

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Joint Petition of Vermont Transco, LLC,)
Vermont Electric Power Company, Inc.)
("VELCO"), City of Burlington Electric)
Department ("BED") and Green Mountain)
Power Corporation for a certificate of public)
good, pursuant to 30 V.S.A. Section 248,)
authorizing the construction of the so-called)
East Avenue Loop Project in Williston, South)
Burlington, Colchester, Winooski and)
Burlington, Vermont, which consists of: (1))
the replacement of 4.8 miles of an existing)
single 115 kV line between VELCO's Essex)
Substation and its East Avenue Substation)
with two new 115 kV lines within the same)
corridor; (2) expansion of the East Avenue)
Substation; (3) installation of a new 1.5-mile)
34.5 kV line from the East Avenue Substation)
to BED's McNeil Substation; (4) construction)
of a new substation at the McNeil Generating)
Station; (5) installation of new and relocated)
equipment from BED's Lake Street)
Substation to the McNeil Substation; and (6))
removal of several circuits connected to)
BED's Lake Street Substation)

Docket No. 7314

**PREFILED REBUTTAL TESTIMONY OF
JEFFREY A. NELSON AND DANIEL J. PRASCH
ON BEHALF OF
PETITIONERS**

November 26, 2007

Summary: The purpose of the testimony is to address concerns regarding impacts on natural resources raised by Agency of Natural Resources and the City of South Burlington, including wetlands, natural communities, wildlife, and rare threatened and endangered ("RTE") species.

TABLE OF CONTENTS

1. Introduction..... 1

2. Overview..... 2

3. Construction Activities in Winooski Wetland / Gorge Island 3

4. Construction Activity in the Floodplain Forests..... 7

5. Restrictions on Construction in Muddy Brook Park..... 10

6. Lack of Effects on Bobcat and Fisher in Muddy Brook Park..... 11

7. St. Michael’s / Twin Bridges Access Route 12

8. Precise Locations of RTE Species 14

9. Stormwater Impacts 15

10. Natural Resources in Laydown Areas..... 17

11. Conclusion 17

EXHIBITS

Exhibit PET REB.8.1 Second Supplemental Report Addressing the Revised
Construction Access Routes and Laydown Area

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Joint Petition of Vermont Transco, LLC,)
Vermont Electric Power Company, Inc.)
("VELCO"), City of Burlington Electric)
Department ("BED") and Green Mountain)
Power Corporation for a certificate of public)
good, pursuant to 30 V.S.A. Section 248,)
authorizing the construction of the so-called)
East Avenue Loop Project in Williston, South)
Burlington, Colchester, Winooski and)
Burlington, Vermont, which consists of: (1))
the replacement of 4.8 miles of an existing)
single 115 kV line between VELCO's Essex)
Substation and its East Avenue Substation)
with two new 115 kV lines within the same)
corridor; (2) expansion of the East Avenue)
Substation; (3) installation of a new 1.5-mile)
34.5 kV line from the East Avenue Substation)
to BED's McNeil Substation; (4) construction)
of a new substation at the McNeil Generating)
Station; (5) installation of new and relocated)
equipment from BED's Lake Street)
Substation to the McNeil Substation; and (6))
removal of several circuits connected to)
BED's Lake Street Substation)

Docket No. 7314

**PREFILED REBUTTAL TESTIMONY OF
JEFFREY A. NELSON AND DANIEL J. PRASCH
ON BEHALF OF
PETITIONERS**

- 1 **1. Introduction**
- 2 Q1. Please state your names.
- 3 A1. Jeffrey Nelson and Daniel Prasch.
- 4

1 Q2. Have you previously filed testimony in this proceeding?

2 A2. Yes, we submitted testimony with the Original Petition, as well as supplemental
3 testimony relating to impacts of the so-called East Avenue Loop Project
4 (“Project”) on natural resources.

