

STATE OF VERMONT
PUBLIC SERVICE BOARD

Petition of Vermont Gas Systems, Inc.,)	
requesting a Certificate of Public Good pursuant)	
to 30 V.S.A. § 248, authorizing the construction)	
of the "Addison Natural Gas Project" consisting)	
of approximately 43 miles of new natural gas)	
transmission pipeline in Chittenden and Addison)	
Counties, approximately 5 miles of new)	Docket No. 7970
distribution mainlines in Addison County,)	
together with three new gate stations in)	
Williston, New Haven and Middlebury,)	
Vermont)	

RESPONSE OF PETITIONER TO THE AGENCY OF NATURAL RESOURCE'S
SECOND SET OF INFORMATION REQUESTS ON PETITIONER

This is the response of Vermont Gas Systems, Inc. ("VGS" or "Petitioner") to the Second Set of Discovery Requests ("Discovery Requests") of The Agency of Natural Resources ("ANR"). Petitioner is filing one complete hard copy of its responses with the Public Service Board ("Board"), with two copies served on the ANR and a copy served on each other party of record.

General Objections:

1. Petitioner objects to any instructions contained in the Discovery Requests to the extent such instructions purport to place on Petitioner greater requirements or reserve greater rights to ANR than are permitted by the Vermont Rules of Civil Procedure as made applicable to Board proceedings through Board Rule 2.214 (A).
2. Petitioner objects to any request for information or production of document(s) that is (or are) subject to the attorney-client privilege, constitute work product, are protected under state or federal law or are proprietary, competitively sensitive or confidential.
3. Petitioner objects to requests to the extent that they (a) are overbroad or unduly burdensome; (b) are cumulative; (c) call for the production of documents not in the possession, custody or control of Petitioner; (d) call for the review, compilation, or production of publicly-available documents that could be obtained by the requesting party in a less burdensome manner; (e) are vague and/or ambiguous; (f) seek information not reasonably calculated to lead to the discovery of admissible evidence; or (g) call for the review, compilation, or production of a voluminous number of documents at great expense to Petitioner.

4. Petitioner does not hereby waive any objections, and it reserves the right to later raise any additional, available objections.

5. Responses and objections indicated herein reflect the position of the individual specified by Petitioner and not the other respondents unless specifically stated otherwise.

Q.ANR:VGS.2-1: Please identify the person responsible for responding to each interrogatory and identify any person who assisted in providing the response. For each person identified who has not previously been identified in responses to ANR, please provide a curriculum vitae or resume indicating that person's employment, education and work experience history.

A.ANR:VGS.2-1: Objection on the grounds that the question as framed is overly broad and unduly burdensome. Petitioner will not be listing those who provided clerical support only, nor will Petitioner be providing resumes for counsel. Further objection to the extent the question seeks work product, information that is subject to the attorney-client privilege or information not reasonably calculated to lead to the discovery of admissible evidence. Without waiving the objection, Petitioner responds: None.

Person Responsible for Response: Kimberly K. Hayden, Esq.
Title: Director, Downs Rachlin Martin PLLC
Date: May 30, 2013

Q.ANR:VGS.2-2: On page 5 of Mr. Nelson's testimony, he states that the purpose of the testimony "is to replace the testimony filed on December 20, 2012." What is the meaning of this phrase? What does Vermont Gas plan to do with Mr. Nelson's December 20, 2012 testimony?

A.ANR:VGS.2-2:

The cited language speaks for itself; the later testimony supersedes (and thus replaces) the former. VGS does not plan to offer the December 20, 2012 Prefiled Testimony of Jeffrey Nelson.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-3: Admit that the project purpose is contained in section 1.2 of Exhibit Petitioner Supp. JAN-13 (2/28/13). If your response is anything other than an unqualified admission, please explain in detail the reasons for any qualifications or denial.

A.ANR:VGS.2-3: Admit.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-4: Supp. JAN-13, page 26, states that "[t]he total distance over which the transmission pipeline was been [sic] realigned to avoid roadway right-of-way is 10.1 miles. Please identify the two references for this statement. Does this distance represent the change from Alternative 5 to 5b or from alternative 5a to 5b?

A.ANR:VGS.2-4: Page referenced in Exhibit Petitioner Supp. JAN-13 does not cite to two references. The distance refers to change from Alternative 5a to 5b.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-5: What is the total distance over which the transmission pipeline has been realigned from alternative 5a to alternative 5b?

A.ANR:VGS.2-5: This calculation has not been performed. However, see pages 5-7 of the Supplemental Prefiled Testimony of John Heintz (2/28/2013) for a detailed description of the changes between Alternatives 5a and 5b, including associated distances.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-6: Supp. JAN-13 identifies stakeholder comments, see page 27, and please identify all groups, organizations, individuals, or agencies that comprise the term "stakeholder" as used in section 2.3.7.3.

A.ANR:VGS.2-6:

Please see Section 2.3.7.2 (page 25) of Exhibit Petitioner Supp. JAN-13.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-7: Admit that the project is not water dependent? If your response is anything other than an unqualified admission, please explain in detail the reasons for any qualifications or denial.

A.ANR:VGS.2-7: Objection, calls for a legal conclusion. Further objection on the grounds that the question is unduly vague and ambiguous for failure to explain "water dependent."

Person Responsible for Response: Kimberly K. Hayden, Esq.
Title: Director, Downs Rachlin Martin PLLC
Date: May 30, 2013

Q.ANR:VGS.2-8: Admit that alternative 5a, otherwise known as the proposal submitted as part of the December 21, 2012 filing, is less environmentally damaging to aquatic resources? If your response is anything other than an unqualified admission, please explain in detail the reasons for any qualifications or denial.

