STATE OF VERMONT PUBLIC UTILITY COMMISSION

)

)

)

Petition of Bellevue RNG, LLC for a certificate of public good, pursuant to 30 V.S.A. § 248, to construct and operate a renewable natural gas facility in Berkshire, VT

Case No. 23-0880-PET

<u>CONSERVATION LAW FOUNDATION'S PUBLIC COMMENTS OPPOSING</u> BELLEVUE RNG, LLC'S REQUEST FOR A CERTIFICATE OF PUBLIC GOOD

Conservation Law Foundation ("CLF") files public comments before the Vermont Public Utility Commission ("Commission") pursuant to Rule 2.204(H)(1). CLF respectfully asks the Commission to find pursuant to 30 V.S.A. § 248 that the so-called Bellevue RNG Project ("Bellevue Project" or "Project") does not promote the general good of the State and to deny Bellevue RNG, LLC's ("Bellevue") request for a certificate of public good.

To issue a certificate of public good, the Commission must determine that the Bellevue Project will "promote the general good of the State."¹ The Commission's conclusion must be supported by findings that the Project will "result in an economic benefit to the State and its residents," that it will not adversely affect air quality "with due consideration having been given to . . . greenhouse gas [("GHG")] impacts," and that it will not adversely affect water quality.²

The Bellevue Project does not meet these criteria. First, as discussed in Section I, far from conferring an economic benefit to Vermonters, the Project will saddle ratepayers with costly infrastructure while failing to provide them competitively priced energy or commensurate benefits. Second, as discussed in Section II, the Bellevue Project is inconsistent with Vermont's GHG reduction mandates under the Global Warming Solutions Act ("GWSA").³ The Project

¹ 30 V.S.A. § 248(a)(3).

² 30 V.S.A. § 248(b)(4)–(5).

³ See 10 V.S.A. § 578(a).

would replace Pleasant Valley Farms' ("PVF") existing anaerobic digester ("Cow Power Digester") with a digester that will not reduce GHG emissions as effectively per volume of manure processed; it does not adequately analyze the potential for methane to leak throughout the renewable natural gas ("RNG") supply chain; it overlooks superior, cost-effective alternatives to reduce heating sector GHG emissions; it contradicts the U.S. Environmental Protection Agency's ("EPA") Waste Management Hierarchy; it will prevent PVF from pursuing operational reforms that produce enduring, whole-farm emissions reductions; and it will hasten the decline of Vermont's small and sustainable dairies. Last, as discussed in Section III, the Project will prevent PVF from implementing practices that protect Vermont's waters.

I. The Bellevue Project will not provide ratepayers competitively priced energy, will saddle ratepayers with expensive infrastructure, and will provide ratepayers few, if any, non-monetary benefits.

Because the Bellevue Project does not provide an "economic benefit to the State and its residents," Bellevue's request for a certificate of public good should be rejected by the Commission.⁴

First, RNG does not offer competitively priced energy, whether compared to clean renewable resources, like solar and wind, or to fossil gas. A comparison between RNG and electricity costs is relevant here because electricity is not only the cheapest and cleanest means of heating Vermont's homes, but it has also been identified by the Vermont Climate Council as the heating fuel of choice if the State is going to reach its mandatory emissions reduction targets.⁵ Utility-scale solar and onshore wind generation already costs a similar amount or less than

⁴ 30 V.S.A. § 248(b)(4).

⁵ VT. CLIMATE COUNS., INITIAL VERMONT CLIMATE ACTION PLAN at 102 (2021).

traditional natural gas combined cycle generation.⁶ By contrast, RNG typically costs at least two to five times as much as traditional natural gas per MMBTU.⁷ Indeed, the 2022 Vermont Comprehensive Energy Plan notes that "RNG is expensive, currently about three times the cost of traditional natural gas" and that "[a]s demand for RNG grows in state and elsewhere, that could put further upward pressure on prices."⁸ The high premium paid for RNG is reflected in VGS's rates. VGS charges an adder of \$1.21 per centum cubic feet ("CCF") for blended RNG and an adder of \$1.55 per CCF for locally sourced RNG.⁹ VGS customers who choose RNG consequently pay about double the per CCF charge they would pay for traditional natural gas.

RNG produced by the Bellevue Project will not deliver the environmental, public health, or other benefits that might justify the Commission approving it as a more costly alternative to other energy sources. As discussed in Sections II and III below, the Bellevue Project's purported environmental benefits are largely an illusion, and the Project will ultimately slow Vermont's progress towards its climate obligations under the GWSA.¹⁰ Ratepayers who want to purchase energy with environmental attributes should not be steered towards the Bellevue Project's RNG when there are cleaner, less costly alternatives. Heating electrification is more cost effective than RNG for the residential and business applications that VGS proposes¹¹ and provides substantial

⁶ See LAZARD, LAZARD'S LEVELIZED COST OF ENERGY ANALYSIS—VERSION 16.0 at 2 (2023), https://www.lazard.com/research-insights/2023-levelized-cost-of-energyplus/.

⁷ Laurie Feinstein & Eric de Place, *The Four Fatal Flaws of Renewable Natural Gas*, SIGHTLINE INST. (Mar. 9, 2021), <u>https://www.sightline.org/2021/03/09/the-four-fatal-flaws-of-renewable-natural-gas/</u>; Arlene Karidis, *Where is Renewable Natural Gas Moving Forward and What Will This Mean for the Industry and States? (Part 2)*, WASTE360 (Apr. 28, 2020), <u>https://www.waste360.com/gas-energy/where-renewable-natural-gas-moving-forward-and-what-will-mean-industry-and-states-part-2</u>.

⁸ VT. DEP'T OF PUB. SERV., 2022 VERMONT COMPREHENSIVE ENERGY PLAN at 210 (2022).

 ⁹ Rates & Billing, VT. GAS SYS., VGS Rates & Billing, <u>https://vgsvt.com/service/rates/</u> (last visited Aug. 10, 2023).
¹⁰ 10 V.S.A. § 578.

¹¹ See Christopher LeForce, Bellevue RNG, pf. at 5–6 (Mar. 17, 2023).