5

6 **2. Overview**

7 Q3. What is the purpose of your testimony?

8 A3. This testimony responds to (i) the prefiled testimony of the Vermont Agency of
9 Natural Resources (“ANR”) distributed to the Petitioners on October 7, 2007, as
10 well as the discovery responses produced on October 29, 2007; and (ii) the
11 prefiled testimony offered by the City of South Burlington (“CSB” or “City”) on
12 October 12, 2007, and the discovery responses produced on November 5, 2007.
13 Specifically, we are responding to concerns raised in the prefiled testimonies
14 provided by John M. Austin, Robert G. Popp, Julie Foley, and Charles S.
15 Eiseman.

16

17 Q4. Which concerns raised by ANR and CSB do Petitioners wish to address?

18 A4. The natural resources concerns we address in this testimony include (i)
19 construction activity within the Winooski Wetland, Gorge Island, and the
20 Floodplain Forest areas adjacent to those areas; (ii) the effect of construction on
21 bobcat and fisher in Muddy Brook Park; (iii) the effects of construction and

1 construction access to the Twin Bridges area; (iv) the locations of rare species
2 within the Project's 115 kV corridor; and (v) stormwater discharges.

3
4 Q5. Is there any other material you wish to address in this testimony?

5 A5. Yes. We briefly describe the results of our investigation of potential
6 environmental impacts on the construction staging area (commonly known as the
7 "laydown area") referenced in the Prefiled Rebuttal Testimony of Jerry Ostrander.
8 The proposed laydown area located off of VT Route 2A in Williston was
9 investigated for streams, wetlands, RTE plants, and natural communities during
10 Fall of 2007. The results of these investigations are discussed in the Second
11 Supplement to the VT Transco/East Avenue Loop (EAL) Natural Resources
12 Report, Exhibit PET REB.8.1.

13

14 **3. Construction Activities in Winooski Wetland / Gorge Island**

15 Q6. Are you familiar with the area in which Structures N/S 45 through 48 are located?

16 A6. Yes: this is an area that we refer to as the "Winooski Wetland," and is best
17 described as a wetland complex extending between Interstate 89 and the
18 Winooski downtown, between the railroad tracks and the southern bank of the
19 Winooski River, and including the wetland portions of the so-called "Gorge
20 Island" (sometimes known as "Catlin Island"), all as depicted on Sheets 16
21 through 19 in the Attachment of Exhibit PET 10.5.

1

2 Q7. Are you aware of the Agency's concerns regarding construction activity in the
3 Winooski Wetland?

4 A7. Yes. We have carefully reviewed the testimony of Messrs. Austin and Popp, and
5 Ms. Foley, as well as the discovery responses to Petitioner's First Set of Requests
6 to Produce. ANR proposed several conditions to protect bird habitat and rare
7 plant species in the Winooski Wetland.

8

9 Q8. Have Petitioners met with ANR to discuss these concerns?

10 A8. Yes. Based on a meeting with ANR witnesses and counsel on November 8, 2007,
11 subsequent correspondence, and a recent site visit with Mr. Popp, the Petitioners
12 believe that certain adjustments to the Project as originally proposed will avoid
13 any undue adverse impacts in the Winooski Wetlands or violation of the Vermont
14 Wetland Rules.

15

16 Q9. Please confirm the routes that Petitioners propose to use to access Structures N/S
17 44 through 46.

18 A9. The Petitioners plans to utilize off-right of way (ROW) access route "Gorge Road
19 #2" to perform construction activities associated with Structures N/S 44 as
20 depicted on Sheet 15 in the Attachment of Exhibit PET REB.8.1. This access
21 route was identified during Fall of 2007 as an alternative access route that avoids

1 disturbance to both the Winooski Wetland, as well as steep slopes located to the
2 west of these structures. Structures N/S 45 and 46 are proposed to be accessed
3 utilizing off-ROW route “Winooski Park #2” as shown on Sheets 14 and 15 in the
4 Attachment of Exhibit PET REB.8.1. This construction access route was chosen
5 as the alternative to avoid clearing of silver maple floodplain forest along the
6 banks of the Winooski River. Off-ROW access route “Winooski Park #2” is an
7 existing cleared utility corridor. “Winooski Park #2” will also be utilized to
8 access the location of the portable dam and river crossing to access Structures N/S
9 47 and 48.

