

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 6940

Petition of Vermont Gas Systems, Inc. for a certificate)	Hearing at
of public good authorizing the construction of a 2.85)	Montpelier, Vermont
mile pipeline in St. Albans, Vermont, and the relocation)	June 14, 2004
of an existing pressure-regulation station located in)	
Swanton, Vermont, to St. Albans, Vermont)	

Order entered: 8/9/2004

PRESENT: Peter B. Meyer, Hearing Officer

APPEARANCES: Geoffrey Commons, Esq.
for the Vermont Department of Public Service

Suzanne M. Monte, Esq.
Downs Rachlin & Martin
for Vermont Gas Systems, Inc.

Warren Coleman, Esq.
for the Vermont Agency of Natural Resources

I. INTRODUCTION

This case concerns a petition filed on March 25, 2004, by Vermont Gas Systems, Inc. ("Vermont Gas" or "VGS") requesting a certificate of public good ("CPG") under 30 V.S.A. § 248 authorizing construction of a "natural-gas facility" (as defined by § 248) to be located in the Town of St. Albans, Vermont. Vermont Gas' petition specifically seeks to (1) construct a 2.85 mile natural gas pipeline in St. Albans, Vermont, commencing approximately 100 feet south of Newton Road and terminating at Nason Road ("Phase V Looping") and (2) relocate an existing pressure-regulation station from Beebe Road in Swanton, Vermont, to the Nason Street Station in St. Albans, Vermont ("Project").

Vermont Gas provided a copy of its complete filing to each party specified in subdivision (a)(4) of Section 248. On April 2, 2004, the Public Service Board ("Board") notified all such parties that the Board had appointed Peter B. Meyer, Environmental Analyst, as the Hearing

Officer in this proceeding and that a prehearing conference would be held at the Board's hearing room in Montpelier on April 14, 2004.

A prehearing conference was held on April 14th to consider the schedule for and issues raised by Vermont Gas' petition. Representatives of Vermont Gas, the Vermont Department of Public Service (the "Department" or "DPS"), the Vermont Agency of Natural Resources ("ANR"), and the Town of St. Albans attended the prehearing conference. At the prehearing conference, Mr. Dan Lindley, Town Administrator for the Town of St. Albans, requested party status for the Town of St. Albans in this docket. Hearing no objections, the Town of St. Albans was admitted as a party. The parties also proposed a schedule for this docket and several dates for a site visit and public hearing.

As required by subdivision 248(a)(4)(A), the Board arranged for publication of notice in the *St. Albans Messenger* on May 12 and May 19, 2004, notifying the public that a public hearing would be held on Vermont Gas' petition in the Meeting Room of the St. Albans Town Hall at 7:00 p.m. on June 1, 2004. The notice also notified the public that a site visit would be conducted on June 1, 2004, at 2:00 p.m. Following such notice, the Hearing Officer convened a site visit and public hearing on June 1. Representatives of Vermont Gas and the Department attended the site visit and the public hearing and Mr. Dan Lindley attended the public hearing. No other person attended the site visit or the public hearing. In addition, no person requested intervention by the May 14 deadline.

Following formal and informal discovery on Vermont Gas' petition, VGS and the Department negotiated a settlement and filed a Stipulation with the Board on June 4, 2004. *See Stipulation Between Vermont Gas Systems, Inc. and the Vermont Department of Public Service, dated June 4, 2004 (the "Stipulation").* Exh. Joint-1. ANR filed a letter on June 3 indicating that ANR has reviewed VGS's filing, that VGS has obtained all outstanding environmental permits and approvals of concern to ANR, and that as long as the Board includes in any Order issued to VGS its standard provision that requires VGS to obtain and abide by any permits and/or approvals necessary for the Project, ANR does not have any additional concerns pursuant to 30 V.S.A. § 248(b)(5). *See Letter of Warren Coleman to Susan Hudson, dated June 3, 2004.*

On June 2, 2004, the Board provided notice to all parties that a technical hearing would be held at the Board's hearing room in Montpelier at 1:00 p.m. on June 14, 2004. The technical hearing was held as scheduled on June 14, 2004.

This matter is ready for decision, and I hereby propose that the Board make the following findings and issue a conditioned certificate of public good to Vermont Gas for the Project.

II. FINDINGS

A. The Project

1. Vermont Gas is a company that transmits, distributes and sells natural gas to the public in Vermont. Pet. at 1.

2. The Project for which Vermont Gas seeks approval consists of (a) construction of 2.85 miles of 16-inch pipeline located in St. Albans, Vermont, commencing approximately 100 feet south of Newton Road and terminating at Nason Road, and (b) relocation of an existing pressure-regulation station from Beebe Road in Swanton to Nason Road in St. Albans. *Id.*; Flock pf. at 5-6.

3. This Project is the fifth phase of a multi-year process of reinforcing or "looping" VGS' transmission-pressure network ("System Expansion"). Flock pf. at 3-7; exh. VGS-MF-1.

4. Each of the prior phases' pipelines have been 16-inch-diameter pipe constructed and tested for a maximum allowable operating pressure of 1440 psig. Flock pf. at 4.