GHG reduction benefits.¹² A study conducted for the California Energy Commission concluded that "building electrification is likely to be a lower-cost, lower-risk long-term strategy compared to renewable natural gas" and "leads to significant improvements in outdoor air quality and public health."¹³

Second, as Vermont increasingly electrifies its heating sector to ensure compliance with the GWSA, any investments in new gas infrastructure will create a stranded cost risk imposed on all VGS ratepayers. As the 2022 Comprehensive Energy Plan explains, "adding more RNG into the system currently significantly increases costs."¹⁴ In this case, VGS plans to recover \$1.67 million of the \$6 million required to build a 7.7-mile distribution line connecting the Project to VGS's existing distribution network from ratepayers.¹⁵ Because Vermont's overall gas demand will decline with electrification, these costs will be recovered from a shrinking customer base. With fewer customers to share the load, the customers who remain will carry increasing costs.¹⁶

Third, the 2022 Comprehensive Energy Plan rightly points out that "there are concerns about inequitably distributing the added cost of RNG among natural gas ratepayers."¹⁷ As heating electrification accelerates and a smaller natural gas customer base is forced to shoulder

¹² EARTHJUSTICE & SIERRA CLUB, RHETORIC VS. REALITY: THE MYTH OF "RENEWABLE NATURAL GAS" FOR BUILDING DECARBONIZATION, EARTHJUSTICE & SIERRA CLUB at 14-16 (July 2020), <u>https://earthjustice.org/wp-content/uploads/report_building-decarbonization-2020.pdf</u>.

¹³ See CAL. ENERGY COMM'N, CEC-500-2019-055-F, THE CHALLENGE OF RETAIL GAS IN CALIFORNIA'S LOW-CARBON FUTURE at iii (2020), <u>https://www.energy.ca.gov/sites/default/files/2021-06/CEC-500-2019-055-F.pdf</u>. Similarly, the 2019 New Jersey Master Plan found that building electrification is the most cost-effective path to achieve further emissions reductions and is especially cost effective when compared to substituting traditional gas with biogases. STATE OF N.J., 2019 NEW JERSERY ENERGY MASTER PLAN: PATHWAY TO 2050, at 161, 270–71, <u>https://nj.gov/emp/docs/pdf/2020_NJBPU_EMP.pdf</u>.

¹⁴ VT. DEP'T OF PUB. SERV., *supra* note 8, at 210.

¹⁵ Bellevue RNG Response to PSD's Second Set of Interrogatories, PSD.PET.2-4, at 6 (July 14, 2023); Christopher LeForce, Bellevue RNG, pf. at 4–5 (Mar. 17, 2023).

¹⁶ See CAL. ENERGY COMM'N, supra note 13, at 1–2.

¹⁷ VT. DEP'T OF PUB. SERV., *supra* note 8, at 210.

increased costs, the remaining customers are likely to be predominantly low-income customers for whom the transition to electrified heating is more challenging. While many customers will be able to afford conversions to heat pumps, low-income customers may be stuck with gas heating systems.¹⁸ Accordingly, as more gas customers electrify their heating systems, it will be the most low-income and vulnerable customers who confront rising gas heating costs.

The high costs associated with RNG, coupled with the substantial stranded cost and equity risks presented by the Project, demonstrate that the Project will not "result in an economic benefit to the State and its residents."¹⁹ Accordingly, the Commission should reject the Project.

II. The Commission should find that the Project does not promote the general good of the State because it is inconsistent with Vermont's GHG reduction mandates under the GWSA.

Under the GWSA, Vermont must reduce GHG emissions by: (1) "not less than 26

percent from 2005 greenhouse gas emissions by January 1, 2025"; (2) "not less than 40 percent from 1990 greenhouse gas emissions by January 1, 2030"; and (3) "not less than 80 percent from 1990 greenhouse gas emissions by January 1, 2050."²⁰ To facilitate compliance with these mandates, Vermont agencies are required to "consider any increase or decrease in [GHG] emissions in their decision-making procedures with respect to . . . the planning, design, and operation of programs, services, and infrastructure."²¹ Further, in deciding petitions for certificates of public good, the Commission is required to find that the energy facility will not have an "undue adverse effect on . . . air and water purity . . . , the natural environment, [and] the use of natural resources, with due consideration having been given to . . . *greenhouse gas*

- ¹⁹ 30 V.S.A. § 248.
- ²⁰ 10 V.S.A. § 578(a).

¹⁸ See id.

²¹ 10 V.S.A. § 578(c).

impacts."²²

Methane is a potent GHG. Its global warming potential is 27 to 30 times larger than carbon dioxide's global warming potential over a 100-year horizon.²³ It is therefore crucial for Vermont to meaningfully reduce its methane emissions as it pursues its climate obligations. For the following reasons, the Bellevue Project is inconsistent with the GWSA's mandates and will insufficiently address GHG emissions when compared to alternatives.

A. Continuing the use of or expanding the Cow Power Digester would achieve greater GHG emissions reduction per volume of liquid waste than the Bellevue Project will.

The Bellevue Project will not reduce PVF's GHG emissions as effectively per volume of liquid waste processed as the Cow Power Digester already does. This is because the Bellevue Project will produce RNG by upgrading biogas while the Cow Power Digester generates electricity by combusting biogas. As the Bellevue Project's proposal demonstrates, using biogas to produce RNG has a higher carbon intensity than using biogas to generate electricity. Consequently, PVF would more efficiently address its methane emissions by continuing to operate the Cow Power Digester or by expanding it.

Specifically, PVF generates electricity by burning biogas produced by the Cow Power Digester, which was built to process liquid waste from 2,200 cows.²⁴ Since the Cow Power Digester's installation in 2006, PVF has doubled in size to more than 4,000 livestock.²⁵ Although the Bellevue Project is designed to digest waste from this larger herd, Ag Methane Advisors

²² 30 V.S.A. § 248 (b)(5) (emphasis added).

²³ Understanding Global Warming Potentials, U.S. ENVTL. PROT. AGENCY,

https://www.epa.gov/ghgemissions/understanding-global-warming-potentials (Apr. 18, 2023); *Id.* at 16. ²⁴ Jared Williams, Bellevue RNG, pf. at 11 (Mar. 17, 2023).

²⁵ Amanda St. Pierre, Bellevue RNG, pf. at 3 (Mar. 17, 2023); see also Exhibit BRNG-PW-2.

estimates that it will result in total GHG emissions reductions of 33,439 metric tons of CO_2e annually, which is only 3,000 to 6,000 metric tons of CO_2e per year more than the Cow Power Digester already achieves.^{26, 27}

In other words, despite the Bellevue Project's goal to process twice as much manure as the Cow Power Digester processes, it will only allow PVF to increase its total GHG emissions reductions by 10 to 20 percent. Thus, based on the inputs and assumptions used by Ag Methane Advisors to calculate the Bellevue Project's emissions reductions, PVF could achieve greater emissions reductions per volume of liquid waste by either continuing to operate the existing Cow Power Digester or by expanding it and using all the resulting biogas to generate electricity.