A.ANR:VGS.2-8: Admit, to the extent that the question seeks a comparison between Alternatives 5a and 5b.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-9: Admit that JAN-13 does not contain a practicability analysis? If the request is denied, please identify where in the analysis the practicability of alternative 51 is discussed.

A.ANR:VGS.2-9: Objection, the question is unduly vague and ambiguous as there is no Alternative 51. Notwithstanding this objection, denied. Evaluation criteria for practicability analysis are presented on page 3 of Appendix 1 in Exhibit Petitioner Supp. JAN-13 and discussed in Section 2.3 of same.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-10: Please identify where you have included a practicability analysis in Supp. JAN-13.

A.ANR:VGS.2-10: See A.ANR:VGS.2-9.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-11: Please identify those RTE species that were avoided with alternative 5a that now may be subject to an impact under alternative 5b. Please identify the location of the RTE and the proximity of the species occurrence to the project limits of disturbance.

A.ANR:VGS.2-11: Based on Exhibit Petitioner Supp. JAN-13, locations of elemental occurrences were identified as follows: For plant species, 8 locations were identified for both Alternatives 5a and 5b. For animal species 6 were identified in Alternative 5a and 5 in Alternative 5b. The proximity of RTE species to project limits of disturbance is depicted in mapping presented in May 3, 2013 re-filed Collateral Permit Applications (see A.CLF:VGS.1-1, May 8, 2013).

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-12: Admit that avoiding impacts to RTE species to the greatest extent practicable was not the purpose or reason for changing the alignment from alternative 5a to alternative 5b. If your response is anything other than an unqualified admission, please explain in detail the reasons for any qualifications or denial.

A.ANR:VGS.2-12: Admit.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-13: Admit that avoiding impacts to significant wetlands was not the purpose or reason for changing the alignment from alternative 5a to alternative 5b. If your response is anything other than an unqualified admission, please explain in detail the reasons for any qualifications or denial.

A.ANR:VGS.2-13: Admit.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-14: Please produce shapefiles and rare plant forms for all plants identified in the Gilman Report, Appendix 6.

A.ANR:VGS.2-14:

We have conferred with ANR regarding this question and understand that ANR has withdrawn this request.

Person Responsible for Response: Kimberly K. Hayden, Esq.
Title: Director, Downs Rachlin Martin PLLC
Date: May 30, 2013

Q.ANR:VGS.2-15: Please confirm the date the Gilman Report, Appendix 6 to JAN-2, was prepared?

A.ANR:VGS.2-15: Originally prepared 12/6/2012, revised 2/26/2013.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-16: Please identify the "Project" to which the Gilman Report, Appendix 6 to JAN-2, refers and is the basis of the study, is it the project proposed in December 2012, Alternative 5a or the project proposed in February 2013, alternative 5b?

A.ANR:VGS.2-16: Appendix 6 to Exhibit Petitioner Supp. JAN-2 refers to Alternative 5b.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-17: The testimony of Jeff Nelson and the Gilman Report, appear to provide inconsistent information. The Nelson testimony states that

A.ANR:VGS.2-17: Objection, this question is incomplete and cannot be answered.

Person Responsible for Response: Kimberly Hayden
Title: Downs Rachlin Martin PLLC
Date: May 30, 2013

Q.ANR:VGS.2-18: The Gilman Report, Appendix 6 to Jan-2, on page 3, lists "seven(7) protected plants . . . encountered within the study areas but outside the current proposed alignment and workspaces:

- a. For each species listed on pages 3 and 5, please provide the distance from the species to the limits of disturbance for the project.
- b. Please provide the number of plants contained in each species population
- c. Please provide the approximate percentage of plants that are likely to be impacted by the project, project construction, and project maintenance

A.ANR:VGS.2-18:

a. While these plant species have been identified within the Project investigation area, each is located outside of the proposed limits of disturbance for Project construction. These distances can be measured from the mapping presented in the EPSC plans dated 4/30/2013 provided with the re-filed Collateral Permit Applications (5/3/2013).

b. See A.ANR:VGS.2-14.

c. None, presuming that the EPSC plans dated 4/30/2013 are followed. In particular, see EPSC Plan Sheet G-011, "Additional Environmental Notes," note 11.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-19: The Gilman Report, Appendix 6 to JAN-2, pages 5-6 identified rare plant populations that were encountered in the study area, but outside of and remote from the final alignment.

- a. For each species listed on pages 3 and 5, please provide the distance from the species to the limits of disturbance for the project.
- b. Please provide the number of plants contained in each species population
- c. Please provide the approximate percentage of plants that are likely to be impacted by the project, project construction, and project maintenance.

A.ANR:VGS.2-19:

- a. These computations have not been performed. However, distances can be measured from the EPSC plans dated 4/30/2013 provided as part of the re-filed Collateral Permit Applications (5/3/2013).
- b. See A.ANR:VGS.2-14.
- c. While a specific computation has not been performed at this point, VGS has included avoidance and minimization measures in the EPSC plans dated 4/30/2013 for the Project. For example, where such plants occur within a wetland, temporary construction mats will be used to protect the subject plans from soil disturbance.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-20: The Conclusion to the Gilman report, Appendix 6 of JAN-2, states that four protected plants "occur near and just outside of the final alignment such that protective measures, fencing, and appropriate signage are recommended to avoid any inadvertent taking." Please explain what is meant by "any inadvertent taking." Please identify all activities that could result in an inadvertent taking. Please identify and describe all avoidance measures to be utilized or employed while engaged in these activities to ensure that there will be no taking of protected species protective measures that will be employed to minimize or eliminate the risk of these activities to avoid a taking.

