

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 8596

Petitions of Lincoln Renewable Natural Gas, LLC)
("Lincoln RNG"), pursuant to 30 V.S.A. Sections 231)
and 248(j), seeking approval for the construction,)
ownership, and operation of a renewable natural gas)
facility in Salisbury, Vermont)

Order entered: 4/8/2016

I. INTRODUCTION

This case involves petitions filed by Lincoln Renewable Natural Gas, LLC ("Lincoln RNG" or "Petitioner"), requesting certificates of public good ("CPG") pursuant to 30 V.S.A. §§ 231 and 248(j), authorizing the installation, ownership, and operation of a renewable natural gas facility in Salisbury, Vermont (the proposed "Project").

In today's Order, we conclude that: Lincoln RNG's Project is of limited size and scope; the petitions do not raise a significant issue with respect to the substantive criteria of 30 V.S.A. § 248; the public interest is satisfied by the procedures authorized by 30 V.S.A. § 248(j); and the Project, under Lincoln RNG's ownership and operation, will promote the general good of the State. Therefore, Lincoln RNG's petitions for CPGs are granted, subject to the conditions set forth in this Order.

II. PROCEDURAL HISTORY

On May 11, 2015, Lincoln RNG filed with the Vermont Public Service Board ("Board") petitions, prefiled testimony and exhibits, proposed findings, and proposed orders pursuant to the

requirements of 30 V.S.A. §§ 231 and 248(j) (respectively, the “Section 231 Petition” and the “Section 248 Petition”).¹

On June 1, 2015, Lincoln RNG filed a map prepared by Vermont Gas Systems, Inc. (“VGS”) depicting the route for a proposed renewable natural gas distribution line that would connect the Project with an existing “gas island” in Middlebury, Vermont. The letter stated that the Petitioner would seek supplemental testimony from VGS regarding the proposed distribution pipeline for the Project, along with an explanation of VGS’s recovery of costs for the new line from Lincoln RNG.

On June 4, 2015, the chair of the Salisbury Selectboard filed a letter of support for the Project, stating that the Project will provide a number of economic and environmental benefits for the Town of Salisbury, as well as for the State.

On June 15, 2015, the Vermont Department of Public Service (“Department”) filed a letter stating that the Department believes the Project will be of limited size and scope, that review pursuant to 30 V.S.A. § 248(j) is appropriate, and that, because the distribution line would not be built but for the construction of the proposed facility, the impacts of that line should be reviewed in this proceeding.

On June 16, 2015, the Vermont Agency of Natural Resources (“ANR”) filed a letter stating that the Petition is appropriate for review under section 248(j) and that the impacts of the proposed distribution line that would connect the Project to the “gas island” in Middlebury should be reviewed in this proceeding.

On June 23, 2015, Lincoln RNG filed a letter from VGS regarding a change to the proposed distribution pipeline route that was filed on June 1, 2016.

On June 24, 2015, the Board issued a memorandum notifying parties to the proceeding that the Project would be considered under 30 V.S.A. § 248(j).

1. The Petitioner filed testimony of Daniel Smith in support of both the Section 231 Petition and the Section 248 Petition. To ensure clarity in our citations to Mr. Smith’s testimony, we will refer to his testimony in support of the Section 231 Petition as “231 pf.” and to his testimony in support of the Section 248 Petition as “pf.” in the normal citation format.

On June 26, 2015, the Town of Middlebury Selectboard filed a letter expressing support for the Project and stating that the Project is “directly in line with many of the stated goals and purposes of the Town Plan.”

On July 9, 2015, Lincoln RNG filed a letter informing the Board that it would file supplemental testimony from VGS on or about August 26, 2015, regarding the Project’s proposed distribution line and cost recovery from Lincoln RNG for the line. On August 31, 2015, Lincoln RNG filed a letter informing the Board that the expected supplemental testimony regarding the proposed distribution line would be filed by September 11, 2015.

On September 14, 2015, Lincoln RNG filed amendments to its Section 248 Petition with accompanying testimony and exhibits (“Amended 248 Petition”), including supplemental testimony from VGS. The amendments and supplemental testimony addressed a change in the routing of the proposed distribution line associated with the Project and a change to the gas upgrade and purification equipment that the Project facility will employ.

On September 28, 2015, Lincoln RNG filed an updated list of adjoining property owners based on the Town of Salisbury’s Grand List.

On October 15, 2015, the Board provided notice of the Amended 248 Petition to all entities specified in 30 V.S.A. § 248(a)(4)(C) and other interested parties.

On November 12, 2015, Lincoln RNG filed a letter requesting an extension until November 23, 2015, for filing comments on the Amended 248 Petition to permit ANR to complete its review of the Project. Lincoln RNG represented that ANR supported the extension request.

On November 13, 2015, the Department filed comments stating that the Amended 248 Petition does not raise any significant issues with respect to the substantive criteria of 30 V.S.A. § 248 (“Section 248”), and, therefore, the Department recommends that the Board approve the Petition and grant a CPG without a hearing.

On November 20, 2015, the Board issued a procedural order granting the extension requested by Lincoln RNG on November 12, 2015. The Board further requested responses to public comments concerning the Section 248 Petition, including the corporate status of Lincoln RNG and the Project’s potential impacts on odor, noise, public safety, and public water supplies.

On November 23, 2015, ANR filed comments stating that there are no significant issues that need to be addressed in a technical hearing, provided that the Board includes certain conditions in the CPGs for the Project.

On November 24, 2015, Lincoln RNG filed amended proposed findings with additional supplemental prefiled testimony and exhibits in support of the Project and its Amended 248 Petition.

On November 30, 2015, Lincoln RNG filed comments on several issues raised in public comments on the Project (“Petitioner Letter (11/30/15)”).

On December 2, 2015, Middlebury College filed a letter in support of the Project, as both the primary customer for the Project’s gas output and as a minority investor in the Project.

On December 4, 2015, the Department filed comments on the public input received by the Board, stating that it maintains the position set forth in its November 13, 2015, filing.

On February 4, 2016, the Board issued a notice of public hearing on the Project.

On February 11, 2016, Lincoln RNG filed a letter clarifying its identification of property owners adjoining the Project site based on a substantial review of applicable land records.

On February 22, 2016, the Board conducted a public hearing in Salisbury, Vermont, attended by approximately 60 members of the public.

No other filings were received.

III. ANR RECOMMENDATIONS

ANR states that no significant issues need to be addressed in a technical hearing, provided that the Board include in any CPG it issues pursuant to Section 248 the conditions set forth in the Petitioner’s Proposed Findings and Order included with its Amended 248 Petition, as supplemented and modified by the further amended proposed findings filed by the Petitioner. On November 24, 2015, the Petitioner filed amended proposed findings that clarified permitting requirements to address ANR concerns regarding waste disposal and air quality.

The conditions proposed by ANR and contained in the Petitioner’s September 14th and November 24th filings are as follows:

1. Prior to construction, the Petitioner shall obtain all necessary permits and approvals for construction and operation of the RNG facility, including:
 - (a) a construction general permit;
 - (b) a stormwater discharge permit;
 - (c) an indirect discharge permit;
 - (d) ANR Solid Waste Division approval regarding:
 - (i) the need for permitting the use of brewery waste; and
 - (ii) compliance of disposal of spent carbon pellet medium used for sulfur removal;
 - (e) ANR Air Quality Division approval regarding:
 - (i) monitoring and reporting the emission of CO₂ from the gas upgrade and purification equipment's off-gas and noxious odors relating to H₂S air emissions.
2. Prior to construction, VGS shall obtain all necessary permits and approvals for construction and operation of the metering and regulation station and the distribution line that will link the RNG facility and VGS's pipeline network, including:
 - (a) an ANR wetlands permit;
 - (b) a U.S. Army Corps permit;
 - (c) an ANR watershed management flood hazard/river corridor permit application; and
 - (d) a construction general permit.
3. The Project shall comply with the Vermont Stormwater Management Rules. Prior to site preparation and construction, the Petitioner shall contact the Vermont Stormwater Program in order to assess which types of stormwater permits are needed for the construction and operation of the Project. The Petitioner shall obtain the required permits prior to site preparation and construction and shall comply with the provisions of the required permits during construction and operation of the Project. At a minimum, during any site preparation, construction, maintenance, and decommissioning activities that involve earth disturbance, the Petitioner shall comply with ANR's Low Risk Site Handbook for Erosion Prevention and Sediment Control (2006).
4. Prior to interconnection of the RNG facility with VGS's natural gas distribution pipeline system, the Petitioner shall obtain the approval of the Vermont Department of Public Service ("Department") of a Quality Assurance Plan ("Plan") that identifies the fuel substrates in use and the associated potential gas contaminants. The Plan shall also provide for notification to the Department and the Vermont Agency of Agriculture, Food, and Markets ("AAFM") of any changes in fuel source usage. The Plan shall be filed with the Board.

5. All construction, operation, and maintenance of the Project shall be in accordance with all permits and approvals, and with all other applicable regulations.
6. The Petitioner shall notify AAFM, ANR, and VGS of any changes in fuel source usage in accordance with the Plan.
7. The Petitioner shall copy ANR on any updates to the nutrient management plans of the farms spreading liquid residue that are either reasonably requested by AAFM or otherwise required by the farms' operating permits.
8. The Petitioner shall be limited to 20 truckload deliveries per day. Deliveries shall take place between the hours of 7:00 A.M. and 7:00 P.M. Monday through Friday, and 8:00 A.M. to 1:00 P.M. on Saturday. No deliveries shall take place on Sundays or state or federal holidays.
9. The Petitioner shall ensure that the sound output of the gas upgrade equipment rates at 65 dB at 10 meters or lower, that external loader operations are restricted to daytime hours (7:00 A.M. to 7:00 P.M.) and that the loader used at the facility is retrofitted with a low-impact back-up alarm to the extent allowed by law.
10. Prior to commencing construction, the Petitioner shall file with the Board and the parties in this proceeding, a letter stating that it has fulfilled all required CPG conditions and that the Petitioner intends to commence construction of the RNG facility and that VGS intends to commence construction of the metering and regulation interconnection station and associated distribution line.
11. The Petitioner shall ensure that the flaring equipment installed will be fully enclosed, with the flame concealed in a protective flare stack. The flare's ignition system will be electronic. The flaring capacity will be 99% of gas production (800 m³/h maximum/809m³/h bio gas production).
12. The Petitioner shall operate the flares in accordance with the manufacturer's operation and maintenance recommendations. The Petitioner shall register any such air emissions that occur with ANR annually in accordance with ANR's air pollution control regulations.
13. The certificate of public good shall not be transferred without prior approval of the Board.