5. As part of Phase I of the System Expansion (approved by the Board in Docket No. 5772), VGS installed 3.14 miles of 16-inch transmission pipeline in 1995 from Beebe Road in Swanton to a point adjacent to Frontage Road in Highgate where it connected to VGS's existing 10-inch pipeline. *Id.*

6. VGS selected the corridor for Phase I because it looped a section of 10-inch-diameter pipeline that crosses the Missisquoi River, which VGS considered to be at-risk for washing out during flooding. *Id.*

7. In 1997, VGS extended the 16-inch pipeline northward 3.43 miles in Phase II of the System Expansion from the northern terminus of Phase I, adjacent to VGS's existing 10-inch pipeline, connecting with the 10-inch pipeline approximately 1,800 feet south of the Rock River. *Id.*

8. Phase III of the System Expansion installed 2.63 miles of pipeline, adjacent to the existing 10-inch pipeline, from the northern terminus of Phase II to the northern terminus of VGS's transmission pipelines at the US/Canadian border; Phase III completed the installation of 16-inch pipeline from Beebe Road in Swanton to the border. *Id.* at 4-5.

9. VGS also constructed two new gate stations as part of Phase III: a purchase station at the US/Canada border, enabling VGS to control gas from the TransCanada Pipeline ("TCPL") system; and a pressure-regulation station at Beebe Road in Swanton, enabling VGS to control the gas pressure between the 16-inch pipeline and the 10-inch pipeline. *Id.* at 5.

10. Phase IV of the System Expansion extended the 16-inch pipeline 4.25 miles south from Beebe Road to connect to VGS's existing 10-inch pipeline just south of Newton Road in St. Albans. *Id.*

11. As part of Phase IV, VGS constructed distribution-pressure-regulation equipment and performed site work for construction of transmission-pressure regulation equipment and piping at Nason Road in St. Albans. *Id.*

12. Phase V will extend the System Expansion southward 2.85 miles from approximately 100 feet south of Newton Road, adjacent to and west of the New England Central Railroad and adjacent to the existing 10-inch pipeline, traveling within existing and new rights-of-way on private property except for two road crossings in St. Albans, one of which is a state highway. *Id.* at 6.

13. Phase V also includes relocation of the existing pressure-regulation equipment currently located at Beebe Road to the Nason Road Station, including transmission-pressure-regulation equipment, a line heater and a communications building. As part of this relocation, VGS will construct an additional building at the Nason Road Station to house the line heater. *Id.* at 6, 7.

14. The Board reviewed the existing Beebe Road site and station construction as part of Phase III of the System Expansion; the Board reviewed construction at the Nason Road site to reinforce the St. Albans' distribution system as part of Phase IV. *Id.*

15. The Nason Road Station was designed to have three functions: serve as a distribution-pressure regulation station for the St. Albans distribution system; control the pressure and gas flow between the 16-inch-diameter pipeline and the 10-inch-diameter pipeline, (the 16-inch

diameter pipeline is designed to operate at a maximum pressure of 1440 psig, while the 10-inch pipeline operates at a maximum of 605 psig); and site transmission-pressure facilities for the 16-inch pipeline to allow access for internal inspection of the pipeline, per State of Vermont and U.S. Department of Transportation regulation CFR 192.150. *Id.* at 7-8.

16. VGS completed the reinforcement work at the Nason Road Station site pursuant to the Board's Order in Docket No. 6666 authorizing construction of Phase IV. The work included the station foundation, fencing and landscaping, the fabrication and installation of the distribution-pressure-regulation equipment and construction of a building over the regulation equipment. *Id.* at 6-8.

17. Relocation of the station from Beebe Road to Nason Road will enable VGS to control the gas flow and pressure at the southern end of the pipeline allowing the company to take advantage of higher delivery pressures frequently available from TCPL, thereby increasing pipeline capacity at those times and allowing some limited gas storage in the 16-inch pipeline. *Id.* at 8.

18. Because there is no capacity gain from having pressure regulation equipment at both Beebe Road and Nason Road, VGS plans to relocate the Beebe Road pressure-regulation equipment to Nason Road, which will allow VGS to take advantage of higher TCPL delivery pressures with lower capital investment. *Id.*

B. Alternatives to the Project

19. In its Integrated Resource Plan ("IRP"), filed November 1, 2001, VGS explored various growth scenarios, the results of which showed that construction of the Phase V Looping was required by 2004 for each scenario. Flock pf. at 36.

20. The IRP also explored the expansion of VGS' propane-air plant and liquified natural gas as an alternative supply; however, the supply-optimization model used by VGS did not select either source as a preferred supply option. *Id.*

21. In Phase I, VGS and the Board evaluated and rejected several other alternatives to avoid expanding at the north end of VGS' transmission system, including (a) an alternative pipeline-delivery point closer to Burlington than VGS' existing and sole delivery point with Trans Canada Pipeline (rejected because no such alternate pipelines and delivery points exist), and (b) storage

or natural-gas-production well in the Burlington area (rejected because there are no storage facilities or natural-gas supplies in production or planned in Vermont, and the time required for and the uncertainties associated with permitting storage or new supplies would be substantial); these conclusions remain the same today. *Id.* at 36-37 (citing Docket No. 5772, Order of 6/12/95 at Findings 7 through 10).

22. VGS also evaluated whether a 16-inch pipe is least-cost compared to a 12-inch or 10-inch pipe (that provides similar capacity), and concluded that a 16-inch pipeline, which would be shorter than either of the alternatives, is the most cost-effective alternative. *Id.* at 37-38.