10

11 Q10. How do Petitioners propose to access Structures N/S 47 and 48 on Gorge Island?

12 A10. As previously mentioned, the Petitioners plan to access the ROW utilizing the
13 “Winooski Park #2” access route with subsequent installation of a portable
14 diversion and temporary cofferdam or crushed stone fill material to cross the
15 northern channel of the Winooski River and gain access to Gorge Island. As
16 stated in the November 8 meeting, the Petitioners propose to work with ANR to
17 devise an acceptable plan for construction access to Gorge Island where
18 Structures N/S 47 and 48 are located.

19

20 Q11. When would Petitioners be proposing to undertake construction activities in the
21 Winooski Wetland and on Gorge Island?

1 A11. Per the Prefiled Rebuttal Testimony of Jerry Ostrander, Q11&A11, pages 4-6,
2 provided that the Certificate of Public Good is issued in Summer 2008, Petitioners
3 are proposing to complete the first stage in winter months (November 2008
4 through March 2009). A second stage of construction will be necessary in the
5 Winooski Wetland sometime beginning in late Summer of 2009.

6
7 Q12. How do Petitioners propose to complete work in the Winooski Wetland during
8 non-winter months?

9 A12. The Petitioners plan to use a construction sequencing approach for preferred dry
10 conditions, but alternatively would use the placement of construction matting
11 when these conditions are not present during line construction activities.

12
13 Q13. What has been the impact of construction in wetlands using matting on recent
14 utility projects?

15 A13. Based on a review of areas where matting was placed in wetlands during
16 construction of VELCO's 370 line associated with the Northwestern Vermont
17 Reliability Project, it is our professional opinion that matting is an acceptable
18 alternative to perform work in wetlands when dry or frozen ground conditions are
19 not present. Herbaceous vegetation, such as reed canary grass, has shown to re-
20 vegetate following removal of matting, and furthermore the placement of matting

1 prevents soil compaction and rutting that can be associated with some
2 construction activities.

3

4 Q14. How do Petitioners propose to address the concerns of Mr. Austin concerning
5 possible construction impacts on bird habitat?

6 A14. Petitioners propose to avoid any work in the Winooski Wetland during the months
7 of May and June. Petitioners acknowledge that this is necessary to minimize
8 disturbance to wood duck and other species during the critical breeding and
9 nesting period.

10

11 Q15. Will matting be left in the Winooski Wetland during the May/June breeding and
12 nesting period?

13 A15. Petitioners' preference is to not have any matting in the Winooski Wetland during
14 that time period, and have pledged to take all practicable measures to have the
15 matting removed; however, if for logistical reasons it should prove less disruptive
16 to leave them in place between construction stages, Petitioners would first consult
17 with ANR to implement a plan that would minimize potential impacts to the
18 functions and values of the Winooski Wetland.

19

20 **4. Construction Activity in the Floodplain Forests**

21 Q16. Please describe the locations of the so-called "Floodplain Forest."

1 A16. The area Petitioners refer to as the “Floodplain Forest” is adjacent to the utility
2 corridor on the non-wetland portions of Gorge Island, and on the northern and
3 southern banks of the Winooski River, all as depicted on Sheets 16, 18 and 19 in
4 the Attachment to Exhibit PET 10.5. Structures N/S 46 through 49 will be located
5 adjacent to these areas.

6
7 Q17. Will any clearing of the Floodplain Forest be required to complete the Project?

8 A17. No. We confirmed that the VELCO utility corridor is presently cleared to
9 virtually the full extent of the legal ROW (150 feet), and Petitioners are not
10 proposing to expand the corridor. Per the prefiled rebuttal testimony of Jeffrey
11 Disorda, any clearing will be for danger trees and incompatible vegetation within
12 the ROW, as part of the regular four-year cycle next occurring in 2008, in
13 accordance with VELCO’s Transmission Vegetation Management Plan.

14
15 Q18. Is a winter construction (i.e., November through March) restriction necessary for
16 this portion of the corridor?