Because the Petitioner has agreed to the conditions proposed by ANR and to ensure no

adverse impacts on the related statutory criteria applicable to the Project, we will adopt the proposed conditions in our approval of the Project, with one modification. As reflected in our discussion of the relevant findings, below, we will adopt a modified condition regarding the hours in which truck deliveries may be made.

IV. PUBLIC COMMENTS

The Board received a number of public comments regarding the Project. Concerns raised in those comments included the Project's potential to result in odors, noise, and truck traffic. Also raised were issues related to public health and safety, including the combustibility of methane gas, truck traffic on local roads, and potential impacts on public water supplies.

The Petitioner filed a letter on November 30, 2015, responding to the issues raised in the public comments, including odor, noise impacts, public safety, and public water supplies. With its letter, the Petitioner also filed a letter from VGS that addressed the key categories of concerns raised in the public comments.

The responses to public concerns filed by the Petitioner are discussed under the relevant criteria, below.

The Board held a public hearing on the Project in Salisbury on February 22, 2016.

V. FINDINGS

Based upon the Petition and the accompanying record in this proceeding, the Board hereby makes the following findings.

Description of the Project

1. Lincoln RNG was incorporated in Vermont in 2006 as a limited liability company for the purpose of developing investor-owned renewable energy projects in collaboration with Vermont dairy farmers. Amended 248 Petition at 1.

2. As an investor-owned Vermont corporation, Lincoln RNG is a company as defined in 30 V.S.A. § 201 and is subject to the Board's jurisdiction under 30 V.S.A. § 203(1). Daniel Smith, Lincoln RNG ("Smith") pf. at 1; Amended 248 Petition at 1.

3. Lincoln RNG's principal offices are in Montpelier, Vermont. Amended 248 Petition at 1.
4. Integrated Energy Solutions, Inc. ("IES"), a Vermont domestic corporation, is the managing member of Lincoln RNG. Smith 231 pf. at 3.
5. Lincoln RNG proposes to construct a renewable natural gas facility ("RNG Facility") that will include: (1) an anaerobic digester tank system that produces biogas; and (2) gas upgrade and purification equipment that refines the biogas into the finished RNG product. David K. Steckler, Lincoln RNG ("Steckler") pf. at 2; Smith pf. at 7; exh. LRNG-DKS-8 at 2.
6. The RNG Facility will be capable of generating approximately 130,000 mcf annually of biomethane gas. Steckler pf. at 21; Amended 248 Petition at 2.
7. The biomethane gas/renewable natural gas ("RNG") output will be "pipeline quality" – that is, interchangeable with pipeline-grade natural gas in form and quality, with a methane content of 97%. The facility will pressurize the RNG to the rate required for pipeline transport. Christopher LeForce, Lincoln RNG ("LeForce") pf. at 5; LeForce pf. (9/14/15) at 9; Amended 248 Petition at 2.
8. The RNG will be injected into VGS's new distribution system in Middlebury, Vermont. The interconnection with the new VGS distribution system will consist of a metering and regulation station ("M&R Station") on the Project site. LeForce pf. at 3; Smith pf. at 8-9; exh. LRNG-DS-1.
9. Lincoln RNG has executed a long-term supply/purchase agreement with Middlebury College (the "College") for approximately 75% of the RNG facility's output. Smith pf. at 19; Patrick J. Norton, Lincoln RNG ("Norton") pf. at 6.
10. Lincoln RNG has executed a purchase/supply contract with VGS for an initial five-year period. Under that contract, all of the Project's remaining RNG output for the first three years of the facility's operation and half of the remaining output for the fourth and fifth years of operation will be sold to VGS. Smith pf. at 19; Smith 231 pf. at 4.
11. Starting with year four of operation, Lincoln RNG will explore the marketing of the remaining output of RNG to VGS or to one or two additional heat process fuel customers. Lincoln RNG is also exploring the potential for marketing RNG as an alternative vehicle fuel through fleet vehicle sales or in combination with VGS through its pipeline distribution network. Smith pf. at 20; Smith 231 pf. at 4-5.

12. Lincoln RNG has executed a long-term lease with Goodrich Farm, Inc. and Goodrich Family Farm, LLC (“the Goodrich Farm”) for the Project’s host site at 592 Shard Villa Road in Salisbury, Vermont, and for the partial supply of the facility’s manure fuel supply requirements. Amended 248 Petition at 2; Smith pf. at 12; Smith pf. (9/14/15) at 8, n. 1; exh. LRNG-DS-2.

13. The leased site for the Project comprises approximately 3.5 acres. The RNG facility and the M&R Station will be located in close proximity to the Goodrich Farm’s building complex. Smith pf. at 25; exhs. LRNG-DS-1, LRNG-DS-2.

14. Lincoln RNG has executed letters of intent with local dairy farmers and producers of corn silage for additional fuel supplies. Amended 248 Petition at 2.

15. Financing for the Project will consist of a combination of private equity and debt funding, with a small amount of federal grant funding. IES, the College, and the digester equipment supplier will be among the equity investors. The College will have a minority stake of less than 20%. Other investors will include private individuals who are predominantly Vermont residents. Mascoma Savings Bank will be the primary lender. The Vermont Economic Development Authority (“VEDA”) will have a minority, participatory share of the commercial loan provided by Mascoma Savings Bank. Loan financing will be subject to a federal loan guarantee provided by the Rural Development Agency of the U.S. Department of Agriculture (“USDA”). 231 Petition at 5-6; Smith 231 pf. at 11-12.

16. The College performed due diligence for both the College’s execution of the purchase supply contract and investment in Lincoln RNG. VEDA has conducted an independent due diligence procedure. Mascoma Savings Bank and the USDA Rural Development Agency will perform a required business appraisal and loan guarantee review, respectively. Norton pf. at 15-16; Smith 231 pf. at 11.

17. Grant funding will be provided by the Natural Resource Conservation Service of USDA under its Environmental Quality Insurance Program (“EQIP”). EQIP funds have been secured to assist with the design and installation of the manure management processes being used for energy generation. These funds are in escrow. Smith 231 pf. at 12.

18. For the design, engineering, and primary construction of the RNG facility and for its operational support, Lincoln RNG has executed a letter of intent with Weltec Biopower (“Weltec”), which will provide both the anaerobic digester fermenter tank equipment and the gas upgrade equipment. Amended 248 Petition at 2.

19. Additional process design and chemical engineering services have been provided by Impact Technologies, Inc. of Lincoln, Massachusetts. Site plan and overall supervisory engineering services are being provided by DeWolfe Engineering, Inc. of Montpelier, Vermont. Amended 248 Petition at 2.

20. The digester system will include three biodigester, or fermenter, tanks. The three tanks will be placed adjacent to each other and constructed of modular stainless steel reinforced panels assembled on three separate concrete bases. Each tank will measure 103.3 feet in diameter and 20.7 feet in height. The system's total capacity will be 1,295,000 gallons. The biodigester system will have an automatic flare to burn off excess gas. Steckler pf. at 7-11; exhs. LRNG-DS-1, LRNG-DKS-8 at 6-11.

21. The gas upgrade and purification equipment will occupy a standard shipping container measuring 40 feet by 8 feet by 9.6 feet. The off-gas stack will be approximately 19 feet high. The upgrade and purification equipment will employ the biodigester system's automatic flare. Steckler pf. (9/14/15) at 5-12; exh. LRNG-DKS-8 at 9, 21.

22. The M&R Station will contain equipment to test and monitor gas quality and quantity and to shut off the RNG facility if gas quality is not suitable for injection into the natural gas pipeline facilities. Amended 248 Petition at 3.

23. Operation of the RNG facility will utilize two existing buildings, pumping and piping apparatus, manure separator equipment, an access roadway, and a storage pad. These buildings, equipment, and access were previously constructed, installed for use, and permitted for the existing raw manure processing plant. Smith pf. at 10-11.

24. The Project's operations team will consist of a varied group of professionals with engineering and financial experience, including an on-site system technician who also will have served as the on-site construction manager. Contracts with the Project's equipment suppliers provide for continuous monitoring to identify operational issues requiring maintenance, as well as the scheduling of routine maintenance. Weltec, the digester vendor, will provide assistance with managing the performance of the system's fuel source recipe, as part of its aftercare support. Smith 231 pf. at 6-7.

25. The manure separation plant is owned and operated by IES d/b/a Panther Bedding and Compost ("IES d/b/a Panther"). In 2014, IES d/b/a Panther obtained a conditional use permit from the Town of Salisbury, an Act 250 land use permit, a low risk construction general permit, a

stormwater discharge permit, and a waste water system and potable water supply permit for the installation of the buildings and equipment, entrance and access roadway, parking, and operation of the manure processing plant. Smith pf. at 11.

26. IES d/b/a Panther will lease the site, buildings, and associated equipment to Lincoln RNG. Smith pf. at 12.

27. The RNG facility's two buildings will consist of wood truss/wood frame construction installed on concrete slabs, with sheet-metal siding and standing-seam metal roofs of material and color similar to the adjacent dairy farm buildings. The steel-corrugated exterior cladding of the digester tank system will be similar in appearance to the dairy barns and the two facility buildings. Smith pf. at 25.