23. A larger diameter pipeline would not achieve additional capacity and was not considered because of the existing 16-inch configuration. *Id.* at 37.

III. Review of the Project under Section 248's Criteria

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

24. 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 municipal legislative bodies, the land conservation measures contained in the plan of any affected municipality, and recommendations for service-connection prohibitions (none of which were received). This finding is supported by findings 25 through 31, below.

25. Vermont Gas approached the following planning and municipal legislative organizations regarding the Project: Town of St. Albans Development Review Board; Town of St. Albans Selectboard; and the Northwest Regional Planning Commission. *Flock pf.* at 9.

26. The Town of St. Albans Zoning By-laws contain a provision relating to underground utilities, including natural-gas pipelines. *Id.*

27. Even though Board approval under Section 248 would preempt local land-use by-laws, VGS applied for and received Site Plan Review and Conditional Use approval from the Town of St. Albans Development Review Board, which does not place any restrictions on service connections; VGS has agreed to abide by the conditions specified in the approval. *Id.* at 9-10; exh. VGS-MF-5.

28. The St. Albans Development Review Board specifically found that: (1) the proposed use does conform to all zoning bylaw requirements; (2) the proposed use does not adversely affect the capacity of existing or planned community facilities; (3) the proposed use does not adversely affect the character of the area in which it is to be located; (4) the proposed use does not adversely affect traffic on roads and highways in the vicinity; and (5) the proposed use does not adversely affect the utilization of renewable resources. Flock pf. at 10; exh. VGS-MF-5.

29. The Northwest Regional Planning Commission provided letters that supported the expansion of the availability of natural gas as an energy source and stated in one letter that it is a benefit for consumers to have additional energy alternatives available. Flock pf. at 9; exhs. VGS-MF-3 and VGS-MF-4.

30. The Project is underground and located primarily within an existing pipeline right-of-way; therefore, its impact on the physical and visual environment is minimized, in conformance with the goals of Act 200. Flock pf. at 10-11.

31. The Project will not affect any development plans for St. Albans or the region. *Id.* at 11.

Need For Present and Future Demand for Service

[30 V.S.A. § 248 (b)(2)]

32. The Project is required to meet the 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 33 through 44, below.

33. Vermont Gas evaluates customer demand from two different perspectives, peak-day load and peak-hour load. Flock pf. at 11.

34. For the fiscal year beginning on October 1, 2004, Vermont Gas projects a peak-day demand of 61,494 Mcf and a peak-hour demand of 5% of that amount or 3,075 Mcf, including the effect of demand-side management ("DSM"). *Id.* at 12.

35. DSM has saved Vermont Gas almost 382,000 Mcf through the installation of efficiency measures, such as high-efficiency water heaters and heating systems, heat recovery packages, and building shell measures, since the program's inception through calendar year 2002. *Id.* at 19.

36. The peak-day impact of these measures is estimated to be 3,075 Mcf in 2005. *Id.*

37. VGS' biggest peak-day DSM initiative is its interruptible program that has avoided an estimated 15,400 Mcf on a peak day. *Id.*

38. DSM cannot provide the additional benefits from looping such as increased linepack, the ability to inspect internally VGS' 10-inch line (where looped), and increased system reliability. *Id.*

39. Vermont Gas must have sufficient supplies to serve peak-day demand and sufficient capacity on its system or "deliverability" to deliver those supplies from the border to its customers. *Id.* at 13.

40. VGS estimates peak-day demand for winter 2004/2005 will be 61,494 Mcfd. *Id.* at 12, 14.

41. Without Phase V Looping, VGS' total capacity (with propane air) for the 2004/2005 winter is projected to be 60,019 Mcfd, resulting in an estimated capacity shortfall of 1,475 Mcfd. *Id.* at 14.

42. Phase V looping will provide an additional 3,420 Mcfd (including the impact on propane-air injection) that will eliminate the projected capacity shortfall for the next two years. *Id.*

43. VGS selected 2.85 miles of additional pipeline to reasonably match system capacity to market demand over the next two to three years, while minimizing the rate impact associated with expanding the transmission system. *Id.* at 18.

44. Depending upon future load growth, VGS anticipates construction of Phase VI in 2006; if actual growth does not meet expectations, Phase VI looping can be postponed. *Id.*

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

45. The Project will not have an adverse effect on system stability or reliability. This finding is supported by findings 46 through 52, below.

46. From Newton Road in St. Albans, southward, Vermont Gas currently operates a single-line transmission system that, if damaged in any way, would seriously affect its ability to serve customers downstream of the damage. Flock pf. at 20.

47. By constructing a looped or parallel pipeline, Vermont Gas will gain the ability to bypass a damaged section and repair it without significantly curtailing customer service. *Id.*

48. The Project also provides VGS with additional linepack with which to serve its customers in the event of a disruption of supply upstream of VGS' border station. *Id.*

49. In addition, the Project will enable VGS to take advantage of higher gas pressures that may be available from TCPL in the future to build linepack in its 16-inch pipeline, which would result in greater pipeline capacity. *Id.*

50. The design and engineering criteria utilized by Vermont Gas with this Project will ensure that the existing system stability and reliability are not adversely affected by the Project. *Id.*; Gibbs pf. at 7-9.