- a. For each species listed on pages 3 and 5, please provide the distance from the species to the limits of disturbance for the project.
- b. Please provide the number of plants contained in each species population
- c. Please provide the approximate percentage of plants that are likely to be impacted by the project, project construction, and project maintenance

A.ANR:VGS.2-20: We note that the Gilman report, at the section referenced above, notes five, not four protected plant populations. "Inadvertent taking" refers to an unexpected or unplanned incursion into an area of known protected plant locations during construction. Such activities could include tree clearing, grading, material staging, and equipment access beyond those which have been presented in the EPSC Plans dated 4/30/2013. Avoidance measures to be utilized are presented in the EPSC Plans dated 4/30/2013.

a. While these computations have not been specifically performed, the distances can be measured from the mapping presented in EPSC plans dated 4/30/2013 provided with the re-filed Collateral Permit Applications (5/3/2013).

b. See A.ANR:VGS.2-14.

c. None, presuming that the EPSC plans dated 4/30/2013 are followed. In particular, see EPSC Plan Sheet G-011, "Additional Environmental Notes," note 11.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-21: Will Petitioner incorporate mitigation measures for impacts to rare species? If so, please identify any and all mitigation measures upon which Petitioner will rely for impacts on rare plants.

A.ANR:VGS.2-21: Yes. The mitigations measures are described in the EPSC Plans dated 4/30/2013 during construction and to the Vegetation Management Plan during operation, including topsoil segregation as described therein. These documents are included with the re-filed Collateral Permit Applications (5/3/2013).

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-22: In "Non-impacted natural communities" and Conclusions sections of the Gilman report Mr. Gilman describes how the project has avoided impacts to the Mt. Florona Swamp Cattail Marsh, Monkton Northern White Cedar Swamp, and New Haven Red Maple-Green Ash Swamp by the December 2012 VT Gas alignment plan to have roadside construction in the vicinity of these natural communities. He states that impacts to other natural communities are significantly minimized by co-locating the pipeline along road margins. Now that the project alignment (January 28, 2013) will impact these same natural communities, how can Mr. Gilman and Petitioner state that impacts have been avoided or minimized?

A.ANR:VGS.2-22: The February 28, 2013 alignment (incorrectly cited as January 28, 2013 above), also referred to as Alternative 5b, considers both avoidance/minimization of environmental impact, as well as the practicability of project construction and operation, given stakeholder concerns raised following the presentation by VGS of Alternative 5a in December 2012. Numerous avoidance and minimization measures associated with Alternative 5b are described in the Supplemental Prefiled Testimonies of Jeffrey A. Nelson and John Heintz (2/28/2013).

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-23: Does Petitioner contend that any impacts to rare plants will be insignificant?

A.ANR:VGS.2-23: Objection, this question is overly broad, ambiguous and calls for a legal conclusion.

Person Responsible for Response: Kimberly K. Hayden, Esq.
Title: Director, Downs Rachlin Martin PLLC
Date: May 30, 2013

Q.ANR:VGS.2-24: Will Petitioner agree to a condition in the Certificate of Public Good requiring a Plan to monitor and control for invasive species. If so, is Petitioner willing to agree to accept the recommendations of the Agency of Natural Resources or any successor organization/agency regarding the types of species to be excluded from colonizing any disturbed areas.

A.ANR:VGS.2-24:

Based on the preliminary data gathered on the presence of invasive species presented in the attached VHB *ANGP Phase I, Invasive Plant Species Assessment* memorandum dated 5/24/2013, much of the proposed project corridor is currently occupied by numerous invasive plant species listed on the attached Vermont Agency of Agriculture, Food and Markets Quarantine #3 – Noxious Weeds list (as well as others not listed, but may be detrimental to natural ecosystems). Therefore, prevention of colonization by such species is impossible as it has already occurred.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-25: Is it possible to assess and inspect the pipeline right of way from the ground?

A.ANR:VGS.2-25: Yes. VGS customarily inspects its pipelines through aerial inspections as well as on the ground.

Person Responsible for Response: Jean-Marc Teixeira
Title: Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-26: Please describe the method by which the Pipeline will be inspected and maintained.

A.ANR:VGS.2-26: As explained in the VGS prefiled testimony, the line will be inspected by aerial, vehicular and walking surveys.

Person Responsible for Response: Jean-Marc Teixeira
Title: Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-27: On page 44, Mr. Nelson states that the pipeline crossing of the Red maple-Green Ash Swamp will not be expected to "change the formative nature of the community (the wet hydrology, which is driven by periodic surface inundation), and impacts should therefore not be considered undue."

- a. Please explain the basis for that statement and provide all facts supporting this conclusion.
- b. Please explain how pipeline construction in deep peat soils will be accomplished without altering wetland hydrology or requiring a wide construction trench.
- c. Please identify and explain the purpose for clearing and maintaining a clearing along the pipeline right of way.

A.ANR:VGS.2-27:

a. Substrate sampling performed on behalf of VGS and described in the attached VHB *Addison Natural Gas Project Swamp Substrate Assessments* memorandum dated 5/24/2013 (**Attachment A.ANR:VGS.2-27(a)**).

b. Objection, this question is vague. The term "deep" peat soils is vague. Nonetheless, the only identified area of known peat soils greater than 10 feet in depth along the Project route is the Monkton Swamp, which will be crossed using directional drilling beneath these soils.

c. See A.ANR:VGS.2-28.

Person Responsible for Response: Jeffrey A. Nelson; John Heintz
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.; Project Manager

Date: May 30, 2013

Q.ANR:VGS.2-28: Please identify and explain why it is necessary to maintain a clearing and the width of the clearing to assess the condition of the pipeline.

A.ANR:VGS.2-28: In order to be able to conduct inspections of the pipeline and to have the ability to expeditiously transport equipment to the right of way should there ever be a need to excavate the pipeline for inspection or repair.

Person Responsible for Response: John Heintz
Title: Project Manager
Date: May 30, 2013

Q.ANR:VGS.2-29: Please explain why it is not possible to inspect the pipeline from the ground where it crosses significant natural communities, rare, threatened or endangered plants, or wetlands.