28. One of the two buildings comprising the RNG facility is a pump control house that measures 24 feet by 36 feet by 18 feet and that will be modified to house the control equipment for the digester system and gas upgrade equipment. The pump house building also includes an office and compost toilet room. Smith pf. at 11; DeWolfe pf. at 6; exh. LRNG-DS-1.

29. The second RNG facility building houses the by-product separator equipment and provides covered storage for the animal bedding byproduct material. This building measures 30 feet by 80 feet by 23 feet. The uncovered storage pad is utilized to store soil enrichment byproduct materials. The storage pad is installed adjacent to the byproduct facility's housing building and measures 120 feet by 140 feet. This building will be modified to include an additional separator. Smith pf. at 11; DeWolfe pf. at 6.

30. The current manure reception tank adjacent to the pump house will be replaced with a larger tank that measures 36 feet by 12 feet by 12 feet, and an additional separator will be installed in the separator/byproducts operations building. DeWolfe pf. at 6; Smith pf. at 11.

31. The access roadway and its intersection with the town road and parking will not require modification. DeWolf pf. at 6.

32. For its initial fuel sources, the RNG Facility will utilize manure, feed waste, silage runoff, and crop residue from the host farm and manure, corn silage, and other fuel source crops from neighboring farms. The initial fuel sources may include up to 2% of food-processing residuals, consisting of brewery waste from a local beer brewery. Smith pf. at 13-15.

33. Manure from the Goodrich Farm will be piped directly from the farm's lagoons into an existing reception tank nearby; additional manure, along with corn silage and food-processing residuals, will be trucked in and deposited into the reception tank. Smith pf. at 14, 28-29.

34. Lincoln RNG will replace corn inputs with additional manure and limited food-processing residuals once the facility achieves continuous, steady-state operation. Smith pf. at 13.

35. The Project's RNG will be conveyed to customers by underground pipeline. Lincoln RNG has executed a facilities contract and an operating contract with VGS for the design, construction, and operation of: (1) the M&R Station adjacent to the RNG facility that will comprise the Project's interconnection with VGS distribution facilities, and (2) a spur distribution pipeline to convey the Project's gas output to market. Amended 248 Petition at 2.

36. The M&R Station will be located approximately 400 feet from the RNG Facility's gas upgrade and purification equipment, along the access road. The station will be 22 feet by 34 feet, installed on a concrete pad, and surrounded by a 7-foot chain-link fence. It will contain a chromatograph, a gas meter, gas regulators, an odorizer, isolation valves, and other equipment to monitor gas quality and to prevent injection of unsuitable gas. Also within the enclosure will be a communications cabinet measuring approximately 8 feet by 5 feet by 6 feet. VGS's pipeline distribution network will be connected to the M&R Station by an underground steel outlet pipe from the gas upgrade and purification equipment. LeForce pf. at 3-4.

37. VGS operates a "gas island" in Middlebury that provides natural gas to the College. The gas island is supplied by compressed natural gas transported in trucks, which is decompressed to normal gas pipeline pressures and injected into underground distribution pipes installed recently in Middlebury. Service under this gas island arrangement is provided pursuant to VGS's interruptible sales service tariff. LeForce pf. at 7-8.

38. The Project site is to the south and approximately six miles from the gas island. VGS will build a spur distribution line from the gas island to the M&R Station. LeForce pf. (9/14/15) at 3-4; Smith pf. (9/14/15) at 8; exh. LRNG-CL-4.

39. The spur distribution line will be installed in rights-of-way along existing roads and will be incorporated into VGS's planned natural gas transmission and distribution network expansion

in and around Addison County, Vermont, for which a certificate of public good has been issued.² LeForce pf. (9/14/15) at 3-4; Smith pf. (9/14/15) at 8; Amended 248 Petition at 3.

40. Lincoln RNG represents that VGS has obtained a Salisbury Town permit to construct the spur distribution line and will obtain a permit from the Town of Middlebury that will reflect final routing revisions. LeForce pf. (9/14/15) at 5-6.

41. Lincoln RNG represents that VGS has received a Section 404 Army Corps Permit #NAE-2013-1969, dated December 14, 2014, and a Vermont individual wetland permit for construction of the distribution line that will be amended to reflect final routing revisions. Lincoln RNG further represents that VGS will apply for a flood hazard area and river corridor individual permit and an ANR construction-phase stormwater permit, which will also encompass construction of the M&R Station. LeForce pf. (9/14/15) at 5; Smith pf. (11/23/15) at 5-6; Joshua L. Sky, Lincoln RNG (“Sky”) pf. at 4.

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

42. The Project will not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of the municipal legislative bodies, and the land conservation measures contained in the plan of any affected municipality. This finding is supported by findings 43 through 47, below.

43. The Goodrich Farm is under protection of a Vermont Land Trust easement. The Vermont Land Trust has authorized construction and operation of the Project’s RNG facility within the farm complex. Smith pf. at 12; exh. LRNG-DS-8.

44. The Salisbury Planning Commission submitted to the Petitioner a letter of support for the Project, stating that the Project is “consistent with the intent of the [town] plan and regulations,” and that “[t]he proposed site on the Goodrich Farm is within the area designated in the Town Plan as a Rural Region in which ‘agricultural use should continue to be the primary land use.’ The plan states that ‘[a]gricultural-related businesses or adaptive reuse of agricultural buildings should be encouraged’ in the region.” Smith pf. at 20-21; exh. LRNG-DS-12 at 1.

2. See *Petition of Vermont Gas Systems, Inc.*, Docket No. 7970, Order of December 23, 2013.

45. The Salisbury Selectboard filed with the Petitioner a letter of support, stating that it “is in concurrence with the Planning Commission’s findings and decisions and [has] no objections to this project[.]” Smith pf. at 20-21; exh. LRNG-DS-11.

46. The Middlebury Selectboard submitted a letter to the Petitioner, stating that the Project is “directly in line with many of the stated goals and purposes of the Town Plan” and “substantially furthers” the Town Plan’s energy goals and objectives. The Middlebury Selectboard also filed a letter with the Board, expressing “strong support” for the Project. Smith pf. at 21; exh. LRNG-DS-13.

47. The Addison County Regional Planning Commission (“ACRPC”) submitted a letter to the Petitioner in support of the Project, stating that the Project “supports the type of development envisioned in the regional plan,” which includes goals and policies related to strengthening diversified agriculture and promoting local, renewable energy sourcing and usage. Exh. LRNG-DS-14.

Need for Present and Future Demand for Service

[30 V.S.A. § 248 (b)(2)]

48. The Project is required to meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures, and energy efficiency and load management measures. This finding is supported by findings 49 through 51, below.

49. Middlebury College expects to utilize 75% of the Project’s RNG output towards achieving the College’s carbon neutrality and campus sustainability policy objectives. Norton pf. at 4-5; Smith pf. at 19; exh. LRNG-PJN-2 at 2.

50. VGS will purchase some or all of the remainder of the Project’s RNG output during the first five years of the facility’s operation. LeForce pf. (9/14/15) at 8; Smith pf. at 19; Smith 231 pf. at 4.

51. Lincoln RNG is exploring the potential for utilizing the RNG product as an alternative vehicle fuel. Smith pf. at 20, 24.

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

52. The Project will not have an adverse impact on system stability or reliability. This finding is supported by findings 53 through 63, below.

53. VGS has concluded that the interconnection of the RNG Facility and the injection of RNG into VGS's natural gas distribution system will have no potential for any negative impacts on the stability and reliability of VGS's system and its associated facility operations. LeForce pf. at 6-9; LeForce pf. (9/14/15) at 8-9.

54. VGS's determination of no negative impacts is based on: (1) documented evidence of the compatibility of the RNG facility's output with required tariff specifications for pipeline-grade natural gas, and (2) the capability of VGS-installed and operated equipment to continually monitor the Project's RNG output and to disconnect the Project facility and RNG pipeline from VGS's distribution system if the RNG's qualities do not meet required specifications. Amended 248 Petition at 3.

55. VGS has concluded that the interconnection of the RNG facility and the injection of RNG into VGS's natural gas distribution system will have no potential for any negative impacts on the stability and reliability of VGS's system and associated facility operations. LeForce pf. at 6-9; LeForce pf. (9/14/15) at 8-9.

56. VGS will require by contract that the Project's RNG output be compatible with the tariff specifications for pipeline-grade natural gas set forth in the Trans Canada Pipeline ("TCPL") Tariff, which establishes specifications for gas quality. LeForce pf. at 5-6.

57. After the Project's commissioning, the M&R Station will allow VGS to measure and meter the RNG, regulate the pressure of the RNG going into the VGS distribution network, and monitor the RNG to ensure that it meets the required TCPL Tariff specifications. LeForce pf. at 3-4.

58. Lincoln RNG will develop and utilize a quality assurance plan for monitoring the Project's fuel stocks and RNG output. The plan will itemize fuel stocks in use and any associated potential contaminants. The plan will also provide notification to the Department and to the Vermont Agency of Agriculture, Food and Markets ("AAFM") of any changes in fuel source usage, thereby allowing VGS to adjust testing protocols to reflect any such changes. The Department will review and approve the proposed plan and, once approved, the plan will be filed with the Board. LeForce pf. at 5-6; Smith pf. at 14-15.

59. The M&R Station will include a remote control valve, a communications cabinet, and transducers that will enable VGS's gas control department to remotely shut off the flow of RNG into the station and distribution network if the RNG quality deviates from the standards established in the TCPL Tariff. This equipment will transmit flow, pressure, and temperature information through the

supervisory control and data acquisition (“SCADA”) system to the gas control department so that conditions can be monitored on a real-time basis. LeForce pf. at 6.

60. RNG that is delivered to the interconnection station will be un-odorized. VGS will install an odorizer system in order to comply with state and federal requirements for odorization of gas. LeForce pf. at 6.

61. Isolation valves will be installed at both the inlet and outlet piping of the M&R Station to isolate any of the monitoring and control equipment described above for maintenance, repair, or replacement. LeForce pf. at 6.

