

STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Petition of Bellevue RNG, LLC for a)
Certificate of Public Good pursuant to 30 V.S.A. § 248) Case no. 23-0880-PET
to construct and operate a renewable natural gas facility)

**BELLEVUE RNG, LLC'S RESPONSE TO CONSERVATION
LAW FOUNDATION'S PUBLIC COMMENT**

On August 21, 2023, the Hearing Officer requested responses to the public comment filed by the Conservation Law Foundation (CLF) on August 11. Petitioner Bellevue RNG, LLC responds as follows:

I. INTRODUCTION

This summer has been yet another stark reminder of climate change impacts, and that immediate and multiple steps need to be taken to reduce greenhouse gas emissions. Bellevue and CLF share common goals – reducing GHG emissions while increasing production use of renewable energy. Disputes over the most ideal way to combat climate change are counterproductive, and risk delaying needed immediate and available measures.

In 2023, the Vermont Legislature recognized the need for a multipronged approach to reducing GHG emissions by enacting the Affordable Heat Act, Act 18. The Bellevue RNG project (Project) falls squarely within Act 18 and other Vermont laws and energy policy specifically designed to reduce greenhouse gas emissions. Indeed, the Project validates the policy choices made by the Legislature and state agencies involved with energy policy. The Project will provide substantial, near-term reductions in current GHG emissions and other environmental benefits including making it easier to prevent water pollution from farm runoff, reducing odors, and lessening truck traffic. The Project will be a local source of renewable energy, and will make one of the several renewable fuels needed to transition away from fossil

fuels available to Vermont homes and businesses. The Project will also provide an important economic boost to a Vermont farm, create jobs, and will be an important part of the local and State economy.

CLF's public comment does not provide a factual or legal basis for decisions to be made in response to Bellevue's petition for a certificate of public good. CLF is not a party and does not submit any testimony. Core points in CLF's public comment reflect fundamental misunderstandings of the Project and the science behind it. CLF relies instead on general, broad-brush assumptions to categorically reject RNG. CLF simply disagrees with Vermont's climate and energy policies, and with farming practices permitted by AAFM. Public comment is a legitimate tool for shaping future policy. CLF's comment should be considered as such.

II. THE PROJECT IMPLEMENTS STATE LAW AND POLICY DESIGNED TO REDUCE GHG EMISSIONS

The Vermont Legislature specifically included sustainably sourced biofuels and local renewable natural gas as eligible measures under the Affordable Heat Act, Act 18. 30 V.S.A. § 8127 (eff. May 11, 2023). The Affordable Heat Act will implement the Global Warming Solutions Act. 30 V.S.A. § 8122 (eff. May 11, 2023). The Project produces local renewable energy and has clear environmental benefits. It is the type of project expressly contemplated by the Affordable Heat Act and Vermont's Comprehensive Energy Plan.

State law and energy policy include projects such as Bellevue RNG for good reason. The Project will substantially reduce current GHG emissions. As stated in Patrick Wood's direct testimony, "the Bellevue Project will create more than 33,439 metric tonnes of CO₂e GHG emissions reductions annually. This is about 3,000-6,000 more metric tonnes of CO₂e GHG emissions per year than the current Berkshire Cow Power, LLC project." "The GHG emissions

impact of having the Bellevue Project in place, as opposed to not having any methane digester in place, will be roughly equivalent to removing 7,000 passenger vehicles from the road for one year, based on estimates from the EPA on the average yearly emissions from passenger vehicles in the U.S.” Patrick Wood Direct Testimony at 9, lines 2-12.

Simply put, the Project will produce renewable energy and reduce Vermont’s GHG emissions. It is one of the immediately needed and multipronged efforts to reduce GHG emissions and displace fossil fuels, and squarely within State law and policy calling for such projects.

III. CLF FUNDAMENTALLY MISUNDERSTANDS THE PROJECT AND THE DIGESTION PROCESS

Contrary to CLF’s assertions, there would be no greater emissions benefit if the digester were to produce electricity instead of RNG.

CLF asserts that doubling digester capacity results in additional GHG reductions of only 10%-20%, implying that a linear relationship between capacity and GHG emission reductions. CLF comment at 7. From that, CLF concludes that this non-linear reduction in GHG emissions results from inefficiencies inherent with RNG production. Id. at 6-7.

To be clear, the digestion process is the same whether the end use of the biogas is electric generation or RNG production. Methane production is a curve that flattens over time – it is not linear. Methane production tapers off toward the end of the digestion process. As such, doubling or tripling digester capacity does not double or triple GHG emission reductions. That is particularly true here because the existing digester partially digests PVF’s manure, but does not have the capacity to complete the digestion process. Bellevue’s GHG analysis accounts for the

actual expected changes in methane production resulting from expansion of the current digester, including methane production curves. CLF's arguments do not.