51. The design of the Nason Road Station included consideration of VGS' Gate Station Security Construction Standards; the design includes security lighting, an eight-foot-tall galvanized chain-link fence topped with barbed wire, and a locked gate to the access road and chain-link fence. Flock pf. at 21.

52. As designed, the pipeline will be able to pass an internal inspection device, which is an option for integrity assessment under Pipeline Integrity Management regulations in CFR Section 192, Subpart O. *Id.*

Economic Benefit to the State and Its Residents

[30 V.S.A. § 248(b)(4)]

53. The Project will result in an economic benefit to the State and its residents. This finding is supported by findings 54 through 57, below.

54. Construction of the Project will allow Vermont Gas to extend its service to new customers, providing them with access to a competitively-priced fuel which will strengthen the economic health of those customers and Vermont as a whole. Flock pf. at 22.

55. The availability of additional energy alternatives is a benefit to customers. *Id.*; exh. VGS-MF-3 (Letter of support from Northwest Regional Planning Commission).

56. VGS' plan to construct the System Expansion in phases to meet expected demand and location of the Project primarily within existing rights-of-way will reduce the costs associated

with construction, which in turn will minimize any short-term, upward pressure on rates. Flock pf. at 22.

57. The Project represents an investment of \$2.7 million, which will result in increased local and state property taxes. *Id.*

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

[30 V.S.A. § 248(b)(5)]

58. The Project as proposed will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and the public health and safety. This finding is supported by findings 59 through 149, below, which are based on the criteria specified in 10 V.S.A. §§ 1424a(d) and 6086(a)(1) through (8), 8(A) and (9)(K).

Public Health and Safety

59. The Project will not have an undue adverse effect on the public health and safety. This finding is supported by findings 60 through 66, below.

60. The Project facilities will be designed and constructed in accordance with the U.S. Department of Transportation Code, the American National Standard ASME B-31.8, Board Rule 6.100, and various other pipeline design and construction methods referenced in these documents. Gibbs pf. at 8; *see also* Flock pf. at 35.

61. The pipe will be manufactured in accordance with American Petroleum Institute ("API") 5L, Specification for Line Pipe and supplemented by VGS' pipe specifications. Gibbs pf. at 8.

62. Cathodic protection for the pipe will be provided by a rectifier system and a coating of fusion-bonded epoxy covering the pipe. *Id.*

63. Depth of cover for the pipeline will be in accordance with jurisdictional requirements to a depth of 36-inches, unless impractical due to rock. *Id.*

64. The pipeline will be welded construction with recommended practice standard 1104, Welding of Pipelines and Related Facilities, approved by API; each weld made on the pipeline will be nondestructively tested using x-ray technology in accordance with the 1104 standard practice. *Id.*

65. After construction, prior to being placed into service, the pipeline will be subjected to a minimum pressure of 2,160 psig, using water, for a period of eight hours to validate the pipeline integrity and determine the presence of any leaks; a successful water test at this pressure will allow the pipeline to be operated up to a pressure of 1,440 psig. *Id.* at 9.

66. VGS plans to obtain the requisite permits for the buildings at the Nason Road Station from the Five Prevention Division of the Vermont Department of Labor & Industry. Flock pf. at 35.

Air and Water Pollution

67. The Project as proposed will not result in undue air or water pollution. This finding is supported by findings 68 through 104, below.

68. The gas heater located at the Nason Road Station will produce some air emissions, however, the heater is rated at 2.05 million btu per hour, which is well below the threshold for permitting of 10 million btu per hour. Letter of Suzanne Monte to Susan Hudson, dated June 17, 2004.

69. The Project is designed to transport natural gas and will not involve any process emissions into the air or water. Flock pf. at 29.

70. Vermont Gas has an aggressive program to prevent leaks and assure timely repair; moreover, the pipeline will be hydrostatically pressure tested to at least 150% of the maximum operating pressure, the pipe will have an external protective coating of fusion bonded epoxy and a cathodic-protection system to prevent corrosion, and the pipeline will be clearly marked with permanent signs to prevent accidental damage by a third party. *Id.*; Gibbs pf. at 8-9.

71. The discharge of water from hydrostatic testing does not require a permit from ANR. Letter from Suzanne Monte to Susan Hudson, dated June 17, 2004 (citing email from Randy Bean, Environmental Analyst for Wastewater Management Division of ANR to Michael Flock, dated June 16, 2004).

72. Excavation for the Project will be primarily at a depth where soil is damp, and soil that is extracted will be replaced within a very short time. Therefore installation of the pipeline will not create excessive dust. Any dust that is created during construction will be controlled with calcium chloride or water, as appropriate. Flock pf. at 29-30.

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

73. The Project will meet all applicable health and environmental conservation department regulations regarding reduction of the quality of the ground or surface waters flowing through or on lands which are headwaters of watersheds characterized by steep slopes or shallow soils, drainage areas of 20 square miles or less, above 1500 feet in elevation, watersheds of public water supplies, or areas supplying significant recharge waters to aquifers. This finding is supported by findings 74 through 80, below.

74. The Phase V corridor crosses two small tributaries to the Stevens Brook. Briggs pf. at 4.

75. Because the pipeline corridor is adjacent to and parallel to an active railroad and Stevens Brook drains most of St. Albans City, the corridor cannot be characterized as land that is not devoted to intensive development. Briggs pf. at 4.