62. The RNG will be conveyed from the outlet flange of the gas upgrade equipment to the M&R Station through a length of pipe. The pipe will be owned separately by Lincoln RNG and installed and maintained with assistance from VGS. The pipe will be installed by the same vendor utilized by VGS to construct the distribution main to the gas island in Middlebury. VGS will consult with Lincoln RNG to assist with establishment of a maintenance and inspection program that provides for the location and marking of service lines, the detection of leaks, and the management of a pipe of this nature. VGS will also work with Lincoln RNG to ensure that maintenance and inspection comply with applicable state and federal oversight and that all necessary documentation is submitted to the Department. The maintenance and inspection program will be filed with the Department for approval. LeForce pf. at 4.

63. The Project’s spur distribution line has been devised as an integrated section of VGS’s overall expansion of its Addison County distribution system or, if the overall system build-out does not occur, as part of the Middlebury gas island. VGS has independently provided for the line’s design and will independently operate and maintain the line. The line will be installed and maintained in accordance with all applicable codes and regulations. LeForce pf. (9/14/15) at 5, 11-13.

Economic Benefit to the State

[30 V.S.A. § 248(b)(4)]

64. The Project will result in an economic benefit to the State and its residents. This finding is supported by findings 65 through 70, below.

65. The Project, including the associated distribution line, will result in Middlebury College’s replacement of a substantial volume of foreign-sourced fossil fuel usage with a local, renewable fuel source. Norton pf. at 13; Smith pf. at 23.

66. The Project will create approximately three full-time employee positions. Construction of the facility will employ a number of local tradespeople. Smith pf. at 23.

67. The Project is designed as a “community digester” that will support dairy farmers and dairy farming in the local area. In exchange for manure, supplier farms will receive by-product bedding and cash payments. The Project’s utilization of farm wastes will thus provide a secondary revenue stream to local farms. Smith pf. at 23-24; Norton pf. at 8-9.

68. The Project will enable VGS to offer RNG as an alternative product to its customers. The RNG facility is also intended to operate as a potential source of compressed RNG vehicle fuel. Smith pf. at 24; LeForce pf. (9/14/15) at 10-11.

69. Installation of the spur distribution line will allow for the provision of gas service that would otherwise not be available to VGS customers. Amended 248 Petition at 3.

70. The Project will be financed with minimal grant funds and without tax credits, thereby demonstrating the evolution and maturation of the renewable energy marketplace in Vermont. Norton pf. at 10.

**Aesthetics, Historic Sites, Air and Water Purity,
the Natural Environment, and Public Health and Safety**

[30 V.S.A. § 248(b)(5)]

71. The Project will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment, the use of natural resources, or public health and safety, with due consideration having been given to the criteria specified in 10 V.S.A. §§ 1424a(d) and 6086(a)(1) through (8) and (9)(K), and greenhouse gas impacts. This finding is supported by findings 72 through 184, below, which give due consideration to the criteria specified in 10 V.S.A. § 1424a(d) and 10 V.S.A. §§ 6086(a)(1) through (8) and (9)(K).

Public Health and Safety

[30 V.S.A. § 248(b)(5)]

72. The Project will not result in an undue adverse effect on public health and safety. This finding is supported by findings 73 through 76, below.

73. The Petitioner represents that Weltec, the principal equipment vendor for the Project, has an established record of installing more than 300 systems in turnkey format and is noted for its provision of safety training and post-commission support. Petitioner Letter (11/30/15) at 3; exh. LRNG-DKS-8 at 3.

74. Weltec will oversee the commissioning of the Project's biogas production and gas upgrade and purification system. Along with operational and maintenance support for the biodigester system, Weltec will provide overall operator training and continuous, on-line "after-care" monitoring and maintenance support for the post-commissioning operation of the gas upgrade and purification equipment. Steckler pf. (9/14/15) at 4.

75. The M&R Station enclosure will include protective safety equipment, including isolation valves, a chromatograph, a remote control valve, a gas filter, a gas meter, gas regulators, an odorizer, a gas relief valve, and a small communications cabinet. The M&R Station will allow VGS to measure the RNG, regulate the pressure going into the VGS distribution network, monitor the RNG to ensure that it meets VGS gas quality standards, and odorize the RNG. LeForce pf. at 4.

76. The Project's associated distribution line will be in compliance with all applicable safety codes for the operation of a natural gas pipeline system. The line will be designed, constructed, and operated to meet all applicable state and federal codes and standards, and VGS will work with Lincoln RNG to ensure that the pipeline is installed, maintained, inspected, and operated consistent with applicable state and federal oversight. A maintenance and operation program will be established to provide for locating services (*e.g.*, Digsafe), leak detection, and appropriate management of the pipeline. LeForce pf. at 4-5 and pf. (9/14/15) at 11-12.

Discussion

In response to public comments regarding public safety, the Petitioner represents that the use of proven equipment suppliers to provide a turnkey facility will help to ensure the facility's safe and effective operation. The Petitioner further represents that the retention of VGS to construct and operate the M&R Station will ensure the safety and reliability of VGS's distribution system as well as the oversight of the RNG facility's operation at its outlet.

We find that the Petitioner has committed to adhering to regulatory standards and requirements to address the potential impacts concerning public safety. Those commitments are reflected in the findings, above, and in the conditions agreed to by the Petitioner in its filings and incorporated herein and in the Project's CPG. Therefore, the criterion for public safety is met.

Air Pollution and Greenhouse Gas Impacts
[30 V.S.A. § 248(b)(5); 10 V.S.A. § 6086 (a)(1)]

77. The Project will not result in undue air pollution or greenhouse gas impacts, and the Project's associated distribution line is expected to have a *de minimis* impact. These findings are supported by findings 78 through 93, below.

78. The RNG facility will result in emissions of carbon dioxide through off-gas venting by the gas upgrade and purification equipment. Steckler pf. (9/14/15) at 2, 12.

79. Hydrogen sulfide emissions will be almost entirely removed from the waste stream, resulting in air emissions from the off-gas venting of less than 1 ppm. Steckler pf. (9/14/15) at 12; exh. LRNG-DKS-8 at 21.

80. The RNG facility will utilize a two-stage pre-treatment process to ensure that hydrogen sulfide emission levels are less than 1 part per million. The first pre-treatment stage will introduce iron hydroxide as part of the digestion process; the iron hydroxide will combine with sulfur to produce iron sulfide, which is removed as part of the depleted digestate. The second pre-treatment stage will entail the removal of the remaining hydrogen sulfide through a carbon polishing filtration process. Steckler pf. (9/14/15) at 6; exh. LRNG-DKS-8 at 16.

81. The RNG facility will be subject to ANR's Air Pollution Control Division regulations governing nuisance and odors. Exh. LRNG-DS-28.

82. The ANR Air Permitting and Engineering Section of the Department of Environmental Conservation's Air Quality and Climate Division will issue a permit to provide for air quality monitoring of the facility. Smith pf. (11/23/15) at 8; exh. LRNG-DS-28.

83. ANR has determined that the Project's carbon dioxide emissions comply with ANR's standards for approval without the need for an additional air pollution control permit. Lincoln RNG is applying for a determination letter that will provide for annual reporting and registration of air emissions with ANR in compliance with ANR's air pollution control regulations. Smith pf. at 31; Smith pf. (9/14/15) at 7.

84. The Project's RNG facility will generate carbon dioxide emissions from the flare installed to burn: (1) excess gas from the biodigester and gas upgrade equipment; and (2) unsuitable gas from the gas upgrade equipment. Because of the limited, known fuel substrates to be employed, use of the flare for the venting of excess biogas production or unsuitable gas produced by the upgrade equipment will be necessary only in limited instances. In such cases, the digester system may be "tuned down" or operated in anticipation of scheduled maintenance. Exh. LRNG-DKS-8 at 23-24.

85. The flaring equipment will ensure that gas is incinerated at a temperature of approximately 800 degrees Celsius. The flaring system will be fully enclosed, with a flame concealed in a protective flare stack. The flare's ignition system will be electronic and will not have a pilot light that can blow out. The flaring capacity will be 99% of gas production (800 m³/h maximum/808 m³/h biogas production). Exh. LRNG-DKS-8 at 9.

86. Lincoln RNG will operate the flares in accordance with the manufacturer's operation and maintenance recommendations. Lincoln RNG will register with ANR annually any flaring air emissions that occur in accordance with ANR's air pollution control regulations. Smith pf. at 33-34.

87. The Petitioner represents that it is working proactively with ANR's Air Quality Division to establish appropriate regulatory oversight of any flaring emissions that might occur. The Petitioner further represents that the emission of hydrogen sulfide gas will be the only potential source of odor resulting from the Project's operation and that emissions will amount to less than 1 part per million. Exh. LRNG-DS-28; Petitioner Letter (11/30/15) at 1.

88. The anaerobic digestion of raw manure at the Project's RNG facility is expected to reduce odors associated with manure storage and spreading on the host and supplier dairy farms. Smith pf. at 27-28.

89. The Project's RNG facility is expected to reduce the chemical oxygen demand and pathogen population present in the digested liquid residue that will be spread and applied by the host and off-site supplier farms as manure fertilizer, as compared to the spreading and application of undigested manure. The use of the more soluble liquid residue derived from the separation of post-digestion solids as manure fertilizer is expected to allow for the greater solubility of nitrogen and phosphorus in application. Smith pf. at 34.

90. The RNG facility is expected to reduce the raw methane greenhouse gas emissions from the manure lagoons on both the host and off-site fuel source dairy farms. On the host farm, the manure will be diverted directly from the open storage lagoons to the sealed digester tanks, in a closed piping system. On supplier farms, manure will be removed daily or every other day from the lagoons and delivered to the RNG facility's reception tank for immediate infusion into the closed digester tanks. Smith pf. at 28-29.

