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State of WASH.
UTIL AND TRANSP.
COMMISSION

To Whom It May Concern:

Technologies like ours generate renewable natural gas or *RNG*—from food, farm and beverage “waste.” Our production process captures more heat-trapping greenhouse gases than it emits, therefore its life cycle has a *net-negative* carbon intensity. In fact, specific RNG pathways (a.k.a. Bio-CNG) have been proven to reduce emissions by more than 370% from conventional diesel¹. Moreover, **decentralized RNG** is a promising advanced alternative fuel for our communities, environment and economy.

Sincerely,

Impact Bioenergy

<http://impactbioenergy.com/about/>

QUESTIONS FOR CONSIDERATION

RNG Program Structuress

1. What level of guidance is needed from the Commission related to the following elements of E3SHB 1257, Sections 13 and 14:

- *General program structure of each section (13 and 14)*
- *Eligibility of particular environmental attributes*
- *Procedures to approve, bank, or transfer environmental attributes*

How should that guidance be provided? For example, Policy Statement? Rule? Other?
Guidance and procedures need to be defined for small volume, “off-grid” producers and consumers of RNG, which do not necessarily involve grid injection. Whether a Policy Statement or Rule, guidance should enumerate the environmental attributes that the manufacturers can consider, and further include social attributes (e.g. green collar, living wage employment in the local circular economies).

¹ <https://www.arb.ca.gov/fuels/lcfs/fuelpathways/pathwaytable.htm>



Avoided thermal and electric power supplied by the non-qualified utility needs to be credited, along with its environmental attributes. For example, any combination of heat and/or power from on-site biogas generation or virtual-grid RNG, for on-site use should have a mechanism to count and credit accordingly. On-site 480 VAC or DC fast charging from RNG is a growing use case that should have cost effective pathways for credit since they are the lowest carbon intensity alternative.

2. For Section 14 programs, should subscribers be required to pay all costs of RNG, or should any under-collection of section 14 costs be credited toward the RNG program charge authorized by Section 13?

Cost recovery mechanisms should distinguish near-/on-site RNG generation due to inherent infrastructure efficiency from avoided hauling of feedstocks and resulting coproducts. Also, cross-service and/or cross-utility mechanisms should cover costs of RNG since on-site 480 VAC or DC fast charging from RNG is a growing use case that should have cost effective pathways for credit since they are the lowest cost AND lowest carbon intensity alternative.

3. What methods should the Commission consider to calculate the 5 percent limit on customer charges for RNG programs authorized in Section 13?

4. How should renewable hydrogen be treated in RNG programs?

It depends upon the feedstock. If the hydrogen is generated with zero or minimal fossil fuel or peak demand utility electricity it could be treated like RNG. Especially if it is generated by converting organic waste, wind, or solar. Especially if it is converting stranded renewables.

RNG Supply and Markets

5. What barriers are there, if any, to accessing and investing in the RNG market, and how can the Commission or regulated utilities address such barriers?



Lack of public awareness of the climate change benefits as well as the local economic value of distributed and local production of low carbon vehicle fuel, lack of RNG/CNG vehicle fleets, lack of RNG/CNG private vehicles, lack of fueling infrastructure, lack of upgrading, storage, and fast-filling stations, lack of mobile fueling stations (CNG or LNG style trailers). The Commission can initiate a public service campaign and also advocate for a WA State Standing Offer price (similar to the German KW Feed-in Tariff, British Columbia Standing Offer for RNG or renewable energy purchase offers) so the WA state private sector can invest and borrow capital knowing the RNG revenue is reliable.

6. Is there an adequate supply of RNG in the current market? Please describe the current market for RNG supply both in and outside Washington state.

This is difficult to determine because most RNG is wasted or unrecovered in WA due to purchase agreements that are based on new fossil fuel purchase rates. The renewable energy portfolio mandates are currently ineffective as most energy utilities are not seeking new renewables. Direct sale to fleets and private sector companies that want to lower their carbon footprint currently do not have access to RNG, or understand their options with current resources in their value chain that is either untapped or treated like a liability.

7. What is the range of price premiums for RNG and how it compares to prices for conventional natural gas in the current market?

The range of price premiums for RNG is negligible in WA State and in some cases, a disincentive. The Port of Seattle will be establishing the most current premium (if any) in the near future at SEATAC Airport. RNG generated near the point of sale (without wheeling or transport) should be considered more valuable as these sources reduce traffic congestion, grid congestion, and losses or inefficiency in delivering RNG to end markets. Environmental and social attributes include credit for promoting resiliency and resourcefulness in our communities, while supporting our small-farmers and local food systems. Some production processes also raise fuel and energy security, while



lowering transportation costs. In addition, RNG can be provided directly to the customer, (behind the meter) and not have to go through the added expense of interconnecting into the pipeline. Therefore, all benefits provided to the RNG supplier industry should not discriminate against smaller suppliers or those who chose to forgo pipeline conveyance and go directly to end user.

RNG Quality Standards

8. What gas quality standards do companies currently require for interconnection of RNG to their distribution system?

There is no uniform standard for RNG. Most grid feed-in interconnects at RNG locations include methane, oxygen, and nitrogen monitoring with an automatic lockout (closed valve) if the gas is out of spec. RNG producers have significant risk that the specifications can change and/or the automatic monitoring can lock out the feed-in access without prior warning.

9. Should the Commission consider adopting uniform standards or provide general guidance for RNG quality? If so, what standards or guidance should the Commission adopt?

Yes – consult with the pipeline owners regarding a uniform standard for grid-injected RNG. The same should not be required for off-grid behind the meter bioenergy or RNG.

10. In advance of the workshop, please review the RNG standards recommended by the American Biogas Council (ABC),² standards recently adopted by the California Public Utilities Commission,³ and the Northeast Gas Association Interconnect Guide for Renewable Natural Gas in New York State.⁴

² Available at <https://americanbiogascouncil.org/resources/rng-purity-recommendation/>

³ Available at <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M292/K947/292947504.PDF>

⁴ Available at https://www.northeastgas.org/pdf/nga_gti_interconnect_0919.pdf