B. The Bellevue Project inadequately analyzes the potential for methane leakage along the RNG supply chain.

Patrick Wood's prefiled testimony on the GHG impacts of the Bellevue Project does not discuss the potential for methane leakage along the RNG supply chain. It is unclear to what extent, if any, his analysis of the Project's GHG impacts incorporates potential methane leakage. The Commission should not issue a certificate of public good if it must rely on incomplete analysis to substantiate alleged beneficial environmental or GHG impacts.

RNG projects can result in significant gas leakage from processing and transportation,

²⁶ Patrick Wood, Bellevue RNG, pf. at 9, 14 (Mar. 17, 2023).

²⁷ It is also notable that Ag Methane Advisors' analysis relies on the California Air Resources Board's ("CARB") Compliance Offset Protocol for Livestock Projects. The CARB model, and any carbon intensity levels that are calculated for RNG projects under the model, currently assumes no emissions regulations for methane derived from manure; therefore, the lack of manure emissions regulations inflate the purported GHG emissions reductions from manure fed RNG projects. However, beginning in 2024, California will implement manure methane emissions control regulations. AIR RES. BD., CAL. ENVTL. PROT. AGENCY, SHORT-LIVED CLIMATE POLLUTION REDUCTION STRATEGY at 8 (2017), <u>https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf</u>. These regulatory changes will lead to fewer avoided emissions from manure for manure-based RNG projects, as well as a drastic increase in the overall carbon intensity of such projects. Hyunok Lee & Daniel Sumner, *Dependence on policy revenue poses risks for investments in dairy digesters*, 72 CAL. AG. 226–35, 226, 233 (2018), https://doi.org/10.3733/ca.2018a0037.

which can negate or significantly reduce any purported GHG emissions reductions. While models that measure the life cycle emissions of alternative fuels—such as the Greenhouse Gases, Regulated Emissions, and Energy Use in Technologies ("GREET") model—typically include an estimate for methane leakage occurring during the RNG production process,²⁸ methane emissions along RNG supply chains are generally underestimated.

For example, a 2022 study observes that large quantities of methane can be emitted from the "biomethane and biogas supply chains, including [from] digestate handling, anaerobic digesters, upgrading units, feedstock storages and transmission, and storage and distribution stages."²⁹ The study finds that although "the broad features of the biomethane supply chain led to emission profiles similar to those of oil and natural gas[,] digestate handling, biogas production, and upgrading are key differentiators."³⁰ According to the study, the biomethane supply chain suffers from "much higher [methane] loss rates than the oil and natural gas supply chain."³¹ Overall, it concludes that the "methane emissions for [biomethane and biogas] *could be more than two times higher* than previously estimated, and the digestate handling stage contributed to the largest [methane] emissions along the supply chain."³²

Similarly, the Argonne National Laboratory develops the GREET model and generally assumes a two percent leakage rate for RNG production, which itself may be too low. The Laboratory nonetheless recognizes that a "substantial amount of methane, which could

²⁸ See ARGONNE NAT. LAB., ANL/ESD/11-6, WASTE-TO-WHEEL ANALYSIS OF ANAEROBIC-DIGESTION-BASED RENEWABLE NATURAL GAS PATHWAYS WITH THE GREET MODEL at 15-16, 18 (2011), https://publications.anl.gov/anlpubs/2011/12/71742.pdf.

 ²⁹ Semra Bakkaloglu et al., *Methane emissions along biomethane and biogas supply chains are underestimated*, 5 ONE EARTH 724, 725 (2022), <u>https://www.sciencedirect.com/science/article/pii/S2590332222002676</u>.
³⁰ *Id.* at 730.

 $^{^{31}}$ Id. at 730–31.

³² Id. at 725 (emphasis added).

correspond to 5–10% or even up to 20% of produced renewable gas, could also leak during the storage and transport of waste to the digester or as [anaerobic digestion] residue and during digester maintenance."³³ This leakage has the potential to significantly affect carbon intensity analyses for RNG.³⁴ Notably, because of uncertainties relating to the leakage rate, the Argonne National Laboratory "does not include potential losses from leakage during transport, storage, or maintenance" for the RNG supply chain.³⁵ In other words, the GREET model underestimates the amount of methane leakage from the RNG supply chain, which results in misleading and exaggerated purported GHG reduction benefits for RNG projects.

In fact, a 2020 study observes that agricultural RNG systems can result in up to an 8.6 percent leakage rate.³⁶ The study concludes that many RNG systems will not deliver GHG-negative—or even zero-GHG—energy at scale. Indeed, "[u]nder some system leakage rates that have been observed for biogas systems, RNG might not even meet the less stringent threshold of outperforming [fossil natural gas] from a GHG perspective."³⁷ Another study explains that "methane leakage rates from biogas production and processing have not been well studied" and "[i]f life-cycle analyses underestimate these or other methane leakage rates along the supply chain, the actual carbon intensity of RNG would be higher."³⁸

³⁶ Emily Grubert, At scale, renewable natural gas systems could be climate intensive: the influence of methane feedstock and leakage rates, 15 ENVTL. RESEARCH LETTERS 08404, 2-3, 7 (2020), https://iopscience.iop.org/article/10.1088/1748-9326/ab9335/pdf (citing Charlotte Scheutz & Anders Fredenslund, Total methane emission rates and losses from 23 biogas plants, 97 WASTE MGMT. 38-46 (2019), https://www.sciencedirect.com/science/article/abs/pii/S0956053X19304842). https://www.sciencedirect.com/science/article/abs/pii/S0956053X19304842).

³³ ARGONNE NAT. LAB., *supra* note 28, at 15–16.

³⁴ Id.

³⁵ *Id.* at 16.

³⁸ REBECCA GASPER & TIM SEARCHINGER, WORLD RES. INST., THE PRODUCTION AND USE OF RENEWABLE NATURAL GAS AS A CLIMATE STRATEGY IN THE UNITED STATES at 19 (2018), <u>https://files.wri.org/d8/s3fs-public/production-use-renewable-natural-gas-climate-strategy-united-states.pdf</u>.