76. There are no areas with steep slopes near the Project's corridor. The corridor crosses two small areas of ledge, however, these areas are not characteristic of the watershed involved. *Id.*

77. Two small drainages at the northern end of the corridor are part of the Stevens Brook watershed, which has a drainage basin of twenty square miles or less. *Id.* at 5.

78. The corridor is between 282 and 340 feet in elevation, well below the 1,500 foot maximum specified in Section 6086. *Id.* at 4.

79. Contacts with the Vermont Department of Health regarding designated watersheds of public water supplies did not disclose the location of any watersheds near the corridor. *Id.*

80. VGS is not aware of any aquifers in the area; nonetheless, once installed at a depth of 3 to 5 feet, the pipeline would not impact any aquifers. *Id.* at 5.

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

81. The Project will meet all applicable health and environmental conservation regulations regarding the disposal of waste and will not involve the injection of waste materials or any harmful or toxic substances into groundwater or wells. This finding is supported by findings 82 through 86, below.

82. The Project is designed solely to transport natural gas and will thus not produce emissions into the air or water. Flock pf. at 29.

83. During normal operations, the Project will not use or discharge water. *Id.* at 30.

84. During construction, VGS will comply with its permits and Erosion and Sediment Control Plan to minimize pollution from construction. *Id.*

85. Water for hydrostatic testing will be discharged into upland areas at the north or south end of the Project and standard haybale ponds will be used to trap sediment when dewatering the pipeline after hydrostatic testing. *Id.*

86. The Water Quality Division of the Department of Environmental Conservation of the Agency of Natural Resources has authorized the discharge of stormwater runoff in connection with the construction of Phase V under General Permit 3-9001 (2003). Exh. VGS-MF-20.

Water Conservation

[10 V.S.A. § 6086(a)(1)(C)]

87. The Project's design has considered water conservation, multiple use or recycling where practical, and utilizes the best available technology for such applications. This finding is supported by findings 88 through 90, below.

88. The Project will not use or discharge water during its normal operation. Flock pf. at 31.

89. The use of water will be limited to dust control (if necessary during construction) and hydrostatic testing. *Id.*

90. Water for dust control and hydrostatic testing will be obtained from the City of St. Albans, which has indicated that it has an adequate supply of water. *Id.*; exhs. VGS-MF-18 and VGS-MF-19 (email correspondence from City of St. Albans).

Floodways

[10 V.S.A. § 6086(a)(1)(D)]

91. The corridor does not cross any floodplains. Briggs pf. at 5.

92. Due to the underground nature of the Project, even along the small streams that do lie within the corridor, the pipeline will not restrict flows nor reduce the area's capacity to store stormwater or runoff. *Id.*

93. After construction, Vermont Gas will restore ground surfaces to pre-construction conditions. *Id.*

Streams and Shorelines

[10 V.S.A. §§ 6086(a)(1)(E) and 6086(a)(1)(F)]

94. The corridor will cross two unnamed, Class "B" streams, both of which are less than the one square mile area minimum requirement for a stream crossing structure or a Stream Alteration Permit. ANR's Water Quality Division confirmed that if the stream crossings are accomplished as described by VGS, there is no need for any permits from the stream alterations program. Flock pf. at 24, 31; Briggs pf. at 6; exh. VGS-MF-21 (email correspondence from Christopher Brunelle, ANR Water Quality Division).

95. Once built, the pipeline will pass underneath the water bodies and therefore will have no impact on the uses for which waters are managed and no discharge that could violate the criteria. Briggs pf. at 6.

96. Impacts to these streams will be minimal and of short duration, occurring only during construction. *Id.*

97. VGS plans to follow erosion-control techniques that will protect water and shores from disturbance from erosion, sediment or construction debris. *Id.*; see exhs. VGS-MF-2 and VGS-MF-14.

98. Construction will not result in permanent surficial disturbance and any disturbed areas will be promptly restored, therefore the streams will retain their pre-construction physical, biological and aesthetic characteristics. Briggs pf. at 6.

Wetlands

[10 V.S.A. § 6086(a)(1)(G)]

99. The project will not violate the rules of the Water Resources Board related to significant wetlands. This finding is supported by findings 100 through 104, below.

100. Vermont Gas designed the Project and timed the construction to minimize wetland concerns. Briggs pf. at 7; Flock pf. at 31.

101. For each wetland crossed, VGS will abide by the applicable construction conditions outlined in Wetlands Fact Sheet Number 14 published by the Wetlands Office of the Water Quality Division of the Department of Environmental Conservation. Flock pf. at 32.

102. The proposed corridor crosses twenty areas of wetland, six of which were identified and delineated as parts of two significant Class 2 wetlands protected under the Vermont Wetland Rules. Briggs pf. at 7.

103. Vermont Gas has obtained and will comply with the requirements of a conditional-use determination ("CUD") for these wetlands; therefore, VGS has complied with wetland rules established by the Water Resources Board. *Id.* at 7, 9; Flock pf. at 24; exh. VGS-MF-17 (ANR Department of Environmental Conservation Conditional Use Determination).

104. Vermont Gas has received a U.S. Army Corps of Engineers permit for the pipeline. Exh. VGS-MF-16.

Sufficiency of Water And Burden on

Existing Water Supply

[10 V.S.A. §§ 6086(a)(2) & (3)]

105. The Project has sufficient water available for its needs, and it will not cause an unreasonable burden on existing water supplies. This finding is supported by findings 106 through 108, below.

