STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 24-3359-INV

Investigation of the standard-offer contract between Vermont Renewable Gas, LLC and the Standard Offer Facilitator	

VERMONT RENEWABLE GAS LLC's REPLY BRIEF REGARDING ELIGIBILITY OF PROPOSED FACILITY FOR STANDARD OFFER CONTRACT

Vermont Renewable Gas, LLC ("VRG") replies to the briefs filed by other parties in response to the Commission's request for briefing in its investigation regarding whether the proposed 2.2MW electric generation facility at the Saint Johnsbury-Lyndon Industrial Park ("Facility") is eligible for a standard-offer contract for a plant using methane derived from agricultural operation.

I. Summary

As explained in VRG's opening brief, VEPP, Incorporated ("VEPP") correctly determined that VRG's proposed Facility is eligible for a standard offer contract for a plant using methane derived from an agricultural operation under 30 V.S.A. § 8005a(d). VEPP's award of a standard offer contract to VRG comports with a plain reading of the relevant statute, is consistent with prior Commission orders, and fulfills the purposes of the Standard Offer Program. The briefs filed by the other parties either support this conclusion or at worst do not provide a compelling basis for a different interpretation.

In its brief, the Vermont Agency of Agriculture Food and Markets ("AAFM") concludes that VRG's proposed source of feedstock can qualify as meeting the requirement that it be derived from agricultural operations, and that the Facility "could substantially benefit farmers, loggers, foresters, and rural communities, while also providing a source of renewable energy

produced on Vermont farms." *AAFM's Brief Related to Feedstock Derived from "Farming" and an "Agricultural Operation" ("AAFM Brief")* at 11.

VRG should be given the opportunity to demonstrate that at least 51% of the Facility's feedstock will in fact be sourced from agricultural operations. The proper process for resolving that issue is in a hearing on VRG's Section 248 Petition, which VRG filed on August 26, 2024 (Case No. 24-2797-PET), and which the Commission has stayed, pending the outcome of this Investigation. As VRG has stated previously, it would welcome a condition in its Certificate of Public Good detailing the sources and composition of the agricultural components of its feedstock and agreeing to a process for monitoring and reporting that information.

Green Mountain Power ("GMP"), in its brief, argues that reading 30 V.S.A. § 8002(21) and 30 V.S.A. § 8005a(d) together indicates that these statutory provisions are ambiguous as applied to VRG's proposed Facility. GMP further argues that the Commission should consider legislative findings in Act 159 of 2010[1] to resolve this apparent ambiguity. GMP's argument fails, primarily because a careful reading of the applicable statutes makes clear that VRG's proposed Facility falls within the meaning of 30 V.S.A. §8005a(d). Further, GMP fails to note that Act 159 was tailored to benefit a specific set of existing anerobic digesters, which were excluded from standard offer coverage under the new farm methane category created by the legislature in 2009 through the enactment of Act 45[2]. The fact that Act 159 was specific to this set of existing farms explains why the language in the findings specifically reference that technology. Finally, to the extent relevant to this Investigation at all, the legislative findings do

[1] An act relating to renewable energy, Pub. Act 159, 2010 (H.781). Act 159 was enacted and signed into law in 2010, not 2009 as indicated in GMP's brief.
https://legislature.vermont.gov/Documents/2010/Docs/ACTS/ACT159/ACT159%20As%20Enacted.pdf.
[2] An act relating to renewable energy and energy efficiency, Pub. Act 45, 2009 (H.446). Act 45 created the farm methane category and set a standard offer price of $0.12 per kWh. *Id* at 5.
https://legislature.vermont.gov/Documents/2010/Docs/ACTS/ACT045/ACT045%20As%20Enacted.pdf

not indicate that the General Assembly intended to exclude other technologies apart from anaerobic digestion. To the contrary, the findings in Act 159 indicate that, though the legislature was aware of the use of "cow power" or anaerobic digestion as a successful technology, the legislature was also aware of the potential for innovation in this area and, chose not to amend the statute to limit the farm methane category to a single technology.

The Vermont Public Service Department ("PSD") suggests that VRG's Facility could qualify as renewable energy under the relevant statutes but engages in an analysis of whether interpreting 30 V.S.A. § 8005a(d) to allow VRG's Facility to qualify for the Standard Offer Program would have cost implications for ratepayers or interfere with Vermont's renewable energy goals. Since, however, VRG's Facility qualifies for the Standard Offer Program under the plain language of the statute, it is within the legislature's purview, not DPS's nor the Commission's, to decide whether to narrow the farm methane category eligible for the Standard Offer Program.