91. The RNG facility and its interconnection with VGS's pipeline distribution system will enable the College to substitute RNG for its current annual use of 640,000 gallons of #6 heating fuel, a substitution that is expected to result in lower carbon dioxide emission levels than combustion of the equivalent volume of #6 heating oil. Smith pf. at 29; exh. LRNG-PJK-1 at 7.

92. Trucking operations, electricity usage, and biodigester boiler operation associated with the RNG facility's operation will produce carbon emissions. Steckler pf. at 20-21; Smith pf. at 30.

93. Construction of the Project's associated distribution line will result in *de minimis* greenhouse gas emissions, which will be produced by an excavator operating for approximately two months. LeForce pf. (9/14/15) at 15-16.

Discussion

In response to public comments regarding potential odor levels, the Petitioner acknowledges two odor issues associated with the Project: (1) odors associated with the handling of raw manure supplies; and (2) odors associated with the operation of the Project's gas processing equipment.

Based on the findings above and the testimony submitted by the Petitioner, we find that the Petitioner has committed to adhering to regulatory standards and requirements to address the potential impacts from odors associated with the Project. Those commitments are reflected in the findings above and the conditions agreed to by the Petitioner in its filings and incorporated herein and in the Project's CPG. Therefore, the criteria for air pollution and greenhouse gas impacts are met.

Outstanding Resource Waters

[30 V.S.A. § 248(b)(8); 10 V.S.A. § 1424a(d)]

94. The RNG facility, the M&R Station, and the Project's associated distribution line will not be located in the vicinity of any waters that have been designated as Outstanding Resource Waters. DeWolfe pf. at 9; Sky pf. at 6.

Water Pollution

[10 V.S.A. § 6086(a)(1)]

95. The Project will not result in undue water pollution. This finding is supported by finding 96, below, and by the specific findings under the criteria of 10 V.S.A. §§ 6086(a)(1)(A) through (G), below.

96. Lincoln RNG represents that it is applying for a construction general permit and a storm water discharge permit from ANR's Watershed Management Division and an air quality monitoring permit from ANR's Air Quality and Climate Division. DeWolfe pf. at 12; Smith pf. (11/23/15) at 5.

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

97. The RNG facility, the M&R Station, and the Project's associated distribution line will not have an undue adverse impact on headwaters because they are not located in an area that meets any of the statutory sub-criteria of a headwater. DeWolfe pf. at 9; Sky pf. at 6.

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

98. The Project will meet applicable health and Vermont Department of Environmental Conservation ("VT DEC") regulations regarding the disposal of wastes. This finding is supported by findings 99 through 116, below.

99. Lincoln RNG represents that the Project's construction general permit will account for stormwater runoff during the construction of the RNG facility, the M&R Station, and the associated distribution line. DeWolfe pf. at 4, 7, 12; Sky pf. at 7.

100. Lincoln RNG represents that the Project's associated distribution line will be constructed to comply with health and VT DEC regulations. Sky pf. at 8-9.

101. Lincoln RNG will apply for a stormwater discharge permit in conformance with the applicable standards of ANR's Vermont Stormwater Management Manual for water quality, groundwater recharge, channel protection, and overbank flood protection. The permit application will incorporate the site plans used for the stormwater discharge permit obtained by IES d/b/a Panther Bedding for the manure processing facility built in 2014. Smith pf. at 11; DeWolfe pf. at 4, 12; exh. LRNG-DS-6.

102. Lincoln RNG represents that the associated distribution line will not result in an increase of impervious surfaces and so will not require operational storm waste discharge permitting. Sky pf. at 7.

103. The RNG facility's gas upgrade and purification equipment will produce an estimated 60 gallons per day of condensate water containing .04 mg of oil per liter of water. The condensate water will be filtered with a zeolite filtration system to remove the oil residue. Zeolite is a granulated, non-liquid substrate with an active ingredient of ammonium compounds that attract hydrocarbons from the water. Once filtered, the water may be discharged directly into the ground or recycled through the digester. Smith pf. (11/23/15) at 4.

104. During RNG system operation, the filtered water will be tested daily to ensure the filtration process is performing as required to remove the oil residue. Based on this testing, additional

filtration processes may be administered, if required. If further corrective filtration processes are required, the water may be captured and transported for commercial treatment off-site because of the minimal amount of water discharge involved. Smith pf. (11/23/15) at 4.

105. ANR's indirect discharge permit section has determined that the oily water discharge, if it can be adequately treated as a separate waste stream, may be treated through the zeolite filtration system and discharged without a permit. Exh. LRNG-DS-26.

106. ANR's indirect discharge permit section has further determined that the spent zeolite medium used to filter the water will need to be disposed of as a hazardous or solid waste material. Exh. LRNG-DS-26.

107. Before disposal of the zeolite filtering medium, testing and consultation with ANR and the equipment supplier will be conducted to determine how best to properly dispose of the waste. Smith pf. (11/23/15) at 4.

108. According to Lincoln RNG, representatives of ANR's indirect discharge permit program and the AAFM agree that the most feasible means of disposal is to discharge the waste water into the existing manure pit, where it will be diluted and re-circulated through the treatment systems. Chemical analyses of the waste streams are being assessed to determine the best means of disposal and whether they can be discharged without additional treatment. The Project will obtain an indirect discharge permit. DeWolfe pf. at 7-8; DeWolfe pf. (9/14/15) at 2; exh. LRNG-DKS-8 at 22.

109. The RNG facility will generate waste water in the form of depleted liquid manure digestate. The existing manure lagoons operated by the host and supplier farms have sufficient storage capacity to retain the depleted digestate to ensure that no spreading will occur during winter months. Gary Freeguard, Lincoln RNG ("Freeguard") pf. at 8-9.

110. The host and supplier farms will dispose of the depleted liquid digestate in accordance with their nutrient management plans to ensure the protection of ground and surface waters. Smith pf. at 35.

111. Lincoln RNG represents that, according to ANR's Division of Solid Waste, the disposition of fuel substrates utilized during the start-up and initial operating periods of the RNG facility does not require additional waste disposal permitting. Smith pf. at 35; DeWolfe pf. at 7-8; exh. LRNG-DS-16.

112. To enable effective operation of the M&R Station, Lincoln RNG's quality assurance plan will itemize the fuel substrates in use and any changes in fuel substrates over time. Lincoln RNG will inform AAFM and ANR's Division of Solid Waste of any such changes, to enable proper oversight of the disposition of liquid residues. LeForce pf. at 5-6; Smith pf. at 14-15.

113. The pump and control room building has an operating composting toilet for the disposal of human waste. This toilet is permitted by a wastewater system and potable water supply system permit obtained previously as part of the Act 250 permitting process for the existing manure separation plant. Exh. LRNG-DS-7.

114. The RNG facility will utilize food-processing residuals; it will not utilize any food residuals. Smith pf. at 15.

115. ANR's Solid Waste Division staff has informed Lincoln RNG that the producer of the brewery waste that will be used as a fuel source has an indirect discharge permit for that waste. Lincoln RNG represents that if the brewery waste is used, this existing permit will be amended to account for the new disposal method through use of the RNG facility's digester. Smith pf. (11/23/15) at 4, n. 2; exh. LRNG-DS-29.

116. ANR's Solid Waste Division staff has determined that if the spent carbon pellet medium that will be used to pre-treat and remove sulfur dioxide from the biogas before its infusion into the gas upgrade and purification equipment is not a hazardous waste or a liquid, then it may be disposed of in a municipal solid waste landfill. Lincoln RNG will undertake testing and consultation with ANR and the supplier to determine the proper means for disposal of the filtering medium. Smith pf. (9/14/15) at 14; Smith pf. (11/23/15) at 4; exhs. LRNG-DS-27, LRNG-DSK-8 at 22-23.

Water Conservation

[10 V.S.A. §§ 6086(a)(1)(C)]

117. The Project will not have an undue adverse effect on water conservation. This finding is supported by findings 118 and 119, below.

118. The gas upgrade plant and hydrogen sulfide removal equipment require approximately 1,200 gallons of water per day. A new drilled well will be established for this supply. DeWolfe pf. at 8; exh. LRNG-DSK-8 at 12.

119. Minimal water will be required for construction of the Project's associated distribution line; operation of the distribution line will not require the use of water. Sky pf. at 9.

Floodways

[10 V.S.A. § 6086(a)(1)(D)]

120. The Project will not cause any undue adverse impacts on floodways because the Project is not within a floodway. DeWolfe pf. at 9. This finding is supported by findings 121 through 125, below.

121. The construction and operation of the Project's associated distribution line will not permanently restrict or divert the flow of flood waters, or endanger the health, safety, or welfare of the public or of riparian owners during flooding. Sky pf. at 10-11.

122. Any unavoidable activities within the river corridors have been designed to minimize potential impacts and are subject to review and permit approval by ANR's Watershed Management Division. Sky pf. at 11.

123. The Project's distribution line will cross two streams within designated river corridors: the Middlebury River and an unnamed tributary of the Middlebury River. Both streams will be crossed using horizontal directional drilling ("HDD"), as provided in the Project's erosion prevention and sediment control ("EPSC") plans, to achieve sufficient depth below the channel and river corridor to avoid direct impacts during project construction and to minimize the potential of pipe exposure over time due to lateral movement of the channels. Sky pf. at 10.

124. The distribution line will require review of the two river corridor crossings under VT DEC's Flood Hazard Area and River Corridor Rule. Sky pf. at 10.

125. Line construction will not occur within any floodways. A portion of the distribution line's construction, at the crossing of the Middlebury River near the intersection of Shard Villa Road and Three Mile Bridge Road will occur in a floodway fringe associated with the Middlebury River. This construction, including the installation of below-grade pipe primarily through HDD in this location, will not have an impact on the floodway fringe. Sky pf. at 10-11, 13.

Streams

[10 V.S.A. § 6086(a)(1)(E)]

126. The RNG facility and the M&R Station will not have undue adverse impacts on streams because they will not be located in close proximity to any streams. DeWolfe pf. at 10. This finding is supported by findings 127 through 129, below.