A.ANR:VGS.2-29: VGS conducts aerial surveys generally once per month to inspect ROW conditions, pipeline conditions, detect leaks, and any encroachments or other potential threats to the pipe. It would not be efficient to conduct all such surveys on the ground.

Person Responsible for Response: Jean-Marc Teixeira
Title: Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-30: Please identify the "Preferred Alternative" as that term is used in Supp. JAN-13.

A.ANR:VGS.2-30: Alternative 5.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-31: On page 27, of Supp. JAN-13, it states that "By relocating the transmission pipeline from the public rights-of-way to the VELCO corridor, the acres of significant wetlands intersected by the proposed construction area increases from 10 acres for Alternative 51 to 21 acres for Alternative 5b.

a. Does this relocation also incorporate those segments of the project in Addison County that deviate from the VELCO corridor, for example the deviation onto Palmer and Latreille properties?

A.ANR:VGS.2-31:

a. Assuming the reference to Alternative 51 is intended to mean Alternative 5a, yes, this change in acreage reflects all changes in pipeline alignment between Alternatives 5a and 5b.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-32: On Page 27-28 of Supp. JAN 13- the report states "However, this number is 11 acres less than the acreage for the Preferred Alternative (32 acres). Please identify the route or alternative to which "Preferred Alternative" refers.

A.ANR:VGS.2-32: Alternative 5.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-33: Please explain the difference or distinction between the "Preferred Alternative" referenced on Page 28 and the route selected as the Preferred Alternative in Section 2.4.

A.ANR:VGS.2-33: No difference.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-34: Admit that reduction of aquatic resource impacts was not the cause for the change in realignment from Alternative 5a to alternative 5b.

A.ANR:VGS.2-34: Admit.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-35: Admit that the Army Corps of Engineers has expressed concern with the ability of alternative 5b to satisfy the LEDPA determination of the 404(1) analysis.

A.ANR:VGS.2-35: Denied. VGS is not aware of any such expression of concern by USACE.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-36: Admit that avoidance of wetlands and other aquatic resources was not the primary driver in the realignment from alternative 5a to 5b.

A.ANR:VGS.2-36: Admit.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-37: Please identify the reason and need for widening the existing cleared VELCO corridor, as referenced on page 28 of JAN-13.

- a. Please identify all efforts to avoid and minimize the forest clearing
- b. Please identify the route distance over which the area will be cleared.
- c. Please provide all factors supporting the need to clear this area
- d. Can Petitioner inspect the pipeline without maintaining a strip of clearance?
- e. Can Petitioner walk the right of way in order to inspect
- f. Explain why Petitioner does not limit the maintenance clearing over the areas of significant natural communities, rare and threatened or endangered plants, or forested area.

A.ANR:VGS.2-37: See A.ANR:VGS.2-28.

- a. Refer to Supplemental Prefiled Testimonies of Jeffrey A. Nelson and John Heintz (2/28/2013).
- b. This analysis has not been conducted by VGS, however, this calculation could be performed using the mapping provided with the re-filed Collateral Permit Applications (5/3/2013).
- c. See A.ANR:VGS.2-28.
- d. No. See A.ANR:VGS.2-28.
- e. Yes, but see A.ANR:VGS.2-29.
- f. VGS does intend to limit maintenance clearing within these areas. See Vegetation Management Plan (provided as part of the re-filed Collateral Permit Applications (5/3/2013)).

Person Responsible for Response: Jeffrey A. Nelson; Jean-Marc Teixeira
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.; Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-38: Please explain the reasons why the realignment cannot remain within the VELCO right of way and provide all facts and information supporting the deviation from the VELCO right of Way.

A.ANR:VGS.2-38: Objection, the question is overly broad and vague for failure to identify which portions of the Project the question refers to. Notwithstanding the objection, the Project was not originally located fully within the VELCO right of way. Realignment out of the VELCO rights of way were selected based on consideration of several factors, including environmental impact, potential to impact existing or planned VELCO infrastructure, and landowner/community concerns.

Person Responsible for Response: John Heintz
Title: Project Manager
Date: May 30, 2013

Q.ANR:VGS.2-39: Please identify and provide the width of any project clearing required to construct or facilitate the horizontal directional boring?

A.ANR:VGS.2-39: See Exhibit Petitioner Supp. JH-3 (2/28/13).

Person Responsible for Response: John Heintz
Title: Project Manager
Date: May 30, 2013

Q.ANR:VGS.2-40: Please identify the amount of construction impacts that will take place in the sand plain forest.

A.ANR:VGS.2-40: Objection, the question is vague and ambiguous. There is more than one sand plain forest within the Project area. Additionally, it is unclear how the "amount" would be quantified.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-41: Has the Army Corps of Engineers accepted or adopted the Project Purpose that has been listed in Section 1.2 of JAN-13 (2/28/13).

A.ANR:VGS.2-41: VHB is unaware of whether the Army Corps of Engineers has accepted or adopted the Project Purpose listed in Section 1.2 of Exhibit Petitioner Supp. JAN-13 (2/28/13).

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-42: Please identify any and all additional natural resource inventories that had yet to be conducted at the time Exhibit Petitioner Supp. JAN-2 was prepared. If any of these inventories have since been completed, please identify the date of completion and please provide any data, information, analysis, report, or other documentation detailing or recording the inventory. If any of these inventories have yet to be conducted, please provide the anticipated date the inventory will be conducted.