In addition to being contrary to the law, it would be manifestly unfair for the Commission to determine that a project once determined to be eligible for the Standard Offer Program is no longer eligible based on policy arguments already considered and resolved by the legislature in the form of a plainly worded statutory provision.

II. Relevant Facts

As described in more detail in VRG's opening brief in this Investigation, the technology proposed by VRG would convert sustainably sourced woody materials derived from agricultural operations into high carbon biochar, while generating methane, which would be combusted to generate electricity. The technology VRG proposes to use is high temperature ablative pyrolysis ("HTAP").

Contrary to PSD's unsupported statement that, "[w]hile the benefits of anaerobic digester plants have been widely recognized, the same cannot be said for the Pyrolysis Concept," there is ample research on existing pyrolysis facilities demonstrating the effectiveness of this technology as a source of renewable energy and showing the benefits of producing high carbon biochar using pyrolysis. As described in this supplemental prefiled testimony, VRG's facility will contribute to the diversification of Vermont's energy sources and will also improve reliability by providing baseload power. Further, the use of pyrolysis to produce methane to generate electricity, and to produce biochar mitigates carbon emissions, enhances soil productivity, and provides water quality benefits. *Evan Dell'Olio Supplemental Prefiled Testimony, February 13, 2025 at 3-6 ("Dell'Olio Supplemental Prefiled").*

PSD's assertion that the pyrolysis technology was unknown at the time that the farm methane category was created—again, without any evidence to support the assertion—is equally misplaced. The use of pyrolysis to generate biochar and methane is a proven technology and has been for decades. Mr. Dell'Olio testifies to the use of pyrolysis as an established technology well before the 2009 adoption by the Vermont General Assembly of a "farm methane" category in the Standard Offer Program. *Dell'Olio Supplemental Prefiled* at 4, 6-8.

With regard to whether VRG's Facility will qualify as a renewable source of energy, VRG will meet forest sustainability requirements for all of its feedstock, both the 51% required to be derived from agriculture, as well as the other 49% of feedstock that may be non-agricultural. As described in Evan Dell'Olio's prefiled testimony, in turn citing Eric Kingsley's prefiled testimony filed in support of VRG's petition for a Certificate of Public Good, VRG has determined that there are ample levels of agricultural and non-agricultural feedstocks within a twenty-five mile radius to supply the proposed Facility with sustainably sourced materials.

Dell'Olio Supplemental Prefiled at 8-10. VRG has previously stated its commitment to meeting the State of Vermont Biomass Renewable Energy Standard, 10 V.S.A. § 2751, for all of its feedstock derived from forests, including the 49% non-agricultural feedstock and is willing to accept a condition on its CPG to ensure accountability for this commitment.

III. The Farm Methane Category Defined by 30 V.S.A. § 8005a(d) Clearly and Unambiguously Authorizes the Use of Technologies Other Than Anaerobic Digestion Including VRG's Proposed Facility

As described in VRG's opening brief for this Investigation, the language of the relevant statutes does not limit the application of the farm methane category to anaerobic digestion. The Public Service Department appears to concede as much in its brief, though suggests that the legislature may not have been aware of other potential qualifying technologies. As noted in Section II above, however, there was (and is) ample information about the potential use of pyrolysis to process agricultural materials to make such a conclusion speculative. Since the statute is clear, resorting to legislative history is not necessary or appropriate. In re Investigation to Rev. Avoided Costs that Serve as Prices for Standard-Offer Program in 2020, 2021 VT 59, ¶ 14, 215 Vt. 247 ("if statutory language is ambiguous, we may consult legislative history") (citations and alterations omitted). Even if the PUC were to look to legislative history, however, there is no basis to conclude that the legislature was not aware of the potential for other technologies to produce methane from agricultural materials.

The Department also encourages the Commission to imply a limitation based on a general concern, not supported by data, regarding ratepayer impacts and the potential for the costs of the Standard Offer being applied to technologies other than anaerobic digestion to interfere with the State's renewable energy goals. PSD suggests that other pyrolysis facility proposals may be waiting in the wings such that allowing VRG's Facility to qualify for the

Standard Offer Program will mean that its pyrolysis system will be the first of many to enroll in the program, with the potential for significant ratepayer impacts and a disruption to renewable energy goals as a result. While these hypothetical impacts are worthy of evaluation, the appropriate forum for consideration of this risk is at the Vermont General Assembly not in the context of a Petition for a Certificate of Public Good under an existing and plainly worded statute.