127. There are four stream channels in the vicinity of the distribution line's route. The design and implementation of measures to protect the natural condition of streams will ensure that construction of the Project's associated distribution line will not have an adverse impact on stream channels. Sky pf. at 11; exh. LRNG-JLS-2 at Attachment 1.

128. The use of HDD is intended to minimize any temporary or permanent stream channel impacts. Five feet of cover will be provided over perennial stream crossings and 10 feet of cover will be provided at the Middlebury River crossing. EPSC measures will be implemented to protect water quality during construction. The co-location of the pipeline immediately adjacent to

roadways, new encroachments, and permanent clearing along stream corridors will be minimized. Sky pf. at 11-12.

129. Riparian buffers will be designated adjacent to perennial and intermittent streams along the pipeline route consistent with ANR's Riparian Buffer Guidance. There will be minimal tree clearing and vegetation removal in riparian buffers, with the exception of a five-foot-wide walking path located on each side of the Middlebury River. The edges of the two paths will extend to five feet from the river's edge and will be maintained annually. Sky pf. at 12; Smith pf. (11/23/15) at 6; exh. LRNG-JLS-2.

Shorelines

[10 V.S.A. § 6086(a)(1)(F)]

130. The RNG facility and M&R Station will not have an undue adverse impact on shorelines because they will not be located on a shoreline. DeWolfe pf. at 10.

131. One section of the Project's associated distribution line will be located near the shoreline of the Middlebury River and will cross under that river. Design and construction methods are intended to ensure that there will be no adverse impact on this shoreline. Sky pf. at 11-12.

Wetlands

[10 V.S.A. § 6086(a)(1)(G)]

132. The Project will not have undue adverse impacts on significant wetlands because the site for the RNG facility and M&R Station does not include any significant wetlands. Exh. LRNG-RDD-1. This finding is supported by findings 133 and 134, below.

133. A Class 3 wetland was identified adjacent to the roadway during installation of the manure processing plant. This area has been stabilized according to erosion control plans. The digester tanks and gas upgrade equipment will not be adjacent to the designated wetland area, and their installation will have no impact on the area. DeWolfe pf. at 10.

134. The Project's associated pipeline will have no permanent or temporary wetland impacts and will have only temporary impacts on one wetland buffer. HDD measures will be employed as the principal method of impact avoidance for seven Class 2 wetlands and/or wetland buffers located along the pipeline route. Pursuant to the Project's EPSC plans, pipeline demarcation and perimeter controls will be reinforced up to 50 feet beyond the edge of wetland boundaries, where needed. Use of these measures will result in no wetland impacts and in 379 square feet of wetland buffer impact.

The wetland buffer impact has been permitted by the VT DEC Wetlands Program. Sky pf. at 13-14; exh. LRNG-JLS-3.

Sufficiency of Water and Burden on Existing Water Supply

[10 V.S.A. §§ 6086(a)(2) and (3)]

135. The RNG facility will not impose any burden on an existing water supply. This finding is supported by findings 136 through 138, below.

136. A new drilled well will be established to provide for the minimal initial water charging requirements for the facility. Construction of the associated distribution line will require minor amounts of water for dust suppression, equipment washing, and HDD. Construction-phase water will be provided independently by pipeline operators. The distribution line will not require water to operate. Sky pf. at 14-15.

137. The new well will be remote from any other wells or water supplies. Petitioner Letter (11/30/15) at 4.

138. The pipeline will not cross through any designated source protection areas for public water supplies; its terminus will be on the opposite side of U.S. Route 7 from a water supply for a motel at that locale. Sky pf. at 15; exh. LRNG-JLS-4.

Discussion

In response to public comments regarding public water supplies, the Petitioner states that it expects the Project to have no impact on wells or public water supplies. In support of its position, the Petitioner submitted with its response a letter from VGS that maintains that methane gas is lighter than air, and it would be difficult to foresee a situation where it could impact any wells, given the shallow depth of the pipeline.

We find that the Petitioner has committed to adhering to regulatory standards and requirements to address the potential impacts concerning public water supplies. Those commitments are reflected in the findings above and the conditions agreed to by the Petitioner in its filings and incorporated herein and in the Project's CPG. Therefore, the statutory criteria concerning the sufficiency of water and water supply are met.

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

139. The Project will not result in unreasonable soil erosion or a reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result. This finding is supported by findings 140 through 142, below.

140. The site plan for the existing manure processing facility accounted for the future presence of digester tanks and gas upgrade equipment with regard to potential soil erosion. The site plan for the RNG facility does not change the footprint of the existing structures other than accounting for a larger, underground reception tank and the M&R Station. DeWolfe pf. at 7.

141. Lincoln RNG will apply for a construction general permit to account for erosion control during construction of the new digester and gas upgrade equipment and the installation of the reception tank. DeWolfe pf. at 7, 12.

142. The Project's associated distribution line will be constructed in accordance with a construction general permit and will not result in an appreciable change in land form or cover. Sky pf. at 4, 15-17.

Transportation

[10 V.S.A. § 6086(a)(5)]

143. The Project will not cause unreasonable congestion or unsafe conditions with respect to the use of highways, waterways, railways, airports, airways, or other means of transportation, existing or proposed. This finding is supported by findings 144 through 152, below.

144. The RNG facility will be relatively close to U.S. Route 7, which will be utilized for north/south truck traffic; town roads will be utilized only as feeder routes to and from Route 7. The off-site farms that will be supplying manure and corn to the Project are located either on Route 7 or on State Highway 30 near Route 7. This supply configuration will maximize the use of Route 7 and minimize the use of town roads. Freeguard pf. at 4.

145. Trucking operations associated with the Project will occur only during normal business hours, Monday through Friday from 8:00 A.M. to 5:00 P.M. and Saturday from 9:00 A.M. to 1:00 P.M. Freeguard pf. at 4.

146. Operation of the RNG facility is anticipated to involve 4,750 vehicle trip ends ("VTEs") per year, including 1,800 VTEs for manure transport and back-haul deliveries of liquid residue to the off-site manure supplier farms, 2,750 VTEs for deliveries of corn to the RNG facility and off-site

deliveries of animal bedding and soil enrichment byproducts, and 200 VTEs for delivery of brewery wastes. Freeguard pf. at 5-6.

147. The Project is expected to result in a reduction of 600 current VTEs of manure transport truck traffic, resulting from the replacement of tanker load field spreading with dragline spreading by the Goodrich Farm. Freeguard pf. at 6.

148. In total, there is expected to be a net of 4,150 new VTEs, annually. Freeguard pf. at 6.

149. The Project's operation is expected to result in a net increase of 14.5 vehicle trips per day above the 12 one-way vehicle trips per day authorized by the conditional use permit for the existing manure processing plant. Freeguard pf. at 6-7; exh. LRNG-DS-3 at 5.

150. There is a posted 35 mph speed limit for this stretch of the road, and visibility is adequate to make the intersection safe for the anticipated amount of traffic to and from the facility. Smith pf. at p. 37; exh. LRNG-DS-3 at 2.

151. Lincoln RNG represents that the proposed location of the new access drive conforms to Vermont Department of Transportation Standard B-71. The roadbed width of the new service driveway is 18 feet with a slope of less than 10 percent; turning radius, turning area, and clear width and height for commercial truck traffic and equipment are all as required. Conditional use and access permits were granted by the Town for the existing manure processing facility. Exh. LRNG-DS-3 at 2; Smith pf. at 37-38.

152. Installation of the associated distribution line will have minimal impacts on the use of highways and other means of transportation. Construction time will total approximately two months. Virtually all of the spur distribution line will be installed within road rights-of-way or shoulders. Traffic control measures will be employed to facilitate the maintenance of one lane of traffic during construction of the distribution line. LeForce pf. (9/14/15) at 16.

Discussion

Lincoln RNG stated in its Petition that trucking operations associated with the Project will occur only during normal business hours, Monday through Friday from 8:00 A.M. to 5:00 P.M. and Saturday from 9:00 A.M. to 1:00 P.M., with no trucking operations on major federal holidays. According to Lincoln RNG, these hours are consistent with the trucking operations schedule established in the conditional use permit granted for the existing manure separation plant.

ANR has proposed a CPG condition, to which Lincoln RNG has agreed, that would limit truckload deliveries to the hours of 7:00 A.M. to 7:00 P.M. Monday through Friday and 8:00 A.M. to 1:00 P.M. on Saturday, with no deliveries on Sundays or on state or federal holidays.

We will adopt the weekday and weekend limitations on truck deliveries that Lincoln RNG has proposed in its Petition because the more limited hours will help to minimize traffic sounds associated with the Project while addressing ANR's concerns. We will adopt, as well, ANR's proposal to prohibit truck deliveries on state holidays as well as on Sundays and federal holidays. Accordingly, we approve the following condition with respect to truck deliveries associated with the Project:

The CPG Holder shall be limited to 20 truckload deliveries of manure per day. Deliveries shall take place between the hours of 8:00 A.M. and 5:00 P.M. Monday through Friday, and 9:00 A.M. to 1:00 P.M. on Saturday. No deliveries shall take place on Sundays or state or federal holidays.

Educational Services

[10 V.S.A. § 6086(a)(6)]

153. The Lincoln RNG facility, M&R Station, and associated distribution line will not cause an unreasonable burden on educational services. This finding is supported by findings 154 and 155, below.

154. None of the Project components will have a negative impact on the local school system. Smith pf. at 38; LeForce pf. (9/14/15) at 17.

155. The construction of the distribution line will be limited in duration and will not affect school bus service. LeForce pf. (9/14/15) at 17.

Municipal Services

[10 V.S.A. § 6086(a)(7)]

156. The Project will not result in an unreasonable burden on the ability of the Town of Salisbury to provide municipal or governmental services because the Project will require neither municipal nor governmental services. This finding is supported by findings 157 through 159, below.