A.ANR:VGS.2-42: See email attached as **Attachment A.ANR:VGS 2-42.1** and **Attachment A.ANR:VGS.2-42.2**, titled "Supplemental Resource Delineation/Field Activities for ANGP Reroute." Additional work that has been completed at this point is provided in the Re-filed Collateral Permit Applications (5/3/2013). VHB has prepared the "Remaining Natural Resource Investigation Areas" memorandum dated 5/28/2013 which provides an inventory of the remaining field assessments to be completed. See **Attachment A.ANR:VGS.2-42.3**.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-43: Admit that alternative 5a is the least environmentally damaging alternative? If your response is anything other than an unqualified admission, please explain in detail the reasons for any qualifications or denial.

A.ANR:VGS.2-43: Deny. Alternative 5b has been identified by VHB as the least environmentally damaging practicable alternative.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-44: Please explain why it is necessary to increase the amount of impacts to wetlands, state significant natural communities, and rare species by changing the alignment from alternative 5a to 5b.

A.ANR:VGS.2-44: Objection; VGS does not agree with the underlying assumption of the question. Notwithstanding the objection, please refer to response to Q.ANR:VGS.2-43.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-45: Admit that alternative 5a is the least environmentally damaging practicable alternative. If your response is anything other than an unqualified admission, please explain in detail the reasons for any qualifications or denial.

A.ANR:VGS.2-45: Deny. Alternative 5a was determined following the preparation of the Prefiled Testimony of Jeffrey A. Nelson (12/20/2012) to not be practicable.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-46: Please explain and describe how the Project complies with Section 9.5 of the Vermont Wetland Rules.

A.ANR:VGS.2-46: Refer to the re-filed Vermont Wetland Permit Application dated 5/3/2013.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-47: Please explain and define the use of the term "feasible" as that term is used in response to Palmer:VGS.1-1.

A.ANR:VGS.2-47: As used it means that the Project in that location would interfere with VELCO's use of the VELCO corridor.

Person Responsible for Response: John Heintz
Title: Project Manager
Date: May 30, 2013

Q.ANR:VGS.2-48: Please identify all existing and planned VELCO infrastructure that would prohibit or prevent the use of the VELCO corridor as described in A.PALMER:VGS1-1.

A.ANR:VGS.2-48: The existing infrastructure is already installed. VGS does not have possession of any VELCO plans for future infrastructure at this location.

Person Responsible for Response: John Heintz
Title: Project Manager
Date: May 30, 2013

Q.ANR:VGS.2-49: Please explain how an increase in the amount of wetland impacts from alternative 5a to 5b, avoids wetland impacts or satisfies the requirement that the project is the least environmentally damaging practicable alternative as required under 404(b)(1). Please provide all facts, rules, regulations, rules, other standards and any other information that supports this response.

A.ANR:VGS.2-49: Refer to the re-filed Department of the Army Section 404 Permit Application dated 5/3/2013.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-50: Please identify the widths of any clearing required for construction, maintenance and operation of the project and gas line that cuts through or abuts the following:

- a. any significant natural community
- b. Any wetland
- c. Any rare, threatened, or endangered plant
- d. Any necessary wildlife habitat

A.ANR:VGS.2-50:

- a. Refer to the re-filed Collateral Permit Application plans and exhibits dated 5/3/2013.
- b. Refer to response to Q.ANR:VGS.2-50a.
- c. Refer to response to Q.ANR:VGS.2-50a.
- d. Refer to response to Q.ANR:VGS.2-50a.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-51: With respect to the new alignment, 5b, please identify and explain all efforts to avoid impacts to the following:

- a. Any significant natural community
- b. Any wetland
- c. Any rare, threatened, or endangered plant
- d. Any necessary wildlife habitat

A.ANR:VGS.2-51:

- a. Refer to the Supplemental Prefiled Testimonies of Jeffrey A. Nelson and John Heintz (2/28/2013) and re-filed Collateral Permit Applications (5/3/2013).
- b. Refer to response to Q.ANR:VGS.2-51a.
- c. Refer to response to Q.ANR:VGS.2-51a.
- d. Refer to response to Q.ANR:VGS.2-51a.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-52: Please explain the reason for and the methodology used to determine the transmission line path through the following:

- a. Any significant natural community
- b. Any wetland
- c. Any rare, threatened, or endangered plant
- d. Any necessary wildlife habitat

A.ANR:VGS.2-52:

- a. Refer to response to Q.ANR:VGS.2-51.
- b. Refer to response to Q.ANR:VGS.2-52a.
- c. Refer to response to Q.ANR:VGS.2-52a.
- d. Refer to response to Q.ANR:VGS.2-52a.

Person Responsible for Response: Jeffrey A. Nelson

Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.

Date: May 30, 2013

Q.ANR:VGS.2-53: What is the total amount of rock, bedrock, or ledge that is expected to be excavated through the use of explosives?

A.ANR:VGS.2-53: That has not been determined. However, it has been assumed that 35% of the Project corridor will require blasting during construction.

Person Responsible for Response: John Heintz
Title: Project Manager
Date: May 30, 2013

Q.ANR:VGS.2-54: Please explain and provide all reasons for why blasting is necessary.

A.ANR:VGS.2-54: Blasting could be necessary as a means to open a trench of sufficient width and depth, generally approximately 5 feet wide by five feet deep to allow for pipeline installation.

Person Responsible for Response: John Heintz
Title: Project Manager
Date: May 30, 2013

Q.ANR:VGS.2-55: Please provide a list of proposed explosives that will be used, including:

- (i) Type of explosive and how much will be used;
- (ii) Type of detonator; and
- (iii) MSDS sheets for all materials relating to explosives.

A.ANR:VGS.2-55: This has not yet been determined.

Person Responsible for Response: John Heintz

Title: Project Manager

Date: May 30, 2013

Q.ANR:VGS.2-56: Please provide a map or maps of areas that will be impacted by blasting which includes the following:

- (a) The area where the proposed blasting will occur;
- (b) A fracture trace map of the area where blasting will occur
- (c) water resources within 2,000 feet of the proposed blasting including:
 - (1) A delineation of the watershed where the proposed blasting will occur.
 - (2) Streams, ponds, or other surface water body;
 - (3) Seeps or springs;
 - (4) Wetlands;
 - (5) Public and potable groundwater wells including drillers' well logs when they are available.
 - (6) Available copies of well logs for public and potable water supplies.