The legislature has heard these concerns before. In 2009, during the debate over Act 45,[3] the relevant legislative committees received testimony from the Department and the Commission regarding potential negative impacts of the standard offer program on the operation of Vermont's electricity system, as well as countervailing testimony from AAFM regarding the benefits to farmers of the farm methane category within the Standard Offer Program.[4] After consideration of this testimony and a full legislative process in both chambers, the General Assembly voted to create the farm methane exemption from the Standard Offer Program cap, worded broadly without limitations based on the type of technology used. 30 V.S.A. § 8005a(d). The legislature also decided to allow farm methane project owners to keep the renewable energy credits.[5] The Commission cannot ignore the statute, nor change these provisions through this Investigation or a CPG petition, so the forum available to the Department to address their concerns about ratepayer impacts is the Vermont legislature.

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[3] An act relating to renewable energy and energy efficiency, Pub. Act 45, 2009 (H.446). https://legislature.vermont.gov/Documents/2010/Docs/ACTS/ACT045/ACT045%20As%20Enacted.pdf

[4] E.g. Testimony before the House Committee on Natural Resources and Energy by Jim Volz, Chair, Public Service Board, Richard Smith, Deputy Commissioner, Department of Public Service, and David Lane, Deputy Secretary, Agency of Agriculture, Food and Markets.

[5] An act relating to renewable energy and energy efficiency, Pub. Act 45, 2009 (H.446) at 9-10. https://legislature.vermont.gov/Documents/2010/Docs/ACTS/ACT045/ACT045%20As%20Enacted.pdf

IV. Concerns About VRG's Feedstock are Easily Resolved and can be Addressed in the Context of a CPG

VRG agrees with AAFM that "'[f]arming' creates many types of woody agricultural products and agricultural waste that is properly considered 'feedstock' from "agricultural operations" within the meaning of 30 V.S.A. § 8005a(d). *AAFM Brief at 6.* It is these products, byproducts and waste materials that VRG has proposed to use in order to satisfy the requirement that 51% of its feedstock is derived from agricultural operations. With regard to "the more difficult question" of "whether timber harvested from a farm for activities not directly related to 'farming' activities is derived from "an agricultural operation," VRG would be pleased to cooperate with AAFM, the Department and the Commission to establish a condition in the CPG for the proposed Facility to provide oversight of VRG's supply of feedstock materials as necessary to ensure that the materials it uses to satisfy the 51% agricultural feedstock requirement come from farming activities.

V. The Legislative Findings in Act 159 of 2009 Support an Interpretation of 30 V.S.A. § 8005a(d) that Extends the Farm Methane Category to VRG's Proposed Facility

The statute is plain on its face and there is no need to interpret it through the lens of legislative history. If, however, the Commission were to look at that history, the legislative findings in Act 159 of 2010, when construed in the proper context, provide helpful additional context in support of reading the language in 30 V.S.A. § 8005a(d) creating the farm methane category, first established in 2009 through Act 45,[6] to be technology neutral. First, it is clear from these findings that the legislators were acutely aware of the benefits of anaerobic digestion to Vermont, including "support of its farm economy and working landscape, odor control, and

[6] An act relating to renewable energy and energy efficiency, Pub. Act 45, 2009 (H.446). https://legislature.vermont.gov/Documents/2010/Docs/ACTS/ACT045/ACT045%20As%20Enacted.pdf

nutrient management to reduce negative impacts on state waters",[7] all benefits that will also be provided by VRG's Facility in the form of renewable energy and high-carbon biochar. *See Dell'Olio Supplemental Prefiled at 2-6.* Based on these categories of benefits, the General Assembly chose to not to disturb the broad language used in Act 45 of 2009 to encourage investment in processing biomass produced on farms to generate electricity.

It is also noteworthy, when reading the findings in Act 159, that this law was passed specifically to remedy a gap that the legislature left when it created the farm methane category as eligible for a special standard offer price in the 2009 session, through the enactment of Act 45.[8] Until Act 159 passed, only new farm methane projects were eligible for the standard offer price of $0.12 per kWh created by the legislature in Act 45 in 2009. The legislature, a year later in 2010, was focused on providing an existing number of anaerobic digesters with access to this standard offer price. With this context in mind, it is difficult to read the findings for Act 159 as retroactively applicable to interpreting the language adopted in 2009 in Act 45, which does not include any limitation on the type of technology used to generate methane from agricultural operations.