106. The Project will not use or discharge water during its normal operation. Flock pf. at 31.

107. The use of water will be limited to dust control (if necessary during construction) and hydrostatic testing. *Id.*

108. Water for dust control and hydrostatic testing will be obtained from the City of St. Albans, which has indicated that it has an adequate supply of water. *Id.*; exhs. VGS-MF-18 and VGS-MF-19 (email correspondence from City of St. Albans).

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

109. The Project will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water. This finding is supported by findings 110 through 115, below.

110. The proposed corridor contains no areas of steep slopes; most of the proposed route is relatively level, with no areas exceeding 19% slope. Briggs pf. at 9.

111. VGS has proposed a comprehensive soil-erosion plan that addresses soil stability, revegetation, and other measures to prevent undue erosion on slopes and adjacent wetlands both during and after construction. *Id.* at 9-10; Flock pf. at 28-29; *see also* exhs. VGS-MF-2 and VGS-MF-14.

112. Because the pipeline will be underground, it will not affect the water-storage capacity of wetlands or interfere with the free flow of surface waters. Briggs pf. at 10.

113. In upland areas, the capacity of the land to hold water will not be adversely affected because there will be no alteration of topography and pre-existing vegetative conditions will be restored after construction. *Id.*

114. VGS practices and precautions will protect soil stability and the capacity of the land to hold water. *Id.*; *see also* exhs. VGS-MF-2 and VGS-MF-14.

115. VGS has received authorization from the Agency of Natural Resources, Department of Environmental Conservation, Water Quality Division to discharge stormwater runoff in connection with construction of Phase V under General Permit 3-9001 (2003). Ehx. VGS-MF-20.

Transportation

[10 V.S.A. § 6086(a)(5)]

116. The Project will not cause unreasonable congestion or unsafe conditions with respect to any affected means of transportation. This finding is supported by findings 117 through 123, below.

117. The Project will cross under State Highway 36, also known as Lake Road, with access roads traveling from Lake Road and State Highway 38, also known as Newton Road. Flock pf. at 32.

118. The pipeline will be installed beneath the highway by boring with a casing pipe installed deep enough under the highway to prevent endangering the highway; bore pits will be far enough from the edge of the road to prevent undermining the road. *Id.*

119. The Vermont Agency of Transportation ("VTrans") has issued a letter of intent for this crossing. Exh. VGS-MF-23.

120. VTrans has also issued letters of intent for new access points from Lake Road and an extension for the work completion date for the previously issued permit for a temporary construction access point from Newton Road. Flock pf. at 32; exhs. VGS-MF-24, VGS-MF-25 and VGS-MF-22.

121. The Project will also be installed under Nason Road (a St. Albans town highway), upon receipt of a road crossing permit from the Town of St. Albans, by slick boring a section of concrete coated carrier pipe without casing. Flock pf. at 32-33.

122. The Project will also have access points from the following St. Albans town highways: Brigham Road; Bronson Road; and Nason Road. *Id.* at 32.

123. The Town of St. Albans Development Review Board approved the Project with the condition that VGS repair damage caused to any Town road; VGS has agreed to abide by the Town's conditions. *Id.* at 9-10, 33; exh. VGS-MF-5.

Educational and Municipal Services

[10 V.S.A. §§ 6086(a)(6) & (7)]

124. The Project will not place an unreasonable burden on the ability of any involved municipalities to provide educational or municipal services. This finding is supported by findings 125 through 128, below.

125. The Project will not require the placement or relocation of any Vermont Gas employees to St. Albans or other nearby communities, or otherwise require educational services. Flock pf. at 33.

126. The Project will not require any municipal or governmental services. *Id.*

127. While VGS does not anticipate removal of excess soil materials, any excess undesirable soils will be transported to a State-approved landfill or disposal area. *Id.*

128. During construction VGS may remove rocks excavated along the corridor. VGS will transport such rocks to a State-approved landfill or disposal area and will seek approval from ANR as appropriate. Tr. 6/14/04 at 11 (Flock).

Aesthetics, Historic Sites or Rare and Irreplaceable Natural Areas

[10 V.S.A. § 6086(a)(8)]

129. The Project will not have an undue adverse effect on the scenic or natural beauty of the area, or upon aesthetics, historic sites or rare and irreplaceable natural areas. This finding is supported by findings 130 through 141, below.

130. For the most part, the proposed corridor passes through open terrain, along existing rights-of-way, or through farm land not visible from public ways; the corridor generally follows the contour of the land, and will be visible from Newton Road at the northern end and from Lake Street, Bronson Road and Nason Road at the southern end. Briggs pf. at 10.

131. At Newton Road the pipeline will be installed in an existing corridor next to the railroad. *Id.* at 11.

132. From Newton Road to Station 106 + 00, the pipeline will travel primarily through open areas — either agricultural fields or old pastures — which will be changed little in appearance once the construction is completed. *Id.*

133. Use of existing corridors will minimize cutting in existing woodland. *Id.*

134. Aside from the required precautionary markings to indicate location, including signs and vent markers at road crossings, interconnect and valve stations, there will be no above-ground structures associated with the pipeline. *Id.*

135. The Nason Road Station is a 105' x 95' fenced pad with three small buildings (8' x 8', 20' x 44', and 20' x 36') and pressure-regulation equipment, which is screened by two 8-foot-high rows of cedar trees. The St. Albans Development Review Board and Planning Commission have approved the station and landscaping. *Id.*; see also exh. VGS-MF-5.