Methane is a more potent GHG than carbon dioxide, and Vermont must reduce methane emissions to meet its climate commitments. However, there are considerable uncertainties regarding methane leakage rates from RNG supply chains. Failing to accurately account for methane leakage can result in the exaggeration of alleged GHG reduction benefits from RNG projects. In some instances, methane leakage even has the potential to negate any purported GHG emissions reduction benefits from RNG projects. Given these uncertainties and the lack of specific consideration of methane leakage for the Bellevue Project in the filings, the Commission should not grant the certificate of public good. Alternatively, the Commission should require a comprehensive study assessing the actual fugitive methane loss at the Bellevue Project so that accurate GHG accounting occurs.

C. There are better ways for Vermont to reduce GHG emissions from agriculture than RNG projects.

To meet its obligations under the GWSA, Vermont should be investing in electrification, non-emitting renewable energy, energy efficiency, and the grid upgrades necessitated by the integration of renewables and greater electrification.

Clean electrification, through heat pump deployment, is the most effective way—from both a cost and GHG emissions perspective—to decarbonize the residential and commercial heating sector.³⁹ As discussed above, RNG projects can have dubious GHG reduction benefits due to significant methane leakage throughout the RNG supply chain, and typically cost more than electrification.⁴⁰ Additionally, RNG projects, like the Bellevue Project, that would be

³⁹ See CADMUS, VERMONT PATHWAYS ANALYSIS REPORT 2.0 at 13, 15–16 (2022),

https://climatechange.vermont.gov/resources; EARTH JUSTICE & SIERRA CLUB, *supra* note 12, at 14–16. ⁴⁰ RNG, like traditional fossil gas, also presents safety risks from gas leaks and explosions and health risks from burning gas indoors. *Id.* at 1–3.

connected to VGS's system via a new pipeline, often require expensive additional gas infrastructure and pipelines or use of existing infrastructure, which would extend Vermont's use of and reliance on traditional fossil fuels for heating. The 2022 Comprehensive Energy Plan recognizes the uncertainties of RNG and that it may prolong the life of existing fossil fuel infrastructure at the expense of increased electrification, finding: "Vermont should be aware just as it needs to be with unregulated fuels—of locking customers into existing combustionbased thermal energy infrastructure, particularly if it delays or dissuades electrification of thermal loads."⁴¹ Therefore, because heating electrification provides greater GHG reduction benefits and generally costs less than other alternatives,⁴² Vermont should be investing in electrification instead of approving the use of ratepayer funds to expand VGS's distribution system to connect RNG projects and, in turn, delay Vermont's transition away from fossil fuels.

Another justification provided by Bellevue for constructing the Project, instead of expanding the existing digester to generate more electricity from manure, is that the Cow Power Digester allegedly is "capacity constrained due to nearby renewable generation projects."⁴³ Rather than consider and potentially approve certificates of public good for RNG projects as a purported means of achieving Vermont's GHG emissions mandates, the Commission should instead consider ways to encourage investments in the electric grid to facilitate the further integration of renewable generation sources.

⁴¹ VT. DEP'T OF PUB. SERV., *supra* note 8, at 210.

⁴² EARTH JUSTICE & SIERRA CLUB, *supra* note 12, at 14–16; *see also Renewable Natural Gas (RNG): Reality vs. Rhetoric*, SIERRA CLUB (Dec. 8, 2020), <u>https://www.sierraclub.org/minnesota/blog/2020/12/renewable-natural-gas-rng-reality-vs-rhetoric</u>.

⁴³ Amanda St. Pierre, Bellevue RNG, pf. at 4 (Mar. 17, 2023).

D. Contrary to EPA's Waste Management Hierarchy, the Bellevue Project maximizes the production of methane, an agricultural waste product and GHG, instead of avoiding methane emissions.

PVF does not need an anaerobic digester to reduce its methane emissions. Vermont's GHG reduction obligations under the GWSA would be better served if PVF avoided producing waste methane in the first place. PVF could achieve this by beginning to transition towards climate-friendly dairy production and by adopting alternatives to liquid-based manure management.

EPA's Waste Management Hierarchy ranks waste management strategies "from most to least environmentally preferred."⁴⁴ EPA's preferred waste management strategy is to avoid the production of waste.⁴⁵ If avoiding waste is impossible, then EPA recommends alternative strategies, including energy recovery.⁴⁶ Vermont's Food Recovery Hierarchy applies a similar logic. It makes the "reduction of the amount [of waste] generated at the source" its priority strategy, ahead of both digestion and energy recovery.⁴⁷

Methane is an agricultural waste product that different manure management practices produce in different quantities. Some practices generate significant methane, and others emit very little. As dairy farms throughout the country have industrialized, shifted towards confinement production, and become concentrated animal feeding operations ("CAFOs"),⁴⁸ they have struggled to manage the staggering quantities of manure that hundreds or thousands of cows

⁴⁴ Sustainable Materials Management: Non-Hazardous Materials and Waste Management Hierarchy, U.S. ENVTL. PROT. AGENCY, link here <u>https://www.epa.gov/smm/sustainable-materials-management-non-hazardous-materials-and-waste-management-hierarchy</u> (last visited July 24, 2023).

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ 10 V.S.A. § 6605k(a).

⁴⁸ See generally 40 C.F.R. § 122.23(b); 33 U.S.C. § 1362(14).

confined in one facility produce. Indeed, the amount of manure that one industrial farm creates can dwarf an entire city's sanitary waste.⁴⁹

Industrial farms have generally opted for liquid-based manure management strategies, storing manure in pits known as "lagoons." Unlike solid-based manure management systems and production models that emphasize pasturing livestock, liquid-based management systems cause manure to decompose in anaerobic conditions. As EPA explains, this yields waste methane that other systems avoid:

When livestock manure is stored or treated in systems that promote anaerobic conditions (e.g., as a liquid/slurry in lagoons, ponds, tanks, or pits), the decomposition of the volatile solids component in the manure tends to produce CH₄. When manure is handled as a solid (e.g., in stacks or drylots) or deposited on pasture, range, or paddock lands, it tends to decompose aerobically and produce CO_2 and little or no CH₄.⁵⁰

The dairy sector's steady shift towards industrialization, confinement production, and

lagoon storage has caused its methane emissions to balloon. Since 1990, methane emissions from

manure management on dairy farms in the United States has more than doubled per cow,

increasing 122 percent.⁵¹ No other agricultural subsector has incurred such a sharp increase.⁵²

Vermont's dairy sector is no exception. Between 1990 and 2020, GHG emissions related to

manure management on Vermont farms increased 83 percent, offsetting progress that farms

⁴⁹ See U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-08-944, CONCENTRATED ANIMAL FEEDING OPERATIONS: EPA NEEDS MORE INFORMATION AND A CLEARLY DEFINED STRATEGY TO PROTECT AIR AND WATER QUALITY FROM POLLUTANTS OF CONCERN at 5 (2008), <u>https://www.gao.gov/assets/gao-08-944.pdf</u> ("In fact, some large farms can produce more raw waste than the human population of a large U.S. city. For example, a very large hog farm, with as many as 800,000 hogs, generates more than 1.6 million tons of manure annually—more than one and a half times the sanitary waste produced by the about 1.5 million residents of Philadelphia, Pennsylvania in 1 year."). ⁵⁰ U.S. ENVTL. PROT. AGENCY, EPA 430-R-22-033, INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS 1990-2020 at 5-11 (2022), <u>https://www.epa.gov/system/files/documents/2022-04/us-ghg-inventory-2022-maintex.pdf</u>. ⁵¹ *ld*. at 5-12.