157. The Project will not impose any burden on municipal services. Smith pf. at 38.

158. The access roadway to the RNG facility is designed to accommodate heavy truck and equipment traffic. Road surfaces will be protected and restored to original or better condition if affected by construction. Smith pf. at 38; LeForce pf. (9/14/15) at 16.

159. Lincoln RNG will employ traffic control measures that will enable the maintenance of one lane of traffic during construction. LeForce pf. (9/14/15) at 16.

Aesthetics, Historic Sites, or Rare and Irreplaceable Natural Areas

[10 V.S.A. § 6086(a)(8)]

160. The Project will not have an undue adverse impact on the scenic or natural beauty of the area, aesthetics, historic sites, or rare and irreplaceable natural areas. This finding is supported by findings 161 through 177, below.

Aesthetics

161. The Project will not have an undue adverse effect on aesthetics. This finding is supported by findings 162 through 168, below.

162. The leased site for the RNG facility and the M&R Station is situated on a relatively large and isolated dairy operation, with open land in all directions except to the east, where the town road is located. The RNG facility complex will be approximately 700-900 feet to the west of the intersection of the access road and the town road. The existing farm building complex lies to the north of the RNG facility and is expected to obscure views of the facility from the roadway. The farm operation is quite isolated in the other three directions. Smith pf. at 36.

163. There are two neighboring houses in view of the Project site. One house is located on the other side of the town road and across from the access road, to the east about 800 feet from the RNG facility. The other house is the Goodrich farmhouse, which is currently unoccupied. This house is to the east, approximately 500 feet from the RNG facility complex. All other neighboring houses are a minimum of 1,000 feet, either north or south, along the road from the farm. Smith pf. at 26.

164. With farm buildings obscuring the view of the Project from the road to the north, the RNG facility will be viewable only when traveling on Route 7 from the south and from one neighboring house. Smith pf. at 26.

165. The RNG facility's complex will be integrated into the adjacent dairy farm building complex. The new digester tanks and gas upgrade equipment, along with the existing two Project buildings, will be located immediately adjacent to the existing building complex. The digester tanks will be constructed of materials and color similar to those of the existing buildings. Smith pf. at 25; exhs. LRNG-DS-1, LRNG-DS-2.

166. The M&R Station will be enclosed by a seven-foot chain link fence. Other than the fence, little of the M&R Station will be visible from the road. Smith pf. at 26.

167. The associated distribution line will not have an undue adverse effect on aesthetics or the scenic quality of the area. The line will be located primarily within existing public road rights-of-way and fully underground. As a whole, there will be minimal change to the visual

landscape due to limited tree clearing associated with the Middlebury River crossing. Sky pf. at 17-18; exh. LRNG-JLS-5.

168. Operation of the RNG facility will require no nighttime lighting. The only exterior lights will be switched entry lights for the two Project buildings. The company sign will be unlighted. Smith pf. at 26-27.

Sound

169. There will be some sound associated with the RNG facility generated by the digester tank motors and the compressor for the gas upgrade equipment. The compressor will produce sound in the range of 85-90 dBA at three feet. Gary Freymiller, Lincoln RNG ("Freymiller") pf. (9/14/15) at 1; exhs. LRNG-DS-15 at 1-3, LRNG-DKS-8 at 22.

170. Sound levels produced by the compressor are expected to be 64-70 dBA at 10 feet from the compressor's housing, thus exceeding the desired 65 dBA level. Freymiller pf. (9/14/15) at 1; exh. LRNG-DS-15 at 3.

171. Sound levels at 32 feet from the nearest dwelling are expected to be approximately 41 dBA and, therefore, may exceed the desired nighttime limit of 40 dBA. Freymiller pf. (9/14/15) at 1; exh. LRNG-DS-15 at 3.

172. There is anticipated to be sound associated with operation of the RNG facility's vehicles, including an on-site loader that will be retrofitted with a low-impact back-up alarm. These vehicles will be operated only during daylight operating hours. Exh. LRNG-DS-15 at 1, 4.

Discussion

In response to public comments regarding sound issues, the Petitioner states that the compressor for the gas upgrade equipment is the single piece of equipment that may cause a sound impact, but that the impact is substantially minimized by the Project's relatively remote location. The Petitioner maintains that the sound impact analysis indicates that the potential sound impact on the nearest neighbor will be at the Board's allowable levels and that sound production 10 feet from the compressor will be at allowable levels. The Petitioner proposes a condition requiring it to ensure that noise impacts outside the compressor container will be within the Board's allowable sound levels.

The Petitioner has proposed that the following condition be included in a CPG for the Project in order to address concerns regarding sound levels:

Lincoln RNG shall ensure that the sound output of the gas upgrade equipment rates at 65 dB at 10 meters or lower, that external loader operations are restricted to daytime hours (7:00 A.M. to 7:00 P.M.), and that the loader used at the RNG facility is retrofitted with a low-impact back-up alarm to the extent allowed by law.

We find that the Petitioner has committed to adhering to regulatory standards and requirements to address the potential impacts concerning sound levels. Based on the agreement of the Petitioner to the proposed condition and to prevent undue, adverse sound impacts from the Project, we adopt the proposed condition in our approval of the Project. The Petitioner's commitments are reflected in the findings above and in the conditions agreed to by the Petitioner in its filings and incorporated herein and in the Project's CPG. Therefore, we find that the Project meets the applicable criteria concerning sound levels.

Historic Sites

173. The Project will not have an undue adverse effect on historic sites. This finding is supported by findings 174 through 176, below.

174. There are no historic sites in the area of the RNG facility or the M&R Station. Smith pf. at 28.

175. According to an archaeological site evaluation and report provided by the University of Vermont Consulting Archaeology Program ("CAP"), the associated distribution line will traverse near but will bypass two pre-contact Native American sites and, therefore, will have no impact on archaeological sites. LeForce pf. (9/14/15) at 15; exh. LRNG-CL-5.

176. The CAP report also represents that there will be no impact on historic sites. LeForce pf. (9/14/15) at 15; exh. LRNG-CL-6.

Rare and Irreplaceable Natural Areas

177. There are no rare and irreplaceable natural areas in the area of the RNG facility or the M&R Station. Smith pf. at 28.

Necessary Wildlife Habitat and Endangered Species

[10 V.S.A. § 6086(a)(8)(A)]

178. The Project will not have any undue adverse impacts on necessary wildlife habitat or endangered species because there are no such habitats or state or federal threatened or endangered species within the Project area. This finding is supported by findings 179 and 180, below.

179. The long-standing farm site for the RNG facility and the M&R Station does not contain and is not near any sensitive environmental habitats or species. DeWolfe pf. at 10-11.

180. Construction of the associated distribution pipeline will avoid bat trees and habitats. Limited tree clearing associated with the Middlebury River crossing and as necessitated by road bores will avoid direct impacts to potential Indiana bat roost trees identified in the field. In accordance with the Project's EPSC plans, these trees, as well as other sensitive resource features, will be identified and flagged for avoidance prior to construction of the pipeline. Any limited tree cutting, estimated at less than 0.06 acres in total, will be conducted during the dormant season or following acoustic or other survey methods verifying the absence of bats to avoid impacts to the northern long-eared bat. Sky pf. at 18; exh. LRNG-JLS-2.

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

181. The Project will not unnecessarily or unreasonably endanger public or quasi-public investments in any governmental or public utility facilities, services, or lands, or materially jeopardize or interfere with the function, efficiency, or safety of, or the public's use or enjoyment of or access to such facilities, services, or lands. This finding is supported by findings 182 through 184, below.

182. The RNG facility will utilize public roadways for the transport of manure supplies. Smith, pf. at 37-38.

183. The associated gas distribution line will be constructed and maintained to meet or exceed applicable safety codes. The pipeline will be installed within existing road rights-of-way. VGS will obtain local highway permits and will coordinate with utilities in the areas where construction of the pipeline will occur. VGS has in place a public awareness program that will be implemented in the communities affected by this section of the line, Middlebury and Salisbury. LeForce pf. (9/14/15) at 16-17.

184. The Project will benefit public investments because local property taxes will be paid on the distribution line. LeForce pf. (9/14/15) at 17.

Consistency With Company's Least-Cost Integrated Plan

[30 V.S.A. § 248(b)(6)]

185. The Project is consistent with VGS's least-cost integrated resource plan ("IRP"), which was approved on December 9, 2013. This finding is supported by finding 186, below.

186. Construction of the M&R Station and associated distribution line will be in accordance with VGS's IRP. Lincoln RNG will compensate VGS for the costs of installing the distribution line, along with the M&R Station. Any additional customers on the new distribution line will also provide compensation toward the recovery of costs. LeForce pf. (9/14/15) at 18.

Waste-to-Energy Facility
[30 V.S.A. § 248(b)(9)]

187. The Project is not a waste-to-energy facility; therefore, this criterion is not applicable.

Existing or Planned Transmission Facilities
[30 V.S.A. § 248(b)(10)]

188. The Project will not have an undue adverse impact on Vermont utilities or their customers, because the Project can be served economically by existing or planned transmission facilities without undue adverse impact on Vermont utilities or customers. This finding is supported by findings 189 and 190, below.

189. The Project's RNG will be transported from the RNG facility to the College and other markets through an underground pipeline distribution system constructed and operated by VGS. The Project's associated spur distribution line will connect directly to VGS's planned distribution system in Addison County. Petition at 2; LeForce pf. at 6-7.

190. Lincoln RNG will be responsible for a majority of the cost of constructing the Project's associated distribution line. LeForce pf. at 7.

Decommissioning Plan
[Board Rule 5.502(C)(2)]

191. Lincoln RNG has provided a decommissioning plan consistent with Board Rule 5.402(C)(2). Exh. LRNG-RSD-2.

VI. Discussion

Petition for a CPG pursuant to Section 231

The statutory standard for Board issuance of a CPG under Section 231 is whether the proposed ownership and operation of the business will promote the general good of the State. Toward that end, the Board has established the following set of criteria to be used as guidelines when determining whether an entity should be granted a CPG:

1. Technical expertise;
2. Adequate service;
3. Facility maintenance;
4. Balance between customers and shareholders;
5. Financial stability;
6. Company's ability to obtain financing;
7. Business regulation; and
8. Relationship with customers.