136. Because the Project will be located primarily underground (except for the structures indicated above) and because of the characteristics of the corridor as selected by VGS, the Project will not have an undue adverse effect on the aesthetics or scenic or natural beauty of the area. Briggs pf. at 11.

137. The impact of the Project is in context with the region, which is an area of open land, scrub and wet woods occasionally broken by roads or utility rights-of-way; as such, the impact will not be adverse. *Id.*

138. By locating the pipeline underground and in locations generally away from sight, Vermont Gas has used reasonable mitigation measures to design the Project. *Id.* at 12.

139. The pipeline's underground installation in the proposed corridor will not shock or offend anyone. *Id.*

140. The proposed corridor does not include any rare or irreplaceable natural areas. *Id.*

141. In a letter to Vermont Gas, the Division of Historic Preservation indicated that the Project will not have an adverse effect on VT-FR-329 or any other historic or archeological resources that are listed on or that may be eligible for inclusion in the State or National Registers of Historic Places, as long as VGS follows certain conditions. VGS has agreed to comply with the conditions outlined in this letter. These conditions are also included in substantially similar form in the U.S. Army Corps of Engineers Section 404 permit. Flock pf. at 26-27; exh. VGS-MF-15 (Letter from Eric Gilbertson, Agency of Commerce and Community Development, Division For Historic Preservation).

Necessary Wildlife Habitat and Endangered Species

[10 V.S.A. § 6086(a)(8)(A)]

142. The Project will not have an impact on any necessary wildlife habitat or endangered species. This finding is supported by findings 143 through 146, below.

143. The Vermont Department of Fish & Wildlife has indicated that the Project does not appear to impact any significant wildlife habitat. Briggs pf. at 13; Flock pf. at 23; exh. VGS-MF-6 (Letter from John Austin, Vermont Department of Fish & Wildlife).

144. According to the Vermont Department of Fish and Wildlife's Significant Habitat Maps for the Town St. Albans, the Project area does not contain any critical habitat, significant natural communities or endangered species. Briggs pf. at 12.

145. In fieldwork, on the state level, Vermont Gas found no occurrences of significant natural communities or rare, threatened or endangered animals or plants. At the federal level, VGS also found no federally-listed or proposed, threatened or endangered species or critical habitat in the Project area. Briggs pf. at 13; Flock pf. at 23; exh. VGS-MF-7 (Letter from Everett Marshall, Vermont Department of Fish and Wildlife, Nongame and Natural Heritage Program); exh. VGS-EB-4 (Letter from U.S. Department of the Interior Fish and Wildlife Service).

146. VGS is not aware of any such resources or habitats likely to support such resources. Briggs pf. at 13.

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

147. The Project will not unnecessarily or unreasonably endanger the public or quasi-public investments in any governmental 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 148 and 149, below.

148. Although the Project will be located adjacent to certain railways and under or adjacent to certain public roads, the Project will not interfere with the use or maintenance of these railways and roads once construction is complete. Flock pf. at 34.

149. The Project will not affect any other governmental or public-utility facilities, services or lands, including State parks, municipal waste sites, and public lands and rivers because of its location and its placement underground. *Id.*

Consistency With Company's Least-Cost Integrated Plan

[30 V.S.A. § 248(b)(6)]

150. The Board has not yet approved Vermont Gas' IRP; however, the Project is consistent with least-cost planning principles. This finding is supported by findings 151 through 156, below.

151. VGS filed its IRP with the Board on November 1, 2001. Flock pf. at 36.

152. The IRP examined various growth scenarios, reaching the same conclusion in each case – that construction of Phase V Looping is required by 2004. *Id.*

153. The IRP also explored the options of expansion of the propane-air plant and LNG as an alternative supply, neither of which was selected by the supply-optimization model as a preferred supply option. *Id.*

154. As evaluated and rejected by VGS and the Board in Docket No. 5772 (Phase I of the System Expansion), to avoid expanding VGS' transmission system at the north end of the system, an alternative pipeline-delivery point would have to be set up closer to Burlington than VGS'

existing and sole delivery point with TCPL, and storage or natural-gas-production wells would have to be located in Burlington; however, there were and still are no such alternate pipelines and delivery points or storage facilities or natural-gas supplies in production or planned in Vermont, and the time required for and the uncertainties associated with permitting storage or new supplies in the Burlington area would be substantial. *Id.* at 36-37 (citing Docket No. 5772, Order of 6/12/95 at Findings 7 through 10).

155. A larger-diameter pipeline than the proposed 16-inch diameter pipeline would not achieve additional capacity and was not considered because the existing configuration is 16 inches in diameter. *Id.* at 37.

156. Construction of a 16-inch diameter pipeline is more cost-effective than a 12-inch or 10-inch diameter pipeline that provides similar capacity. *Id.* at 37-38.

Outstanding Water Resources

[30 V.S.A. § 248(b)(8)]

157. The Project will not adversely affect the criteria used by the State of Vermont to designate outstanding resource waters and will not constitute a facility affecting or located on any segment of water that the Vermont Water Resources Board has designated as an outstanding resource. This finding is supported by findings 158 through 165, below.