 $^{^{52}}$ *Id.* at 5-12.

made in other areas.⁵³

Industrial dairy farms that have adopted increasingly methane-intensive production models have significantly increased their baseline methane emissions. While this is bad for Vermont's GHG emissions reduction mandates, it is good for business. Anaerobic digesters offer the most climate-damaging farms—large, confinement farms that rely primarily on liquid-based manure management—the opportunity to make money by manufacturing and capturing the same methane emissions that they should have avoided producing in the first place. As a recent report from the Center for Agriculture and Food Systems at Vermont Law and Graduate School ("VLS-CAFS") explains, anaerobic digesters "require the ongoing generation of GHG emissions to be financially viable. . . . [T]he system breaks down if emissions are reduced at the source."⁵⁴ By contrast, climate-friendly farms whose practices limit methane production do not have the same opportunity. In other words, RNG projects on industrial farms reward gratuitous methane that could and should be avoided in the first place.

Agricultural GHG accounting methodologies generally do not correct for the climate-damaging or climate-friendly choices a farm has made when establishing the farm's baseline emissions. These methodologies consequently reward the farms whose emissions have intensified the most with the opportunity to claim greater emissions reductions than farms that

 $^{^{53}}$ VT. AGENCY OF NAT. RES., VERMONT GREENHOUSE GAS EMISSIONS INVENTORY AND FORECAST: 1990 – 2020 at 16 (2023), <u>https://climatechange.vermont.gov/content/vermont-greenhouse-gas-emissions-inventory-and-forecast-report-1990-2020</u>. CH₄ and N₂O emissions associated with manure management increased from 0.18 MMTCO₂e in 1990 to 0.33 MMTCO₂e in 2020.

⁵⁴ CTR. FOR AGRIC. & FOOD SYS, VT. LAW & GRADUATE SCH., RETHINKING MANURE BIOGAS at 9–14 (2022), https://www.vermontlaw.edu/sites/default/files/2022-08/Rethinking Manure Biogas.pdf.

have avoided emissions all along.⁵⁵ This is precisely the opportunity that the Bellevue Project aims to capitalize on.

PVF is a Large CAFO⁵⁶ whose development has mirrored the national dairy sector's development. As PVF has grown and industrialized, it has relied on confinement production and liquid-based manure management and lagoons rather than alternatives. In 2006, the Commission issued a certificate of public good for the Cow Power Digester,⁵⁷ which is designed to process manure from about 2,200 cows.⁵⁸ Since then, PVF's herd has grown to about 4,000 mature dairy cows and 1,775 heifers and youngstock.⁵⁹ None of these livestock spend any time on pasture.⁶⁰ PVF stores the more than 61 million gallons of liquid waste that its herd produces each year in at least 19 earthen and concrete lagoons with a total capacity exceeding 33 million gallons.⁶¹ While stored, the manure decomposes anaerobically and produces methane, a consequence that PVF could avoid through alternative management, such as solid-based manure management and transitioning livestock to pasture.⁶²

However, rather than avoid GHG emissions, the Bellevue Project is designed to

⁵⁵ See, e.g., Anaerobic Digesters, VT. DEP'T OF ENVTL. CONSERVATION, <u>https://dec.vermont.gov/air-</u> <u>quality/permits/source-categories/anaerobic-digesters</u> (last visited July 24, 2023) ("If the baseline manure management practices minimized anaerobic decomposition through more pasturing of the animals, or prompt spreading of collected manure, then the digester GHG reductions would be less significant because the baseline practice largely avoided anaerobic conditions which generate methane, and instead favored aerobic carbon dioxide generation . . . Additionally, some of the carbon in the manure would be incorporated into the pasture soil."). ⁵⁶ 40 C.F.R. § 122.23(b)(1)–(2), (4); Amanda St. Pierre, Bellevue RNG, pf. at 3 (Mar. 17, 2023) ("Presently, we have 4,000 mature dairy cows.").

⁵⁷ Petition of Berkshire Cow Power, LLC, for a Certificate of Public Good, Case No. 7200, § 248(j) Certificate of Public Good (Oct. 25, 2006).

⁵⁸ Patrick Wood, Bellevue RNG, pf. at 14 (Mar. 17, 2023).

⁵⁹ Pleasant Valley Farm, 2023 Nutrient Management Plan at 6 (Feb. 2, 2023); *see* Amanda St. Pierre, Bellevue RNG, pf. at 3 (Mar. 17, 2023); Exhibit BRNG-PW-2 at 1.

⁶⁰ Pleasant Valley Farm, *supra* note 59, at 84–85.

⁶¹ *Id.* at 6, 87.

⁶² WHITE HOUSE OFFICE OF DOMESTIC CLIMATE POLICY, U.S. METHANE EMISSION REDUCTION PLAN at 11 (2021), https://www.whitehouse.gov/wp-content/uploads/2021/11/US-Methane-Emissions-Reduction-Action-Plan-1.pdf.

manufacture and capture methane using manure as a feedstock.⁶³ As the Vermont Department of Environmental Conservation ("DEC") notes, on-farm anaerobic digesters are not designed to prevent methane production; they are designed to produce as much methane as possible.⁶⁴

The Bellevue Project contradicts EPA's Waste Management Hierarchy. Rather than prioritize manure management strategies that avoid the production of waste methane—the Waste Management Hierarchy's preferred approach—the Bellevue Project maximizes the production of methane on PVF to produce RNG. The Commission should not support on-farm projects whose purpose is to generate large quantities of a potent GHG, even for energy production. Nor should the Commission create an incentive for other Vermont dairies to follow PVF's lead by industrializing, increasing their GHG emissions, and ultimately installing an anaerobic digester to profit from emissions they could have avoided. Instead, Vermont should support projects that help farms shift away from confinement production and liquid-based manure management and towards genuinely climate-friendly dairying.