A.ANR:VGS.2-56:

- a. VGS has not yet determined specific locations where blasting will be required.
- b. No such information has been prepared.
- c. See a.

Person Responsible for Response: John Heintz; Jeffrey A. Nelson
Title: Project Manager; Director of Energy and Environmental Services, Vanasse Hangen
Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-57: Please provide a description of the geology where blasting will occur including whether there is Karst in the area that could be affected by blasting and identify potential hazards that may exist from the blast impact upon the geology (e.g. the blast opens a drainage pathway to a cave).

A.ANR:VGS.2-57: See A.ANR:VGS.2.56.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-58: Does Petitioner plan to conduct any pre and post blast monitoring to assess the possible impact to water sources and water supplies from the blasting activity? If so, please produce the monitoring plan.

A.ANR:VGS.2-58: Yes. A preliminary draft blasting plan was included with **Attachment A.ANR.RTP.1-3 (Heintz)**. VGS plans to update this plan in connection with its prefiled rebuttal testimony and will finalize a construction blasting plan prior to construction. The VGS blasting plan will include pre and post blast monitoring.

Person Responsible for Response: John Heintz
Title: Project Manager
Date: May 30, 2013

Q.ANR:VGS.2-59: If Petitioner does not intend to conduct any pre and post blast monitoring to assess the possible impact to water sources and water supplies from blasting activity, please describe the method by which Petitioner will demonstrate that the project blasting activities will not have an undue adverse impact on groundwater, surface waters, water sources and the water supply?

A.ANR:VGS.2-59: Refer to A.ANR:VGS.2-58.

Person Responsible for Response: John Heintz
Title: Project Manager
Date: May 30, 2013

Q.ANR:VGS.2-60: Exhibit EMS-1 shows the estimated GHG reductions per year and for the period 2016-2034 for the proposed project. Annual reductions range from 13,000 tons/year in 2016 to 15,700 tons/year in 2034. Total GHG reductions for the 19-year period are calculated to be 292,000 tons. Is this analysis limited to combustion of fuels by consumers?

A.ANR:VGS.2-60: Yes.

Person Responsible for Response: Eileen Simollardes
Title: Vice President, Supply and Regulatory Affairs, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-61: Admit that the analysis contained in EMS-1 does not account for GHG releases during extraction and production of the fuel (e.g., fugitive methane emissions at the wellhead. If your response is anything other than an unqualified admission, please explain in detail the reasons for any qualifications or denial.

A.ANR:VGS.2-61: Admitted.

Person Responsible for Response: Eileen Simollardes
Title: Vice President, Supply and Regulatory Affairs, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-62: Admit that the analysis contained in EMS-1 does not account for GHG releases for fugitive natural gas leakage from transmission and distribution pipes and other system components such as gate stations, residential / commercial distribution hookups, etc. If your response is anything other than an unqualified admission, please explain in detail the reasons for any qualifications or denial.

A.ANR:VGS.2-62: Admitted.

Person Responsible for Response: Eileen Simollardes
Title: Vice President, Supply and Regulatory Affairs, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-63: Admit that the analysis contained in EMS-1 does not account for GHG releases natural gas releases from scheduled maintenance and new construction activities (e.g., purging, pressure testing, relief valve testing). If your response is anything other than an unqualified admission, please explain in detail the reasons for any qualifications or denial.

A.ANR:VGS.2-63: Admitted.

Person Responsible for Response: Eileen Simollardes
Title: Vice President, Supply and Regulatory Affairs, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-64: Admit that the analysis contained in EMS-1 does not account for GHG releases for natural gas releases from unscheduled events (e.g., historical estimate of accidental releases, relief valve releases due to overpressure events, etc.). If your response is anything other than an unqualified admission, please explain in detail the reasons for any qualifications or denial.

A.ANR:VGS.2-64: Admitted.

Person Responsible for Response: Eileen Simollardes
Title: Vice President, Supply and Regulatory Affairs, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-65: Will VGS provide an analysis of the GHG emissions for the baseline and the presented future scenario using this broader lifecycle approach that includes the activities listed above? If VGS is unable to provide data or estimates for any of the above potential GHG emissions sources, please explain why.

A.ANR:VGS.2-65: Objection, calls for legal conclusion. Section 248(b)(5) does not establish a GHG standard. Notwithstanding the objection, no.

Person Responsible for Response: Eileen Simollardes
Title: Vice President, Supply and Regulatory Affairs, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-66: Regarding Exhibit EMS-1, please clarify the following:

- A. What are the data sources / references for the various assumptions used to produce the 2016, 2034 and 2016-2034 estimates?
- B. What is the forecasted schedule for annual conversions? What is the total number of households in the Vergennes and Middlebury area and the forecasted conversion rate as a percentage of all households? Please include a row for number of residences converted per year as well as the forecast natural gas sales per year for each year from 2016 to 2034
- C. How many new natural gas customers are expected to be utilizing new "high efficiency" appliances (i.e., furnaces, boilers, etc.) vs. conventional lower efficiency units (e.g., conversion of an existing older propane unit to combust natural gas)?
- D. Does VGS have any additional information on the actual current fuel oil and propane use per household and the forecasted annual natural gas use per household in the prospective service area, plus any commercial or industrial customer usage? If so, please provide.
- E. Please perform a sensitivity analysis that includes at least two household natural gas conversion rate scenarios – one optimistic (this may be the existing analysis) and one pessimistic

A.ANR:VGS.2-66:

