



May 15, 2017

Via Electronic Transmission: LCFSworkshop@arb.ca.gov

Re: April 13, 2017 Updates to Staff Discussion Papers

Dear ARB Staff:

These comments respond to the Air Resources Board (ARB) Staff's April 13, 2017 updates to staff discussion papers, including: *Fossil and Renewable Natural Gas as a Transportation Fuel* and *Renewable Natural Gas from Dairy and Livestock Manure*. The RNG Coalition thanks ARB Staff for their presentations at the April 17, 2017 Working Meeting and their efforts to update and further refine these discussion papers.

I. ABOUT US

The Coalition for Renewable Natural Gas (RNG Coalition) is a non-profit association of companies and organizations dedicated to the advancement of renewable natural gas (RNG, or biomethane). RNG Coalition members produce more than 90% of the RNG in North America, including for baseload renewable electricity and the predominate volume of ultra-low carbon, cellulosic biofuel in the United States (US).

II. RNG COALITION FEEDBACK

Avoided Methane Venting. The RNG Coalition thanks ARB for its approval of digester pathway applications that use an avoided methane venting baseline scenario. We agree that manure management at California dairies is essential to reach California's GHG emission reduction goals and that this action is especially important toward that end.

Mandatory Controls. While the recognition of manure-to-RNG fuel pathways earning Carbon Intensity (CI) scores as low as -400 gCO₂e/MJ is certainly exciting, the mandatory controls on the horizon (via SB 1383, Lara 2016) tempers our long-term expectations for these

pathways. The transition period to mandatory controls is especially important. We applaud ARB for thinking proactively about it and we stand ready to engage with you as an industry partner seeking solution.

Attribute Storage. We urge ARB to extend its two-quarter limit on renewable attribute storage. Storage is essential for projects while they await ARB or EPA approval. Pathway approval history shows that the approval process can often exceed six months. The two-quarter limit is arbitrary, since the GHG emission benefits will occur regardless of delivery timing.

Livestock Protocol Timing. We are concerned that the difference between the livestock protocol schedule and LCFS calendar year schedule, will create considerable difficulties regarding accurate allocation of credits. We suggest that any over-generated credits, due to this inherent time lapse, be made up via future generation of credits. Rather than invalidate previously generated credits, a balance on the account should be issued and the reporting party should be eligible to either purchase credits or use future credit generation to make up for the negative balance. This allows for assurance of credit trades and maintains confidence in the credit market space.

Third Party Verification. The RNG Coalition affirms ARB's actions to prevent double counting and also to align the third-party verification program with the federal QAP. We find the QAP program robust and sufficient to alleviate any concerns with double counting.

Energy Use Estimation. Monitoring and verifying data concerning manure transportation is burdensome. This burden is not justified by the minimal increase in accuracy that may be gained. The RNG Coalition urges ARB to make manure transport an estimated value.

Confidential Business Information. The RNG Coalition is comprised of many companies and organizations that work together for the advancement of RNG. Our members are competitors in a relatively small and nascent industry. Our current arrangement with EPA allows for reporting of project specific data, including actual biomethane quantities, as confidential business information (CBI). We respect ARB's role as verifier, and affirm the use of a QAP / third party verification program, but we request that participating companies not be compelled to have their CBI published to the general public.

Definitions. Although ARB Staff has not asked for feedback on the terms and acronyms used in the discussion paper, the RNG Coalition and American Biogas Council have recently concluded an extensive process to develop uniformity and consensus on definitions of relevance for our respective industries. We urge ARB's consideration and adoption of the following:

- Biogas: a mixture of carbon dioxide (CO₂) and hydrocarbons, primarily methane (CH₄) gas, from the biological decomposition of organic materials.
- Syngas: a gas mixture composed primarily of hydrogen (H₂) and carbon monoxide

(CO), along with hydrocarbons from the thermochemical decomposition of organic or inorganic materials.

- Conditioned Biogas: medium-BTU biogas that is stripped of some trace contaminants and water, but maintains the relative mix of carbon dioxide (CO₂) and methane (CH₄).
- Biomethane: biogas-derived, high-BTU gas that is predominately methane after the biogas is upgraded to remove most of the contaminants and a majority of the carbon dioxide (CO₂) and nitrogen (N₂) found in biogas.
- Renewable Natural Gas (RNG): biomethane that is upgraded to natural gas pipeline quality standards such that it may blend with, or substitute for, geologic natural gas.
- Renewable Compressed Natural Gas (R-CNG): RNG that is compressed to a high pressure, often for use as a transportation fuel.
- Renewable Liquefied Natural Gas (R-LNG): RNG that is converted to liquid form, often for use as a transportation fuel.

Transmission Distance. ARB staff suggests developing a common methodology for calculating pipeline transmission distance from an RNG processing facility to California CNG fueling facilities. While we affirm that attempt to simplify, we are concerned that the choice of that common endpoint might advantage some projects over others. We suggest ARB adopt two end points (Northern and Southern California), or even three end points (North, Central, South). We affirm the use of web-based driving distance estimates to represent transmission distances.

III. CLOSING.

The RNG Coalition thanks ARB Staff for your continued efforts. If you require any follow-up, please don't hesitate to contact us.

Yours in Service,

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