E. The installation of an anaerobic digester on PVF will slow Vermont's progress towards the State's GHG emissions mandates by preventing PVF from implementing practices that could achieve more significant, whole-farm GHG reductions.

On-farm anaerobic digesters lock Large CAFOs into climate-damaging production models and stall their transition towards alternatives. This is because anaerobic digesters are expensive, industrial investments that are suited only to large, industrial farms.⁶⁵

Digesters need reliable access to large quantities of manure or other feedstocks to

⁶³ Jared Williams, Bellevue RNG, pf. at 5 (Mar. 17, 2023).

⁶⁴ VT. DEP'T OF ENVTL. CONSERVATION, *supra* note 55 (explaining that on-farm anaerobic digester projects "manage manure in a manner that maximizes the generation of methane").

⁶⁵ See VT. CLIMATE COUNS., *supra* note 5, at 110 ("practices like methane digesters may not be scale appropriate for small farms").

produce methane. Even though subsidies and opportunities to monetize questionable environmental attributes through state and federal programs are the cornerstone of an anaerobic digester's economic viability,⁶⁶ it must nonetheless produce sufficient biogas or RNG to pay off. Large CAFOs that confine hundreds or thousands of animals in a production facility are among the few types of farms that can produce and collect enough manure to support an economically viable digester. Once a farm installs a digester, that farm is unlikely to implement operational changes that jeopardize the digester's manure supply and productivity, even if those changes would improve the farm's overall GHG profile.

For all their costliness, anaerobic digesters exclusively target methane emissions related to manure management, the source of just 10 percent of American agriculture's GHG emissions.⁶⁷ Other emissions sources are more significant. Enteric fermentation is responsible for three times as much methane, and soil management accounts for nearly four times the GHG emissions.⁶⁸

As discussed above in Section II.D, dairy farms do not need to install anaerobic digesters to address methane related to manure management. Solid-based manure management produces significantly less methane than liquid-based manure management. Even more compelling, some operational choices reduce GHG emissions from multiple sources. For example, climate-friendly farms that extensively pasture their cows reduce emissions related to both manure management

 ⁶⁶ STIFEL EQUITY RESEARCH, ENERGY & POWER – BIOFUELS: RENEWABLE NATURAL GAS at 5 (2021), https://static1.squarespace.com/static/53a09c47e4b050b5ad5bf4f5/t/62043b66de19b74d326663f8/1644444522166/2
<u>021NStifel+RNG+Analysis.pdf</u> ("In our view, producers are not in the business of producing RNG; they are in the business of monetizing RNG's environmental attributes through various federal and state programs.").
⁶⁷ U.S. ENVTL. PROT. AGENCY, *supra* note 50, at 5-3; *see also* VT. AGENCY OF NAT. RES., *supra* note 53, at 16 (noting that methane and nitrous oxide from manure management combine to account for just 26 percent of agricultural GHG emissions).

⁶⁸ U.S. ENVTL. PROT. AGENCY, *supra* note 50, at 5-3.

and soil management. Unlike livestock confined to a production facility, livestock that graze on pasture disperse their manure throughout farmland. This allows manure to decompose aerobically, which produces almost no methane. In addition, pasture-based farms are less likely to resort to soil management practices that release significant emissions, such as combining the heavy use of synthetic fertilizer with extensive tillage. PVF does not pasture its herd at all.⁶⁹

Large, industrial dairies with anaerobic digesters cannot pursue these types of climatefriendly management practices without incurring significant costs. Many of the reforms that would most improve a Large CAFO's emissions profile would also threaten an anaerobic digester's productivity. For example, if an industrial dairy chose to transition its herd from confinement production to pasture-based production, it would undermine the steady supply of manure required to sustain a digester. Rather than concentrate their manure within a barn or production area, the farm's herd would spread its manure throughout the farm's pasture, leaving the farm's lagoons shallow and its digester struggling.

For industrial farms with anaerobic digesters, climate-friendly operational changes that address the full scope of the farm's emissions can transform multimillion dollar anaerobic digesters into stranded assets that yield no return. As a result, anaerobic digesters prevent Large CAFOs from beginning a whole-farm transition towards climate-friendly production. VLS-CAFS underscores this unintended consequence:

It is imperative that policymakers and others recognize that manure biogas systems reduce emissions from only one part of this system—manure management. At the same time, manure biogas systems rely on the ongoing production of large quantities of livestock manure—the source of manure management emissions—to function. Espousing these systems to the exclusion of other emissions mitigation measures can foreclose the potential to make important modifications throughout

⁶⁹ Pleasant Valley Farm, *supra* note 59, at 84–85.

the livestock life cycle.⁷⁰

The Bellevue Project illustrates how digesters bind industrial farms to climate-damaging production. If the Project moves forward, then PVF will be "contractually obligated to collect all manure generated at the dairy and deliver it to a collection point for the Project."⁷¹ Bellevue "will sell both the gas and the renewable attributes from the Project."⁷² In return, the Project will provide PVF a steady stream of revenue.⁷³ PVF's contractual commitment will last for 20 years⁷⁴ "with probable contract extensions."⁷⁵ These 20 years could be more productively spent transitioning away from industrial production and towards more climate-friendly dairying.

The Bellevue Project does not promote the general good of the State. Vermont's farms are responsible for 15.8 percent of the State's GHG emissions,⁷⁶ and Large CAFOs like PVF contribute a disproportionate share. The Bellevue Project bolsters PVF's existing commitment to an industrial model of dairying that is incompatible with Vermont's GHG emissions mandates. PVF should be pursuing long term operational changes that address the full range of its emissions, not systems that "**require the ongoing generation of GHG emissions** to be financially viable."⁷⁷

F. The installation of an anaerobic digester on PVF will slow Vermont's progress towards the State's GHG emissions mandates by contributing to the ongoing decline of Vermont's small, sustainable farms.

In addition to locking industrial farms into industrial production models, anaerobic

⁷⁰ CTR. FOR AGRIC. & FOOD SYS, *supra* note 54, at 5.

⁷¹ Jared Williams, Bellevue RNG, pf. at 7 (Mar. 17, 2023).

⁷² *Id.* at 6.

⁷³ Amanda St. Pierre, Bellevue RNG, pf. at 7 (Mar. 17, 2023).

⁷⁴ Jared Williams, Bellevue RNG, pf. at 7 (Mar. 17, 2023).