A. The estimates are based on the sales shown in **Attachment A.ANR:VGS.2-66**, year 2 for 2016, year 20 for 2034, and the sum of years 1 to 20 for 2016-2034 as well as the following assumptions:

- 70% of residential customers are assumed to switch from fuel oil and 30% from propane. This assumption was based on a review of the market's home heating fuels from census data. Large Industrial customers' alternate fuel use is based on information provided by the customers.
- Per billion btus, the consumption of natural gas is assumed to produce 117,647 pounds of carbon dioxide, 0.6 pounds sulfur dioxide, and 92.2 pounds nitrous oxide.
- Per billion btus, the consumption of propane is assumed to produce 136,612 pounds of carbon dioxide, 1.1 pounds sulfur dioxide, and 153 pounds nitrous oxide.
- Per billion btus, the consumption of oil is assumed to produce 159,285 pounds of carbon dioxide, 507.1 pounds sulfur dioxide, and 128.6 pounds nitrous oxide.

See also **Attachment A.VFDA:VGS.2-9**.

B. See **Attachment A.ANR:VGS.2-66**.

C. Based on recent experience in new markets, VGS expects approximately 25% of new customers to utilize energy efficient equipment.

D. No, VGS does not have additional information on per household consumption. Industrial customer usage was provided in HIGHLY CONFIDENTIAL Attachment A.ANR:VGS RTP.1-3 (Lyons).

E. VGS has not performed this analysis

Person Responsible for Response: Eileen Simollardes
Title: Vice President, Supply and Regulatory Affairs, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-67: Regarding Exhibit EMS-1, admit that the baseline assumes that in the absence of natural gas, all customers now using fuel oil or propane will continue to do so through 2034. If your response is anything other than an unqualified admission, please explain in detail the reasons for any qualifications or denial.

A.ANR:VGS.2-67: Admitted.

Person Responsible for Response: Eileen Simollardes
Title: Vice President, Supply and Regulatory Affairs, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-68: Admit that the assumption that in the absence of natural gas, all customers now using fuel oil or propane will continue to do so through 2034 maximizes the forecasted GHG benefit of the project. If your response is anything other than an unqualified admission, please explain in detail the reasons for any qualifications or denial.

A.ANR:VGS.2-68: Denied. The forecasted GHG benefit does not capture all GHG benefits, including things such as the GHG benefit associated with replacement of older systems with more efficient systems or the GHG benefit associated with reduction of truck traffic.

Person Responsible for Response: Eileen Simollardes
Title: Vice President, Supply and Regulatory Affairs, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-69: Is it reasonable to expect that some percentage of these customers would convert to a different, less GHG-intensive energy source (e.g., conversion from fuel oil to geothermal heat pumps) in the absence of natural gas service?

A.ANR:VGS.2-69: It is reasonable to assume this however the reverse is also true.

Person Responsible for Response: Eileen Simollardes
Title: Vice President, Supply and Regulatory Affairs, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-70: If the answer to the preceding question is yes, admit that the GHG reductions resulting from the project would be less than that projected by VG? . If your response is anything other than an unqualified admission, please explain in detail the reasons for any qualifications or denial.

A.ANR:VGS.2-70: Denied. Depending on the price difference between propane and fuel oil it is possible that customers currently using propane could switch to fuel oil.

Person Responsible for Response: Eileen Simollardes
Title: Vice President, Supply and Regulatory Affairs, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-71: The forecast assumes that the GHG benefits of the project remain constant over the 19-year period. Is it reasonable to expect that GHG emissions will increase over time as the system ages (e.g., leaks from component wear or failure)? If YES, please provide an estimate of these emissions. If NO, please explain why.

A.ANR:VGS.2-71: No. VGS will have an on-going maintenance program to prevent leaks regardless of the age of the system.

Person Responsible for Response: Jean-Marc Teixeira
Title: Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-72: The 2011 Comprehensive Energy Plan sets a goal of having 90% of the state's energy come from renewable sources by 2050. How much of the 10% non-renewable portfolio would be allocated to homes served by this project?

A.ANR:VGS.2-72: VGS has not performed this analysis.

Person Responsible for Response: Eileen Simollardes
Title: Vice President, Supply and Regulatory Affairs, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-73: Please provide the amount of "TOTAL GAS UNACCOUNTED FOR" as represented by Vermont Gas to FERC and explain the standard for measurement and the amount of "TOTAL GAS DELIVERIES" that amount represents for existing infrastructure.

A.ANR:VGS.2-73: 80,850 Mcf, per page 520 of Vermont Gas' FERC Form 2 for 2012. The standard of measurement is gas received at the border station less gas sales to customers. This equates to 1% of total gas deliveries.

Person Responsible for Response: Jean Marc Teixeira
Title: Vice President, Operations
Date: May 30, 2013

Q.ANR:VGS.2-74: Please provide any and all documentation, information, and data that quantify the contribution from each of the various "system losses" including measurement / meter error, accounting inaccuracies, gas theft, pipe/valve leaks, internal gas use by VGS (e.g., combustion of gas at compressor stations to maintain pipeline temperatures), consumption on an inactive meter, third party damages, scheduled maintenance gas releases, accidental and other gas leaks/releases?

A.ANR:VGS.2-74: See A.PSD:VGS.2-33 and 34. See also A.CLF:VGS.1-14.

Person Responsible for Response: Jean-Marc Teixeira
Title: Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-75: If there is no such data, documentation, or information, please explain why.

A.ANR:VGS.2-75: Not applicable.

Person Responsible for Response: Jean-Marc Teixeira
Title: Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-76: What is the limit of precision of the VGS inventory system?

A.ANR:VGS.2-76: Objection, the question is unduly vague and ambiguous.

