



**FILED VIA ePUC**

April 18, 2023

Holly R. Anderson  
Clerk of the Commission  
112 State Street  
Montpelier, VT 05620-2701

Re: Case No. 22A-0527 Farm-Based Renewable Natural Gas Study

Dear Ms. Anderson:

On February 17, 2022, Vermont Gas Systems, Inc. (“VGS” or the “Company”) provided notice that we intended to use Climate Action and Innovation Budget funds to commission a feasibility study on Farm-Based Renewable Natural Gas (“RNG”) in Franklin County (the “Study”). Since no objection or request for formal process was received from the Department of Public Service (the “Department”) or the Commission during the thirty days following that notice, we proceeded with the expenditure. It has been one year since the Study was allowed. Accordingly, we are providing the Commission and Department with an annual report of the Project’s progress as required by Section 5(f) of our Alternative Regulation Plan.<sup>1</sup>

As discussed in the February 2022 filing, VGS has engaged GSR Solutions LLC (“GSR”) to conduct a techno-economic feasibility study regarding RNG production on Vermont farms. Currently, GSR and their engineering firm are continuing work with VGS to model several scenarios for RNG production in Franklin County. This process includes reviewing numerous permutations and combinations that assess the number of cows per farm, their proximity to VGS’s pipeline, and other relevant factors. Though the original scope of work estimated that the GSR Study would be complete within eleven months, given the complexity of assessing these various scenarios, we have granted GSR an extension to ensure their work product is comprehensive. To date, GSR has:

- established agreements and collaborations with multiple dairy farm partners and other stakeholders;
- assessed the feasibility of consolidating multiple nearby dairy farms into a cluster of anaerobic digesters and/or gas-upgrading systems with pipeline interconnectivity, and identified two distinct clusters for potential collaboration;
- created multiple comprehensive questionnaires and data evaluation sheets to evaluate the capacity and readiness of participating farms for project integration;
- begun data collection from farms included in the two identified clusters;

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<sup>1</sup> See Exhibit VGS-JMP-5 filed May 21, 2021 in Case No. 19-3529-PET.

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- analyzed available waste streams as anaerobic digestion (AD) inputs and assessed nutrient recovery potential from resulting digestate, and completed front-end evaluations for the two identified clusters;
- initiated evaluation of the cost-effectiveness of RNG upgrading, interconnection, and nutrient recovery system configurations for integration with farm-based AD systems; and
- developed basic designs featuring thermodynamically valid mass and energy balance models, AD/RNG specifications, and pipeline mapping for the first potential cluster.

We are available to the Commission and the Department to answer any questions about this filing.

Respectfully submitted,

/s/ Mary G. Bouchard

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