⁷⁵ Amanda St. Pierre, Bellevue RNG, pf. at 7 (Mar. 17, 2023).

⁷⁶ VT. AGENCY OF NAT. RES., *supra* note 53, at 9.

⁷⁷ CTR. FOR AGRIC. & FOOD SYS, *supra* note 54, at 24 (emphasis original).

digesters contribute to the ongoing decline of "farmers using more sustainable production models."⁷⁸ These include organic dairies, a group of farms that produce significantly less GHG emissions per area of land managed than their conventional counterparts do.⁷⁹

It is widely accepted that Vermont's dairy industry is in crisis.⁸⁰ The crisis, however, has not affected all farms equally. Vermont's small and sustainable dairies are struggling, but its industrial farms are growing. Between 2012 and 2021, the number of small dairies in Vermont fell 44 percent, from 810 farms to 453 farms.⁸¹ During the same period, the number of organic dairies fell 21 percent, from 205 to 162 farms.⁸² Then, in 2021, Danone, the owner of Horizon Organic, announced that it would terminate contracts with Vermont's organic dairies.⁸³ By contrast, the number of Large CAFOs in Vermont doubled between 2012 and 2021, rising from 17 to 35.⁸⁴ Industrial farms have capitalized on challenging times to consolidate farmland, consolidate markets, and grow. This explains why Vermont's milk production has increased slightly since 2012⁸⁵ even though the State has lost so many farms.

On-farm anaerobic digesters contribute to the loss of Vermont's small and sustainable

https://legislature.vermont.gov/committee/detail/2022/366 (last visited July 28, 2023). ⁸¹ VT. AGENCY OF AGRIC., FOOD, AND MKTS., VERMONT DAIRY DATA (Feb. 2, 2022),

https://agriculture.vermont.gov/sites/agriculture/files/Vermont%20Dairy%20Data%20summary%20-%20February%202022.pdf.

⁷⁸ *Id.* at 5.

⁷⁹ Maria Vincenza Chiriaco et at., *Determining organic versus conventional food emissions to foster the transition to sustainable food systems and diets: Insights from a systematic review*, 380 J. OF CLEANER PRODUCTION 124937, 5 (2022), <u>https://www.sciencedirect.com/science/article/pii/S0959652622045103</u> (analyzing peer-reviewed studies, including 10 papers finding that organic dairy farms' GHG emissions ranged from 12 to 70 percent less per area of land managed than conventional dairy farms' emissions).

⁸⁰ See, e.g., Task Force to Revitalize the Vermont Dairy Industry, VT. GEN. ASSEMBLY,

⁸² Id.

⁸³ Emma Cotton, *Danone, owner of Horizon Organic, to terminate contracts with Vermont farmers*, VTDIGGER (Aug. 23, 2021), <u>https://vtdigger.org/2021/08/23/danone-owner-of-horizon-organic-terminates-contracts-with-vermont-farmers</u>; *see generally* Organic Foods Production Act of 1990, 7 U.S.C. §§ 6501–6524.

⁸⁴ VT. AGENCY OF AGRIC., FOOD, AND MKTS., *supra* note 81.

⁸⁵ *Id.* Vermont dairies produce 2.56 billion pounds of milk in 2012 and 2.564 billion points of milk in 2021.

farms. Only large, industrial farms can support anaerobic digesters. Consequently, only large, industrial farms can benefit from the subsidies, markets, and revenue streams that anaerobic digesters offer access to. Given that these subsidies and markets are premised on shaky environmental claims, the benefits that accrue to Large CAFOs farms with anaerobic digesters constitute an unfair advantage in a market that is already hostile to small, sustainable farms.

The Bellevue Project will exacerbate Vermont's small, sustainable dairy crisis. PVF might welcome the revenues that the Project will bring,⁸⁶ but the Project will place small and organic farms that cannot monetize their existing contributions to Vermont's climate mandates at a disadvantage. The Commission should not compound the struggles these farms face, nor should it encourage them to follow PVF's lead towards industrialized dairying.

III. The Commission should find that the Project does not promote the general good of the State because the installation of an anaerobic digester on PVF will prevent PVF from implementing practices that improve water quality.

PVF would best minimize impacts to water quality by shifting away from industrial dairy production and towards alternative models, such as those that reduce the concentration of livestock, maximize pasturing, and avoid liquid-based manure management. The Project will prevent PVF from pursuing such a transition.

Industrial farms like PVF create a risk to water quality because they concentrate large numbers of animals and their manure at a limited number of locations. PVF's 4,000 mature dairy cows produce as much raw waste as 188,880 people—four times Burlington, Vermont's

⁸⁶ Amanda St. Pierre, Bellevue RNG, pf. at 7 (Mar. 17, 2023).

population.⁸⁷ Protecting surface water and groundwater from so much waste is difficult. Manure lagoons regularly leak, fail, or overflow, spilling hundreds of thousands of gallons of waste into nearby waters,⁸⁸ and manure applied to farmland frequently washes away. Climate change amplifies these challenges by increasing the frequency with which extreme precipitation and flooding strike agricultural infrastructure and farmland.⁸⁹ Indeed, Vermont's Climate Action Plan notes that that "agriculture sector is [] highly vulnerable to climate change,"⁹⁰ and the July 2023 storm offers a cautionary example as flooding overwhelmed farms and farmland

throughout Vermont.91

Because of the water quality risks posed by PVF's operations, it is regulated under the

federal Clean Water Act as a Large CAFO⁹² and under Vermont law as a Large Farm Operation

("LFO").93 Vermont law requires PVF to maintain an LFO Permit, to comply with the LFO

⁸⁷ Michael Van Amburgh and Karl Czymmek, *Setting the Record Straight: Comparing Bodily Waste Between Dairy Cows and People*, CORNELL UNIV. (June 21, 2017), <u>https://blogs.cornell.edu/whatscroppingup/2017/06/21/series-phosphorus-and-the-environment-2-setting-the-record-straight-comparing-bodily-waste-between-dairy-cows-and-people/</u> ("[W]aste from the 200 cow example herd compares to 9,444 people"); Amanda St. Pierre, Bellevue RNG, pf. at 3 (Mar. 17, 2023) ("Presently, we have 4,000 mature dairy cows.").

⁸⁸ See, e.g., Kendra Pierre-Louis, Lagoons of Pig Waste Are Overflowing After Florence. Yes, That's as Nasty as It Sounds., N.Y. TIMES (Sept. 19, 2018), <u>https://www.nytimes.com/2018/09/19/climate/florence-hog-farms.html</u> ("Because of the storm, at least 110 lagoons in the state have either released pig waste into the environment or are at imminent risk of doing so").