Person Responsible for Response: Jean-Marc Teixeira
Title: Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-77: Please confirm whether VGS reports gas inventory and loss to FERC to the dekatherm? Please identify and indicate whether there is a higher measure of accuracy available.

A.ANR:VGS.2-77: The VGS FERC Form No. 2 report is in MCF. MCF is a volumetric measurement and dekatherm is a thermal measurement.

Person Responsible for Response: Jean-Marc Teixeira
Title: Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-78: Please explain and describe how leaks are detected and how describe how often monitoring is performed and the method for monitoring.

A.ANR:VGS.2-78: Please refer to Mr. Teixeira's prefiled testimony at A 19. The gas system is monitored at the VGS gas control center 24/7. VGS also injects an odorant in the natural gas at the gate station at the U.S./Canadian border to aid in leak detection. Also see: Attachment A.CSWD:VGS.RTP1.12.1, Section 192.613 (Continuing Surveillance), Section 192.705 (Transmission lines: Patrolling), and Section 192.721 (Distribution Systems: Patrolling).

Person Responsible for Response: Jean-Marc Teixeira
Title: Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-79: Please describe the leak monitoring protocol(s) currently used by VG its agents, employees, and contractors, and indicate whether this protocol will be used to detect leaking infrastructure in the proposed VGS project.

A.ANR:VGS.2-79: See A.ANR:VGS.2-78. The above protocols will continue to be used to detect leaks.

Person Responsible for Response: Jean-Marc Teixeira
Title: Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-80: If a different monitoring protocol is to be implemented, please describe this protocol and explain why a different protocol is being used for this project?

A.ANR:VGS.2-80: Not applicable.

Person Responsible for Response: Jean-Marc Teixeira
Title: Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-81: How many leaks are detected annually by VGS?

A.ANR:VGS.2-81: In 2012, there were 71 leaks reported to DOT.

Person Responsible for Response: Jean-Marc Teixeira
Title: Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-82: How many of these leaks are repaired, and what is the average amount of time that elapses between leak detection and leak repair?

A.ANR:VGS.2-82: 100% of the leaks are repaired. Vermont Gas does not record the average time lapse between leak detection and repair. VGS practice is to repair Class 1 leaks immediately. Code allows Class 2 leaks to be scheduled for repair within 6 months of detection and class 3 leaks to be monitored. VGS's practice is to repair all leaks as soon as possible. See **Attachment A.CSWD: VGS.RTP.1-12.1** - Continuing Surveillance and Emergency Plans Leak Response pages 9 and 10.

Person Responsible for Response: Jean-Marc Teixeira
Title: Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-83: Does VGS have a "Purging and Interconnection" written procedure to address natural gas releases from these activities? If YES, please describe the procedure and provide a copy of the procedure. If NO, please explain why.

A.ANR:VGS.2-83: See Attachment A.CSWD: VGS.RTP.1-12.1 - Purging.

Person Responsible for Response: Jean-Marc Teixeira
Title: Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-84: Will VGS participate as a partner in the U.S. Environmental Protection Agency's Natural Gas STAR Program (<http://www.epa.gov/gasstar/>)? If NO, please explain why.

A.ANR:VGS.2-84: No. See A.CLF:VGS.1-20. VGS reviewed the program and did not identify changes in its operations that would yield significant reductions in fugitive emissions.

Person Responsible for Response: Jean-Marc Teixeira
Title: Vice President of Operations, Vermont Gas Systems, Inc.
Date: May 30, 2013

Q.ANR:VGS.2-85: On page 3, of Exhibit Petitioner Supp.JAN-4 (2/28/13), the report states "the Project's 2/28/13 Alignment would involve the following unavoidable impacts to Class II wetlands or buffers, as approximated based on conservative estimates" The 2/28/13 alignment increases the amount of significant wetlands impacted from 10 acres for alternative 5a (the 12/21/12 alignment) to 21 acres for alternative 5b (the 2/28/13 alignment), please explain the basis for the claim that this increase in wetland impacts is "unavoidable."

A.ANR:VGS.2-85: Refer to responses to Q.ANR:VGS.2-13, Q.ANR:VGS.2-36, Q.ANR:VGS.2-44, and Q.ANR:VGS.2-49.

Person Responsible for Response: Jeffrey A. Nelson
Title: Director of Energy and Environmental Services, Vanasse Hangen Brustlin, Inc.
Date: May 30, 2013

REQUESTS TO PRODUCE

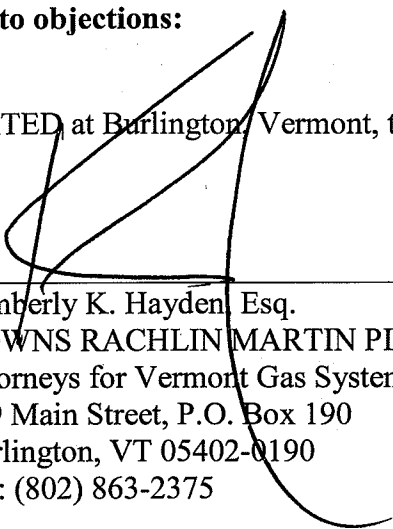
Q.ANR:VGS.RTP.2-1: Please produce all documents referenced, referred to, or relied upon in responding to these information requests.

A.ANR:VGS.RTP.2-1: Documents referenced not otherwise produced are provided. See **Attachment A.ANR:VGS.RTP.2-1.**

Person Responsible for Response: Kimberly K. Hayden, Esq.
Title: Director, Downs Rachlin Martin PLLC
Date: May 30, 2013

As to objections:

DATED at Burlington, Vermont, this 30th day of May, 2013.



Kimberly K. Hayden, Esq.
DOWNS RACHLIN MARTIN PLLC
Attorneys for Vermont Gas Systems, Inc.
199 Main Street, P.O. Box 190
Burlington, VT 05402-0190
Tel: (802) 863-2375

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