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RNG Coalition Comments on SB 100 Technical Workshop

Please see our attachment.

Additional submitted attachment is included below.

November 27, 2019

Siva Gunda
California Energy Commission
1516 Ninth Street
Sacramento, California 95814

RE: Comments on *SB 100 November 18th, 2019 Technical Workshop*

Dear Ms. Gunda:

The Coalition for Renewable Natural Gas (RNG Coalition) is a California-based nonprofit organization representing and providing public policy advocacy and education for the Renewable Natural Gas (RNG or biogas-derived biomethane) industry. We advocate for the sustainable development, deployment and utilization of RNG, so that present and future generations have access to domestic, renewable, clean fuel and energy in California and across North America.

The RNG Coalition respectfully submits these comments to the California Energy Commission (CEC) in response to the technical workshop held on November 18th, 2019 (the Workshop) to begin discussing the technologies and inputs for analysis to inform the joint agency report required by Senate Bill (SB) 100.[1] We strongly support the greenhouse gas (GHG) reduction goals of SB 100 and believe the RNG can make a contribution to such goals.

We Support the "RPS+" List of Eligible Resource Types Relative to the "No Combustion" Option

At the Workshop, the California Air Resources Board presented two possible options for defining eligible electricity sources under SB 100. The first, referred to as "RPS+," would add large hydroelectric, nuclear generation, and natural gas generation with carbon capture and sequestration (CCS) to the list of currently eligible technologies under the Renewable Portfolio Standard (RPS) to develop a list of technologies eligible for recognition under SB 100 implementation. The second, referred to as the "no combustion" option would exclude resources that combust fuel, including RNG used in advanced natural gas power plants equipped with CCS.

We believe the "RPS+" option is a stronger option due to the compelling arguments made by Dr. Stephen Kaffka of UC Davis,[2] Mr. Arne Olson of Energy and Environmental Economics,[3] and

[1] The "100 Percent Clean Energy Act of 2018" (de León, Chapter 312, Statutes of 2018).

[2] Dr. Kaffka concluded that, "Biomass use is the key to a circular economy, necessary for wide-scale decarbonization."

other invited experts who felt that RNG-fired gas plants with CCS could provide zero- to negative-carbon power and essential grid services in a system with an otherwise very high penetration of intermittent renewables, such a solar and wind.[4]

As summarized in Chapter 1 of the recently released *Draft 2019 Integrated Energy Policy Report* (Draft IEPR),[5] the two key studies containing in-depth analyses of California decarbonization pathways show that RNG-to-power is a potentially useful option to reaching full decarbonization.[6,7] Although it's possible that further study will reveal a flaw in such logic, we have no reason to believe that to be the case. Therefore, we suggest proposing a "no combustion" option is premature since no technical study shows this to be a cost effective and technologically feasible path to reach SB 100 goals.

A no-combustion option is also unsupported by either the legislative text of SB 100 or our understanding of the legislative intent behind the law. A key driver behind SB 100 opening up eligibility to "zero-carbon" resources appeared to be that the legislature recognized we need all possible "tools in the tool box" to combat the existential threat of climate change, and therefore chose to expand the list of eligible technologies to anything with strong greenhouse gas performance—even if such technologies had potential negative environmental externalities[8] that had previously kept them from being RPS-eligible. We struggle to see why the potential air quality impacts associated with methane combustion, which can be almost fully mitigated through proper controls, should be treated differently.

The Focus of SB 100 Should Be on Creating a Technology-Neutral Performance Standard, Built Around Lifecycle Greenhouse Gas Performance

We believe that it is useful to design policies that allow for multiple GHG abatement options to compete directly to help minimize the cost of reaching our decarbonization goals. California

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[3] One of Mr. Olson's key findings was that "It would be extremely costly and impractical to replace all natural gas generation capacity with wind, solar and storage."

[4] We note that these expert opinions are similar to what was said at the September 24, 2019, Integrated Energy Policy Report workshop on Near-Zero Carbon Electricity and summarized in Chapter 1 of the Draft IEPR.

[5] https://efiling.energy.ca.gov/getdocument.aspx?tn=230539

[6] Energy Futures Initiative, May 2019, *Optionality, Flexibility, and Innovation, Pathways for Deep Decarbonization in California*, https://static1.squarespace.com/static/58ec123cb3db2bd94e057628/t/5ced6fc515fcc0b190b60cd2/1559064542876/EFI_CA_Decarbonization_Full.pdf.

[7] E3 has produced a series of work that shows the complementary nature of biomethane-derived-RNG and other low-carbon technologies. This series includes: The *2017 Scoping Plan* Pathways Analysis, *Deep Decarbonization in a High Renewables Future: Updated Results from the California PATHWAYS Model* (June 2018) and *Residential Building Electrification in California* (April 2019) and *Natural Gas Distribution in California's Low-Carbon Future: Technology Options, Customer Costs and Public Health Benefits*, (*Aas et al. 2019)*.

[8] Negative externalities such as continued fish habitat disruption issues for large hydroelectric generation or nuclear waste from nuclear reactors.

has established world-leading policies that create competition across a variety of greenhouse gas reduction options. For example, both the Low Carbon Fuel Standard (LCFS) and the RPS are technology-neutral, market-based programs that have successfully reduced greenhouse gas emissions. However, a key difference between these two programs is that the LCFS uses a full lifecycle accounting framework to evaluate the greenhouse gas impact of each source of low carbon energy while the RPS currently has an eligibility threshold that, once met, essentially treats all megawatt hours of renewable energy equivalently.

The lifecycle accounting in the LCFS program has many years of proven success in rewarding low carbon biofuels. The same concepts could be used to create a policy to promote lower-GHG options in renewable power supplies until only zero- or negative-carbon sources remain, in line with the goals of SB 100.[9] The CEC, the CPUC and CARB, should examine if an LCFS-like accounting could be used as the backbone of SB 100 eligibility. If harmonized with the LCFS, and a potential new policy to promote RNG in buildings and industry per SB 1440 (Hueso, 2018),[10] such SB 100 accounting would also help clarify relative incentives to use RNG across transport, power, building, and industrial applications.

Conclusion

We appreciate that the ongoing dialogue on decarbonization issues. We respectfully ask the joint agencies to create a well-designed policy framework that promotes the use of RNG as one of many important options to help decarbonize California. Thank you very much for your consideration of these comments. Please do not hesitate to contact me directly with any questions or concerns.

Sincerely,

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[9] Full lifecycle accounting within an SB 100 framework would also allow biomass resources that have poor greenhouse gas performance to be disincented.

[10] SB 1440 bill text here: https://leginfo.legislature.ca.gov/faces/billVersionsCompareClient.xhtml?bill_id=201720180SB1440&cversion=20170SB144098AMD