To the contrary, had the legislature wanted to limit the breadth of the farm methane category, they clearly were aware of the terms "anaerobic digestion" and "cow power"[9] in 2010 and they could have used these specific terms to amend the existing language creating the farm methane category as enacted in Act 45. The legislature did not add any such limitation to the definition of the farm methane category in the Standard Offer Program. Instead, the legislature

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[7] An act relating to renewable energy, Pub. Act 159, 2010 (H.781) at 2, finding (5). https://legislature.vermont.gov/Documents/2010/Docs/ACTS/ACT159/ACT159%20As%20Enacted.pdf

[8] An act relating to renewable energy and energy efficiency, Pub. Act 45, 2009 (H.446). https://legislature.vermont.gov/Documents/2010/Docs/ACTS/ACT045/ACT045%20As%20Enacted.pdf

[9] "Cow Power" is a reference to a program created by GMP to pay farmers more for electricity generated from anaerobic digestion of dairy cow manure. https://greenmountainpower.com/help/cow-power/

left the language broad enough to allow other technologies, including VRG's, which uses HTAP to generate electricity from methane and to produce high-carbon biochar, providing economic and environmental benefits equivalent to those provided by anaerobic digestion.

Further, reading the full set of legislative findings, not just the ones quoted in GMP's brief, supports an interpretation of 30 V.S.A. § 8005a(d) as is written, to allow new and innovative technologies. Contrary to GMP's assertion, the findings do not indicate that the legislature intended to limit the breadth of the program to just "cow power" or anaerobic digestion technology. For instance, the findings include a reference to the farm methane projects as "as pioneers and laboratories for the technology of producing electricity through anaerobic digestion of wastes from farm animals and other sources."[10] The findings also reference the benefits of the "studies and pilot projects related to the economics of electric energy production through anaerobic digestion of wastes, the use of lake weeds as digester feedstock, a computerized digester monitoring and control system, and the use of digester effluent to grow algae for use as biofuel, among others."[11] Instead of indicating a desire to limit the scope of the farm methane category to just anaerobic digestion of livestock manure, or "cow power", these findings suggest that the legislature was encouraged by the new and innovative approaches being taken to produce electricity using other agricultural products in addition to livestock waste. The legislature was also enamored of the potential to use farm methane projects to produce other types of products, such as biofuels from algae. Looking at the broader list of legislative findings, the Commission should find that VRG's proposed Facility, using other sources of agricultural materials, and producing other products, such as biochar, easily falls within the scope of what the

[10] An act relating to renewable energy, Pub. Act 159, 2010 (H.781) at 2, finding (2). https://legislature.vermont.gov/Documents/2010/Docs/ACTS/ACT159/ACT159%20As%20Enacted.pdf
[11] *Id*. finding (3).

legislature intended to achieve through providing the farm methane category in the Standard Offer Program.

VI. Conclusion and Request

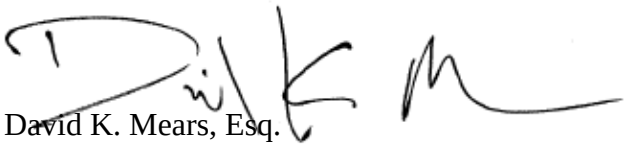
VRG has expended significant capital and personnel resources towards the development and permitting of its proposed HTAP Facility to convert agricultural materials into high carbon biochar, while producing methane used to generate electricity, in reliance on Vermont law, Commission interpretations, and a Standard Offer contract from VEPP. VRG was fully transparent about the nature of its proposal with VEPP through the application process for the Standard Offer Program. VRG was also fully transparent in its pre-filing conversations with PSD, AAFM and the Vermont Agency of Natural Resources. The reward for following the rules and engaging proactively in the regulatory process should not be to have the rules changed mid-stream.

VRG remains ready and willing to continue through the process designated in Section 248 and Commission rules to obtain a Certificate of Public Good. The Commission can impose conditions on the grant of the CPG as necessary to ensure that VRG operates its Facility within the constraints imposed by the relevant statutes. VRG should be given the opportunity to present its CPG petition and to continue through the process established by the legislature and the Commission.

For all of the reasons above, VRG requests that the Commission uphold VEPP's determination that VRG qualifies for the Standard Offer program as a Farm Methane Facility outside of the cumulative capacity of Standard Offer allocations pursuant to 10 V.S.A. § 8005a(d)(1) because it uses methane derived from agricultural operation as a source of fuel to generate electricity.

Dated at Montpelier, Vermont this 13th day of February, 2025

Vermont Renewable Gas, LLC



David K. Mears, Esq.
david@tarrantgillies.com
Nicholas Low, Esq.
nick@tarrantgillies.com
Tarrant Gillies & Shems, PLC
44 East State Street
Montpelier, VT 05602
(802) 223-1112