The Board has treated the above criteria as guidelines only, because the factors considered in making a general-good finding necessarily vary from case to case, depending on specific circumstances. 30 V.S.A. § 203 permits the Board to exercise its jurisdiction “so far as may be necessary to enable [it] to perform [its] duties and exercise the powers conferred upon [it] by law.” Accordingly, the Board’s regulatory authority over Lincoln RNG may be applied to reflect the limited activities Lincoln RNG plans to undertake in Vermont, and the Board may issue a CPG that reflects those limited activities.

In this case, Lincoln RNG represents in its 231 Petition that it will deliver its RNG output to two customers (the College and VGS) in the facility’s start-up phase and to not more than five customers overall. The College will receive 75% of the facility’s output, while approximately 30,000 mcf of the Project’s annual total projected 130,000 mcf of biomethane gas will be marketed to other customers. The Project will utilize VGS’s established pipeline distribution facility for delivery of the gas output, but the gas provided by Lincoln RNG will be renewable, with associated environmental attributes. The M&R Station will be operated independently by VGS and will have the capability to shut off injection of the RNG into VGS’s system if gas quality is not suitable, thereby protecting the safety and reliability of VGS’s network. Lincoln RNG further represents that the Project will be funded through private equity and debt funding, with a small amount of federal grant funding.

Given the limited number of contract customers anticipated for the Project’s output and given VGS’s management of output delivery from the RNG facility directly to VGS’s distribution network, we focus our assessment on Lincoln RNG’s technical competence, including its ability to maintain the Project facilities, its financial soundness, and its business competence and regulatory compliance.

The evidence demonstrates that Lincoln RNG meets the criteria that are applicable to its ownership and operation of the Project. Lincoln RNG will rely on equipment supply vendors that it represents have proven expertise and experience in the development of biomethane digester systems. During the construction, operation, and maintenance of the RNG facility, Lincoln RNG expects to

utilize proven equipment manufacturers that will provide turnkey supply of the RNG facility's digester and gas-upgrade equipment and that will provide continuous, virtual system monitoring and continuously available technical support. Lincoln RNG has an experienced construction and operations team that will be trained and supported by the equipment vendors and will work in association with VGS for product delivery. Automated product quality controls will be managed by VGS through the M&R Station. The RNG facility will be financed through private equity and debt funding; Lincoln RNG will not seek to recover the costs of the Project through charges paid by Vermont retail gas ratepayers.

We conclude that Lincoln RNG has the technical, operational, and regulatory expertise and experience, as well as the financial stability and means, required for a CPG. We further conclude that Lincoln RNG will have limited customers for the Project's output and will not seek to recover Project costs from Vermont ratepayers; therefore, the "balance between customers and shareholders" and "relationship with customers" criteria are not applicable to our review of the Petition in this case.

Based on a review of the record, we conclude that, subject to the conditions set forth in full below, a CPG authorizing Lincoln RNG to own and operate the Project is in the general good of the State.

De minimis Regulation

Lincoln RNG has requested *de minimis* review over the operation of the RNG facility, but has not specified what such review would entail. In the past, the Board has determined that certain companies that are subject to the jurisdiction of federal regulatory bodies, such as the Federal Energy Regulatory Commission, warrant *de minimis* jurisdiction with respect to specific state requirements, such as the pursuit of corporate financing without prior Board approval. However, Lincoln RNG has not raised any such justifications in its 231 Petition. Accordingly, we find that a determination of *de minimis* regulation is not warranted at this time.

VII. CONCLUSION

Based upon the above discussion and findings, we conclude that the Project will be of limited size and scope, the Petition does not raise a significant issue with respect to the substantive criteria of 30 V.S.A. § 248, the public interest is satisfied by the procedures authorized by

30 V.S.A. § 248(j), and the Project will promote the general good of the State. We further conclude that, subject to conditions as set forth below, a CPG authorizing Lincoln RNG to own and operate the Project is in the general good of the State.

VIII. ORDER

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED by the Public Service Board (“Board”) of the State of Vermont that:

1. The installation and operation by Lincoln Renewable Natural Gas, LLC (“Lincoln RNG” or “Petitioner”) of a renewable natural gas facility in Salisbury, Vermont (the “Project”), will promote the general good of the State of Vermont in accordance with 30 V.S.A. § 248(j), and a certificate of public good (“CPG”) to that effect shall be issued.

2. Construction, operation, and maintenance of the Project shall be in accordance with the evidence and plans submitted in this proceeding. Any material deviation from these plans or substantial change to the Project must be approved in advance by the Board. Failure to obtain advance approval from the Board for a material deviation from the approved plans or a substantial change to the Project may result in the assessment of a penalty pursuant to 30 V.S.A. §§ 30 and 247.

3. The Project shall comply with the applicable requirements of the National Electrical Safety Code.

4. Prior to proceeding with construction, Lincoln RNG shall obtain all necessary permits and approvals. Construction, operation, and maintenance of the Project shall be in accordance with such permits and approvals and with all other applicable regulations.

5. Prior to commencing construction, the Petitioner shall file a letter with the Board, the parties, and the Town of Salisbury, stating that it has fulfilled all requisite CPG conditions and that it intends to commence construction of the Project.

6. The CPG Holder shall restrict construction activities and construction-related deliveries to the hours between 7:00 A.M. and 7:00 P.M. Monday through Friday and between 8:00 A.M. and 5:00 P.M. on Saturdays. No construction activities or related deliveries shall occur on Sundays or state or federal holidays.

7. Prior to construction, the Petitioner shall obtain all necessary permits and approvals for construction and operation of the RNG facility, including:

- (a) a construction general permit;
- (b) a stormwater discharge permit;
- (c) an indirect discharge permit;

- (d) an ANR Solid Waste Division approval regarding:
 - (i) the need for permitting the use of brewery waste; and
 - (ii) compliance of disposal of spent carbon pellet medium used for sulfur removal; and
- (e) an ANR Air Quality Division approval regarding monitoring and reporting the emission of CO₂ from the gas upgrade and purification equipment's off-gas and noxious odors relating to H₂S air emissions.

8. Prior to construction, VGS shall obtain all necessary permits and approvals for construction and operation of the M&R Station and the distribution line that will link the RNG facility and VGS's pipeline network, including:

- (a) an ANR wetlands permit;
- (b) a U.S. Army Corps of Engineers permit;
- (c) an ANR watershed management flood hazard/river corridor permit application; and
- (d) a construction general permit.

9. The Project shall comply with the Vermont Stormwater Management Rules. Prior to site preparation and construction, the Petitioner shall contact the Vermont Stormwater Program in order to assess which types of stormwater permits are needed for the construction and operation of the Project. The Petitioner shall obtain the required permits prior to site preparation and construction and shall comply with the provisions of the required permits during construction and operation of the Project. At a minimum, during any site preparation, construction, maintenance, and decommissioning activities that involve earth disturbance, the Petitioner shall comply with ANR's Low Risk Site Handbook for Erosion Prevention and Sediment Control (2006).

10. Prior to interconnection of the RNG facility with VGS's natural gas distribution pipeline system, the Petitioner shall obtain the approval of the Vermont Department of Public Service ("Department") of a Quality Assurance Plan ("Plan") that identifies the fuel substrates in use and the associated potential gas contaminants. The Plan shall also provide for notification to the Department and the Vermont Agency of Agriculture, Food, and Markets ("AAFM") of any changes in fuel source usage. The Plan shall be filed with the Board.

11. All construction, operation, and maintenance of the Project shall be in accordance with all permits and approvals, and with all other applicable regulations.

12. The Petitioner shall notify AAFM, ANR, and VGS of any changes in fuel source usage in accordance with the Plan.

13. The Petitioner shall copy ANR on any updates to the nutrient management plans of the farms spreading liquid residue that are either reasonably requested by AAFM or otherwise required by the farms' operating permits.

14. The Petitioner shall be limited to 20 truckload deliveries of manure per day. Deliveries shall take place between the hours of 8:00 A.M. and 5:00 P.M. Monday through Friday, and 9:00 A.M. to 1:00 P.M. on Saturday. No deliveries shall take place on Sundays or state or federal holidays.

15. The Petitioner shall ensure that the sound output of the gas upgrade equipment rates at 65 dB at 10 meters or lower, that external loader operations are restricted to daytime hours (7:00 A.M. to 7:00 P.M.), and that the loader used at the facility is retrofitted with a low-impact back-up alarm to the extent allowed by law.

16. Prior to commencing construction, the Petitioner shall file a letter with the Board and the parties in this proceeding, stating that it has fulfilled all required CPG conditions, that the Petitioner intends to commence construction of the RNG facility, and that VGS intends to commence construction of the M&R Station and associated distribution line.

17. The Petitioner shall ensure that the flaring equipment will be fully enclosed, with the flame concealed in a protective flare stack. The flare's ignition system will be electronic. The flaring capacity will be 99% of gas production (800 m³/h maximum/809 m³/h bio gas production).

18. The Petitioner shall operate the flares in accordance with the manufacturer's operation and maintenance recommendations. The Petitioner shall register any such air emissions with ANR annually in accordance with ANR's air pollution control regulations.

Dated at Montpelier, Vermont, this 8th day of April, 2016.

_____	)	
_____	)	PUBLIC SERVICE
_____	)	
<u>s/Margaret Cheney</u>	)	BOARD
_____	)	
_____	)	OF VERMONT
<u>s/Sarah Hofmann</u>	)	

OFFICE OF THE CLERK

FILED: April 8, 2016

ATTEST: s/Judith C. Whitney
Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@vermont.gov)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and Order.