The Project is designed to, and will in fact, capture as much methane as possible from all the manure generated by PVF. Currently, PVF adds more manure to the existing digester than it is designed to handle. The existing digester was designed to handle manure from approximately 2,000 cows. Patrick Wood Direct Testimony at 14. Additional cows have been added since the original digester was installed. Therefore, the manure is only partially digested, resulting in less than optimal methane avoidance and gas production. See id. The added retention time allowed by the Project's added capacity will capture the additional methane from all of PVF's manure. Right-sizing the existing digester to PVF's manure volume captures more methane, produces more renewable energy, and provides greater GHG emission reductions. Id. See also Williams' and St. Pierre's Direct Testimony.

It is also worth noting that CLF argues that: "PVF would more efficiently address its methane emissions by continuing to operate the Cow Power Digester or by expanding it." Id. at 6. Expanding the existing digester is exactly what the Project will do. The existing digester will remain in place and continue to operate. Jared Williams Direct Testimony at 5; Exs. BRNG-JW-2 & 3. Bellevue will install an additional 2.5 million-gallon digestion vessel that will operate in tandem with the existing 1.1 million-gallon digester. Id. Manure will first be digested in the new digester. After initial time in the new digester, manure will flow into the existing digester. The addition of the new vessel creates added digestion capacity to provide optimal retention time for the full volume of manure generated by the Farm. Id.; See also Patrick Wood Direct Testimony at 9-14.

In sum, the facts neither support CLF's categorical rejection of RNG, nor its disagreement with state law and policy recognizing that projects such as Bellevue's are needed and environmentally sound measures to reduce GHG emissions and transition from fossil fuels.

IV. BELLEVUE'S GHG ANALYSIS ACCOUNTS FOR POTENTIAL LEAKS FROM THE RNG FACILITY, WHICH ARE EXPECTED TO BE MINIMAL

The CARB Livestock Offset Protocol (LOP) applied by Ag Methane Advisors as part of Bellevue's GHG analysis includes two parameters to account for potential leakage: (1) the Biogas Collection Efficiency (BCE), that assumes 2% leakage from the digestion vessel itself;¹ and (2) the Biogas Destruction Efficiency (BDE), that assumes: (a) 6.4% of methane is not destroyed from electricity generation, (b) 2% of methane is not destroyed from gas upgrading and pipeline injection, and (c) that 4% of methane is not destroyed by flaring.^{2 3} These parameters were embedded in the GHG impact calculations conducted by Ag Methane and result in conservative analysis. The Project's actual operation may be more efficient.

¹ The BCE value is imbedded into the CARB model. See Table A.3 of the CARB LOP (on page 46, available at: <https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2014/capandtrade14/ctlivestockprotocol.pdf>), provides a default BCE of .98 for enclosed vessel digesters which include plug flow and complete mix digesters like those of the current and proposed projects respectively. See also Table A.6 of the CARB LOP (on page 54, available at: <https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2014/capandtrade14/ctlivestockprotocol.pdf>), provides the default BDE values for electricity producing engines, natural gas pipelines and flares.

² The BDE values were included in the following: - BRNG-PW-4 Data Inputs Bellevue RNG Project.pdf; BRNG-PW-2 Data Inputs Berkshire Cow Power Project (6-Month Manure Bypass); and BRNG-PW-3 Data Inputs Berkshire Cow Power Project (4-Month Manure Bypass).

³ While the intent of the BDE parameter is to account for methane which is not destroyed by combustion, it also has the effect of accounting for potential leakage in the calculations.

Further, Bellevue will pressurize its entire system with nitrogen, check for, and fix any leaks prior to introducing any gas into it. Once operational, Bellevue will scan the RNG Facility with a thermal imaging camera to identify and rectify any leaks. Bellevue is highly incentivized by Project economics and environmental concerns to eliminate leakage, and will go to great lengths to ensure that leaks do not occur. In short, the amount of methane leaking from RNG production or electric generation amounts to the degrees of how well a project is managed and operated, and does not justify CLFs categorical arguments. The bottom line is that the Project will greatly reduce existing methane emissions.

Regarding any leakage from VGS's system, VGS has one of the most modern natural gas systems in the country, with most of the system comprised of high-density plastic pipe.⁴ This means that leaks are much less common than on older systems.

V. THE PROJECT PROVIDES SUBSTANTIAL ECONOMIC BENEFIT

Continuing to flatly disagree with State law and energy policy, CLF categorically states that RNG does not provide economic benefit to the State. As disclosed in discovery conducted in this proceeding and testimony submitted by Jared Williams and Amanda St. Pierre, the Proposed Project will provide significant economic benefits in several forms. Two full-time employees will be hired at the facility, one being salaried and the other hourly. Wages and benefits will be competitive for skilled workers and the RNG industry. Dozens of local contractors will be employed during construction to assist with site grading, excavation, concrete