⁸⁹ RYAN RUGGIERO ET AL., THE GUND INST., UNIV. OF VT., AGRICULTURE AND FOOD SYSTEMS, THE VERMONT CLIMATE ASSESSMENT, 2021 at 8 (2021), <u>https://site.uvm.edu/vtclimateassessment/downloads-links/</u> ("It is likely that heavy precipitation . . . will supply much of summer precipitation, which means farmers will need to adjust their stormwater infrastructure for larger runoff events."); *see* CAITLIN CROSSETT & MAHALIA CLARK, THE GUND INST., UNIV. OF VT., CLIMATE CHANGE IN VERMONT, THE VERMONT CLIMATE ASSESSMENT, 2021 at 6 – 7 (2021), <u>https://site.uvm.edu/vtclimateassessment/downloads-links/</u>.

⁹⁰ VT. CLIMATE COUNS., *supra* note 5, at 110.

⁹¹ See Max Scheinblum, 'A very stressful time': Vermont farmers face heavy damages from deluge, VTDIGGER (July 13, 2023), <u>https://vtdigger.org/2023/07/13/a-very-stressful-time-vermont-farmers-face-heavy-damages-from-</u>deluge/.

⁹² 40 C.F.R. § 122.23(b)(1)–(2), (4); 33 U.S.C. § 1362(14).

⁹³ VT. AGENCY OF AGRIC., FOOD, AND MKTS., LARGE FARM OPERATION RULES at Subchapter 4 (2007) [hereinafter "LFO Rules"].

Rules,⁹⁴ and to comply with the Required Agricultural Practices Rule ("RAPs").⁹⁵ The LFO Rules and the RAPs are designed to prevent agricultural waste, including animal wastes, from polluting Vermont's surface waters and groundwater.⁹⁶

PVF's recent history of compliance with these water quality protection laws is concerning. In 2020, Vermont's Agency of Agriculture, Food, and Markets filed a complaint in Vermont Superior Court alleging that PVF violated the LFO Rules and RAPs when it expanded its facilities without an LFO permit and built a manure lagoon with "nearly three acres of surface area" that did not meet the LFO Rules.⁹⁷ PVF was later ordered to pay a civil penalty of \$20,000 and to apply for an LFO permit.⁹⁸

Contrary to Bellevue's suggestion,⁹⁹ an anaerobic digester is unlikely to help PVF mitigate water pollution. PVF is in the Lake Champlain watershed, where reducing phosphorus runoff from farms is a longstanding priority. Under the Lake Champlain Total Maximum Daily Load ("TMDL"), farms are responsible for reducing phosphorus runoff to Lake Champlain by 143.3 metric tons per year.¹⁰⁰ DEC, however, has concluded that digesters do not mitigate water pollution, stating that "[a]naerobic digestion by itself is not expected to result in reductions in

⁹⁴ *Id.*; 6 V.S.A. § 4851(b).

⁹⁵ VT. AGENCY OF AGRIC., FOOD, AND MKTS., REQUIRED AGRICULTURAL PRACTICES RULE FOR THE AGRICULTURAL NONPOINT SOURCE POLLUTION CONTROL PROGRAM at § 3 (2008) [hereinafter "RAPs"].

⁹⁶ *Id.* § 1.3; V.S.A. § 4801; LFO Rules, *supra* note 93, at Subchapter 2.

⁹⁷ Complaint at ¶¶ 61–65, 69–70, *State of Vermont v. Pleasant Valley Farms of Berkshire, LLC*, Docket No. 1-1-20 Frev (Jan. 2, 2020).

⁹⁸ Final Judgment Order at ¶¶ 2, 5, *State of Vermont v. Pleasant Valley Farms of Berkshire, LLC*, Docket No. 1-1-20 Frev (July 10, 2023).

⁹⁹ See Amanda St. Pierre, Bellevue RNG, pf. at 7 (Mar. 17, 2023); Jared Williams, Bellevue RNG, pf. at 9 (Mar. 17, 2023).

¹⁰⁰ U.S. ENVTL. PROT. AGENCY, PHOSPHORUS TMDLs FOR VERMONT SEGMENTS OF LAKE CHAMPLAIN at 18, 44 (2016) (establishing a total phosphorus allocation for agricultural production areas and agricultural land of 118.21 metric tons per year and identifying a phosphorus baseload from agricultural production areas and agricultural land of 261.5 metric tons per year).

phosphorus loading to soils, surface water, ponds or lakes. . . . As of 2017, none of the 15 large manure digester projects in Vermont reduced [a farm's] phosphorus loading due to the use of an anaerobic digester."¹⁰¹ The 15 digesters DEC refers to include PVF's Cow Power Digester.

The Bellevue Project does not promote the good of the State. Just as the Bellevue Project will prevent PVF from pursuing changes that systematically reduce its GHG emissions, so too will it prevent PVF from mitigating the risk it poses to Vermont's waters. On-farm anaerobic digesters depend on the same concentration of animals and the same manure management practices that make industrial farms a threat to water quality. After the Bellevue Project is completed, PVF is unlikely to resolve these underlying risks. Doing so would involve structural changes that would threaten the Bellevue Project's operation, PVF's contractual obligations, and the revenue PVF hopes to draw. In addition, the Commission should not encourage other farms to pursue similar projects.

Conclusion

The Bellevue Project does not promote the general good of the State. It will not provide economic benefits to Vermont and Vermonters; it will hinder Vermont's efforts to meet GHG emissions reduction mandates under the GWSA; and it will stall progress necessary to improve water quality. For these reasons, CLF respectfully requests that the Commission find that the Project does not promote the general good of the State and deny Bellevue RNG's request for a certificate of public good pursuant to 30 V.S.A. § 248.

¹⁰¹ VT. DEP'T OF ENVTL. CONSERVATION, *supra* note 55.

Dated at Montpelier, Vermont, this 11th day of August 2023

CONSERVATION LAW FOUNDATION

By: /s/ R. Scott Sanderson R. Scott Sanderson, Esq. Conservation Law Foundation 15 East State Street, Suite 4 Montpelier, VT 05602 (603) 892-6519 (802) 223-0060 (fax) rsanderson@clf.org

By: /s/ Nick Krakoff

Nick Krakoff, Esq. Conservation Law Foundation 27 North Main Street Concord, NH 03301 (603) 369-4787 nkrakoff@clf.org