facility. Biomethane production is rarely if ever located near enough to a power generation facility to allow for this. One panelist at the Workshop suggested that on-site power generation was a viable alternative to allowing pipeline delivery of biomethane – however, on-site power generation is nearly impossible to permit in California as it produces significantly greater criteria pollution and substantially less electricity (due to lower efficiency) than is generated by distribution of pipeline biomethane to an efficient combined-cycle gas plant through the pipeline grid.

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It is also conceivable that biomethane producers could avoid pipeline distribution if they cryogenically liquefy and transport the biomethane over the road to the power generation facility via a cryogenic trailer. This means of delivery would unequivocally satisfy the suggested new interpretation of "use" put forth by one Workshop attendee in order to qualify for Bucket No.1 REC treatment. However, it would be absurd to force biomethane producers to move their product to market in such a costly and inefficient manner when the existing pipeline infrastructure – already paid for by California energy consumers - exists precisely to deliver this energy product to market. Cryogenic liquefaction and truck transport of biomethane would increase pollution associated with its use, reduce net energy yields and require producers to sell their product at higher prices (to cover the increased costs). It would be to the detriment of all California energy consumers if the Commission adopted rules that would make it impossible for biomethane developers to sell their product to efficient power generation facilities in California other than in a manner that extracts the highest toll in terms of greenhouse gas emissions, criteria pollution and costs to rate payers.

Finally, and perhaps most importantly, we note and support the comments made by Chad Adair of the Sacramento Municipal Utility District ("SMUD") during the Workshop. SMUD is a public utility with a Board of Directors elected by their rate-payers. This rate-payer elected Board has approved long-term procurement of pipeline delivered biomethane due to the benefits for the rate-payer cited by Mr. Adair at the Workshop- it is cost effective, base load , renewable power that enhances SMUD's ability to reliably deliver renewable power to SMUD's customers. Every MMBtu of biomethane used by

SMUD is accounted for from the point of injection to the point of consumption on each interconnecting pipeline. It is true that no one can trace the molecules, which flow in variable quantities and unpredictable directions hour to hour and day to day, but the renewable energy content is unequivocally delivered. Each MMBtu of biomethane that SMUD purchases for use in the combined cycle plant reduces their demand for fossil fuel natural gas.

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3. **Pipeline Delivered Biomethane Provides Significant Benefits to California Energy Consumers.** We note the following advantages of using biomethane delivered via the natural gas pipeline for power generation:

(1) Fifty-Seven percent (57%) of California's power is provided by natural gas. Natural gas is the single most important energy resource for meeting California's energy needs. Only biomethane can substitute for fossil fuel natural gas as a low to negative carbon, renewable "drop in" fuel that can be distributed and used in the existing infrastructure that California rate-payers ***are already paying for*** to produce base load, renewable energy. The principle determinant of power prices, in fact, is the price of natural gas. Increased supply of renewable, sustainable biomethane will result in lower prices for natural gas and lower power prices for California consumers. Given that natural gas is a pooled resource with little regional variation in price this is true irrespective of which interstate pipeline system the biomethane is injected into.

(2) Biomethane delivered via natural gas pipeline enables California utilities to manage their energy production more reliably as it gives them a base load renewable resource. This fact was testified to by multiple publicly-owned and investor-owned utilities during the Workshop.

(3) Biomethane provides diversity in California energy resources and, due to the fact that it can generally be purchased by utilities at prices lower than solar and wind, under long-term fixed price contracts, and used to meet peak energy demand - will result in lower rate increases for energy consumers as a result of RPS compliance. Substantial increases in power prices in California could lead to job losses and political backlash that could result in the abandonment or revision of the aggressive renewable power goals for the State. Quite simply – Californians need every renewable resource at their disposal to achieve the RPS goals in a cost-effective manner and avoid a substantial increase in power prices that could derail the entire program.

(4) Biomethane decreases GHG emissions associated with California energy consumption. At our biomethane production facility in Texas, we have tripled gas capture and production through substantial investments in the landfill gas collection system and processing plant. These investments were made feasible by the existence of the California RPS market, which results in a premium for the biomethane fuel as compared to conventional gas prices. In fact, our Texas operation has been reviewed and audited by a third party that concluded that our operations have resulted in

significant greenhouse gas reductions above and beyond what would have been achieved through mere regulatory compliance with landfill gas capture rules.

(5) Any change in the rules that prevents or severely limits the ability of California load-serving entities to procure pipeline biomethane, use it to generate power and generate Bucket No.1 RECS will result in job losses in California. We are a California company that is dedicated to developing biomethane projects wherever we can. Our principal market for our product is California load-serving entities. If we are unable to deliver biomethane via the pipeline to California load-serving entities that can generate Bucket No. 1 RECS from its use, our business prospects will be materially and substantially harmed which could result in immediate job losses in California. We have three potential projects in development in California and many more in initial feasibility study that, long-term, must be able to deliver biomethane via the pipeline grid to load-serving entities that can generate Bucket No. 1 RECS in order to be viable. Both projects will, if successful, create many jobs in California. Both will be impossible if producers are unable to deliver their product via the pipeline and maintain its environmental attributes notwithstanding the uncertainty regarding pipeline molecular flows. Finally, increased and unpredictable power prices associated with compliance with the RPS could lead to relocation of businesses that consume significant quantities of energy, leading to more in-State job losses. Pipeline delivered biomethane can help mitigate this risk as it is cost-effective and can be used at peak demand to generate renewable power.

(6) Biomethane represents a significant potential in the vehicle fuel market. Biomethane can be compressed and liquefied to fuel light duty and heavy duty vehicles. At Clean Energy, we are building a network of LNG stations across the country for fueling heavy duty trucks that can be fueled with biomethane LNG – achieving a 90% reduction in greenhouse emissions with a sustainable fuel. Development of the vehicle fuel market is entirely dependent, in the near term, on the stability of the RPS compliance market in California, which currently provides the only long-term off-take contracts that can support financing of the biomethane production facilities.

The rules governing the use of biomethane delivered via the natural gas pipeline and set forth by the Commission are clear and work well. They have been the basis for significant investment in the development of biomethane production projects both within and outside the State of California. Pipeline biomethane delivered in accordance with the Commission's existing rules provides clear benefits to California energy consumers. There is no statutory basis in SB X1-2 for changing the existing rules and any changes that restrict or prevent producers from distributing their product to California load-serving entities as a renewable fuel via the pipeline

grid would harm California businesses, the environment and energy consumers. Failure to maintain consistent rules could lead to the destruction of a promising and emerging renewable energy industry. For these reasons we respectfully request that the Commission issue clear guidance in the Fifth Edition of the Renewables Guidebook that the existing rules regarding delivery and use of pipeline biomethane will be maintained.

Best regards,

Harrison Clay
President
Clean Energy Renewable Fuels