158. The Water Resources Board has designated four outstanding resource waters, none of which are located on or near the proposed corridor. Briggs pf. at 13-14; Flock pf. at 35.

159. Having regard to certain criteria established by the State for designating outstanding resource waters — specifically those addressing aquifer-protection areas, value in providing temporary storage for floodwater and storm runoff, fish habitat, maintenance of habitat for threatened or endangered plants or animals, maintenance of habitat for wildlife (including stopover habitat for migratory birds), presence of scenic areas and sites, rare and irreplaceable natural areas, known archeological sites and historic resources — I have previously found that the Project will not adversely alter the values protected by such criteria. Findings 58-104, and 129-146, above.

160. The current water quality classification for streams crossed by the corridor is Class B, which is consistent with actual water examined during VGS' field work; since the pipeline will

be underground, there will be minimum short-term impact on the water quality and no long-term impact. Briggs pf. at 15.

161. There are no gorges, rapids or waterfalls in the corridor's vicinity. *Id.*

162. Because the pipeline will be buried, the accessibility of waters for recreational, educational, research or other public uses will not be affected. *Id.* at 16.

163. Vermont Gas is not aware of any studies prepared or under consideration regarding any of the waters crossed by the corridor by any local, regional, State, federal or international agency. *Id.*

164. The Project will not affect any existing alteration, diversion or impoundment of which Vermont Gas is aware of any waters crossed by the corridor. *Id.*

165. The Water Resources Board informed Vermont Gas that, while other Vermont waters have been proposed to be designated as outstanding resources, none are located near Vermont Gas' proposed corridor, nor are there any proposed outstanding resource waters in Franklin County. *Id.* at 14.

H. Other Environmental and Land-Use Considerations

166. Construction is planned for late summer to early fall to avoid disrupting bird nesting and brood rearing, and to minimize impacts on the stream crossing because water flow will be at its lowest during that period. Finally, construction should be completed before ground freezing or heavy snowfall. Flock pf. at 38-39; Briggs pf. at 10.

Inapplicable Criteria

167. The Project is not a natural gas facility that is part of or incidental to an electric-generating facility, so the seventh criterion of Subsection 248(b), requiring compliance with the Department's electric-energy plan, and the tenth criterion, addressing use of existing and planned transmission facilities, are not applicable. *See* 30 V.S.A. § 248(b)(7), (10).

168. The Project is not a waste-to-energy facility; therefore, the ninth criterion of Subsection 248(b) is not applicable. *See* 30 V.S.A. § 248(b)(9).

III. CONCLUSION

Based upon all of the evidence, the proposed Project:

(a) 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 municipals' legislative bodies and the land-conservation measures contained in the Town of St. Albans, Vermont;

(b) 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;

(c) will not adversely affect system stability and reliability;

(d) will result in an economic benefit to the state and its residents;

(e) will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and the 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)-(8), (9)(K);

(f) is consistent with the principles for resource selection expressed in VGS' least-cost integrated resource plan, and there is good cause for the project; and

(g) does not involve a facility affecting or located on any segment of the waters of the state that has been designated as outstanding resource waters by the Water Resources Board.

The foregoing findings and conclusions are hereby reported to the Board in accordance with the provisions of 30 V.S.A. § 8.

This Proposal for Decision has been served on all parties to this proceeding in accordance with 3 V.S.A. § 811.

Dated at Montpelier, Vermont, this 28th day of July, 2004.

s/Peter B. Meyer

Peter B. Meyer
Hearing Officer

IV. ORDER

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

1. The findings of fact and conclusions of the Hearing Officer are adopted.
2. The Stipulation between Vermont Gas Systems, Inc. and the Vermont Department of Public Service is approved.
3. The construction by Vermont Gas Systems, Inc. of Phase V of its looped pipeline, in accordance with the evidence, plans and approvals submitted in the proceeding will promote the general good of the State of Vermont consistent with 30 V.S.A. § 248, and a certificate of public good shall be issued to allow such construction.
4. The certificate of public good shall be subject to the following conditions:
 - a. VGS will provide the Department with its proposed design for coverage at the Nason Street drainage ditches for review and comment prior to installation of said coverage.
 - b. VGS will review its surge protection design with the Department prior to construction.
 - c. VGS will build the Project in accordance with the testimony and exhibits filed in this docket. The parties acknowledge that minor changes may be made to the Project in the course of construction. VGS also acknowledges its responsibility to seek further PSB approval prior to making any changes that are potentially significant under the criteria of 30 V.S.A. § 248.
 - d. VGS will file an Integrated Resource Plan by November of this year.
 - e. VGS will provide for DPS review and comment, prior to construction, a proposed design for pressure monitoring at the 8-inch crossover connection between the 10-inch and 16-inch pipelines at Beebe Road.
 - f. VGS shall obtain and comply with all conditions and requirements of all necessary permits and approvals.

Dated at Montpelier, Vermont, this 9th day August, 2004.

<u>s/Michael H. Dworkin</u>)	
)	PUBLIC SERVICE
)	
<u>s/David C. Coen</u>)	BOARD
)	
)	OF VERMONT
<u>s/John D. Burke</u>)	

OFFICE OF THE CLERK

FILED: August 9, 2004

ATTEST: s/Judith C. Whitney
Deputy 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: Clerk@psb.state.vt.us)

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.