⁴ See Letter from Neale F. Lunderville, President & CEO, Vermont Gas Systems, Inc. to T.J. Poor, Director, Efficiency & Energy Resources, Vt. Dept. of Public Service (Oct. 20, 2021) (available at https://anrweb.vt.gov/PubDocs/ANR/ClimateCouncil/6009/VGS%20CEP%20CAP%20Comments%2010_20_2021.pdf).

work, and other work. Bellevue has retained several consultants to assist with the Proposed Project's permitting and planning. Once the facility is operational, local skilled trades will be used to assist with electrical work, piping, and mechanical services. The facility will pay the level of property and other taxes required by law, which will benefit the local community and the State of Vermont. Having a plant and related infrastructure that produces and provides renewable energy is also an economic benefit. The pipeline that is being installed as part of this project will allow individuals along the route to have access to natural gas. These individuals will have the opportunity to switch from propane or heating oil to natural gas which is currently a more affordable source of energy. Please refer to Amanda St. Pierre's testimony for specific economic benefits to the Pleasant Valley Farms and its dairy and maple operations.

The Proposed Project will reduce pollution. Reduced runoff, trucking, odors, and GHG emissions provide economic benefit. See e.g., Amanda St. Pierre and Jared Williams' prefiled testimony. The Proposed Project furthers local and regional plans, including the plans' economic development provisions.

RNG produced by the Project will provide a cost-effective option for Vermont customers.

VGS's inclusion of RNG in its overall rate structure is expressly contemplated by the PGA RNG Feature of VGS's current Alternative Regulation Plan⁵ and VGS's recently approved

⁵ See Exh. VGS-JMP-5 filed May 21, 2021, in Case No. 19-3529-PET (approved by the Vt. Pub. Util. Comm'n on Aug. 11, 2021) at 4-5.

3-year alternative regulation plan, which calls for a 6% increase in RNG supply over the term of the Plan.⁶

Accordingly, CLF's claims about the cost of RNG not only ignores the fact that in-state RNG projects are an express State policy goal, but its position also contradicts the Commission's express support for VGS's inclusion of RNG in its overall supply portfolio.

CLF also argues that the distribution line costs preclude economic benefit. Bellevue is paying 77.5% of the distribution line's costs. Once operational, Bellevue will continue to contribute to the distribution line's costs through tariffed rates as one of VGS's major customers on this distribution line. Pleasant Valley Farms will also contribute to the distribution line's costs when it switches from fuel oil to gas and becomes a VGS customer. Construction of the distribution line contributes to the economic benefits described above. The distribution line involves more construction spending, job creation, and infrastructure supporting local production of renewable energy. Additionally, based on the testimony of Christopher LeForce, new customers will have access to VGS's retail service with the economic benefit of lower cost natural gas and may opt to purchase renewable natural gas.

VI. CLF'S POLICY ARGUMENTS DO NOT PROVIDE GROUNDS FOR § 248 DECISIONS IN THIS MATTER

CLF takes issue with CAFOs, current Vermont farm practices, and farm-economy trends. CLF argues that alternative farming practices are more effective than digesters and effectively asks the Commission to deny the Project because of PVF's farm practices – practices that are permitted by AAFM. Transforming farm practices and the larger farm economy is well outside

⁶ See *Petition of Vermont Gas Systems, Inc., pursuant to 30 V.S.A. § 218d, for authority to implement an Alternative Regulation Plan*, Case No. 22-5085-PET (Vt. Pub. Util. Comm'n, Aug. 18, 2023).

of § 248's scope. Indeed, a CPG expressly cannot regulate farming activities. 30 V.S.A. § 248(q)(1). Further, CLF does not address the economic viability of its proposed farm practices, much less whether such practices are presently viable here.

Likewise, CLF argues that RNG would delay electrification of the thermal sector. As CLF acknowledges, electrification requires substantial investment in the electric grid. CLF comment at 11. This investment will not occur overnight. Likewise, homeowners and owners of commercial properties have substantial long-term investments in heat and hot-water systems powered by fossil fuels. RNG can displace such fossil fuel use and can do now, while electrification will take time. Multiple renewable fuels are critical to reducing GHG emissions and meeting the needs of Vermont homes and businesses that are not presently able to electrify. See 30 V.S.A. § 8127.

As explained above, locally produced RNG is part of State law and energy policy designed to reduce GHG emissions. This Project's facts validate the choices made in State law and energy policy. CLF simply disagrees. It argues that the Commission should reject the Project merely because it is a RNG project rather than an electrification project. This argument is outside the scope of a § 248 proceeding and, as such, does not provide any basis to deny a CPG. CLF's policy preferences cannot trump Vermont law and policy.

VII. CONCLUSION

Bellevue respects efforts to shape larger future policies. Such efforts, however, should not translate to relief that contradicts state law and energy policy, fails to reflect project-specific facts, and that is not grounded in the science behind the Project. Nor should such efforts block

the Project's substantial and in-hand benefits in the hope that future policies could transform larger farm practices or economic trends.

The Project will substantially reduce GHG emissions and is an important and immediate step toward displacing fossil fuels.

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