17 A18. Given the absence of any clearing based on the project construction, no such
18 condition is necessary.

19
20 Q19. Are there any rare, threatened or endangered species located in the portion of the
21 utility corridor adjacent to the Floodplain Forests?

1 A19. Yes, there is an occurrence of Great St. John's-wort (*Hypericum ascyron*) located
2 approximately 100 feet north of the proposed location of Structures N/S 48.

3

4 Q20. How do Petitioners propose to protect this species?

5 A20. Consistent with the Petitioners' approach to protecting all threatened and
6 endangered plant species protected under Vermont's Endangered Species Law (10
7 V.S.A. Chapter 123) this occurrence of Great St. John's-wort will be reconfirmed
8 and re-flagged in the field and protected with conspicuous flagging and/or barrier
9 taping prior to construction activities associated with the Project.

10

11 Q21. Did the ANR express other concerns regarding construction on the non-wetland
12 portions of the Floodplain forests?

13 A21. Yes. First, the ANR is concerned about the effect of rutting in these areas by
14 construction machinery. Petitioners are proposing to use best efforts – both for
15 winter and non-winter construction – to avoid leaving any visible ruts.

16 Second, the Agency had a concern regarding the access to Structures N/S 49 and
17 50 from S.D. Ireland labeled "S.D. Ireland #1" on Sheet 19 in the Attachment of
18 Exhibit PET 10.5, based on possible impacts to Wetland No. 2007-12.

19

20 Q22. How do Petitioners propose to address the S.D. Ireland access issue?

1 A22. Based on a meeting with ANR regarding off-ROW construction access route
2 “S.D. Ireland #1” and potential impacts to Wetland No. 2007-12, an alternative
3 route “S.D. Ireland #2” was investigated and is shown on Sheet 19 in the
4 Attachment of Exhibit PET REB.8.1. Per the meeting held on November 8, 2007,
5 “S.D. Ireland #2” has been determined as the preferred route for access to
6 Structures N/S 49 and 50. If for any reason the landowner is unwilling to allow
7 Petitioners to use this access route, Petitioners will seek ANR’s approval for use
8 of the originally-proposed route.

9
10 **5. Restrictions on Construction in Muddy Brook Park**

11 Q23. Please summarize Mr. Eiseman’s proposed conditions concerning construction in
12 the area known as Muddy Brook Park, shown on Exhibit PET 8.1.1, Sheets 2
13 and 3.

14 A23. Mr. Eiseman proposes a prohibition on construction in the Muddy Brook Park to
15 the extent possible between May 1 and September 15, based on his concerns
16 regarding disturbance on breeding birds.

17
18 Q24. Do Petitioners object to this prohibition?

19 A24. Yes, we do. We feel that the prohibition lacks a sufficient nexus to any
20 significant wildlife habitat, or rare threatened or endangered species, to warrant
21 imposition.

1

2 Q25. Please explain.

3 A25. Based on our delineations of streams and wetlands within the Muddy Brook Park
4 area located beneath the existing 115 kV utility line corridor, no specific areas of
5 wetland-dependent bird breeding habitat were identified. Furthermore, Muddy
6 Brook Park within this area is traversed by existing walking paths and located
7 adjacent to National Guard Avenue within an area that consists predominantly of
8 agricultural lands. That said, Petitioners have committed to limiting mechanical
9 clearing during this time period, as set forth more fully in Q7&A7 beginning on
10 page 5 of the prefiled rebuttal testimony of Jeffrey Disorda.

11

12 **6. Lack of Effects on Bobcat and Fisher in Muddy Brook Park**

13 Q26. Do Petitioners agree with Mr. Eiseman's assertion regarding the potentially
14 adverse effects of the Project's construction and the corridor's maintenance on
15 bobcat and fisher?

16 A26. The Petitioners acknowledge Mr. Eiseman's concerns, but disagree that there will
17 be an undue adverse effect on bobcat and fisher due to line constructions and
18 maintenance activities within the existing corridor. Construction activities
19 associated with the Project are scheduled for short durations, and there are no
20 proposed changes in ROW maintenance activities, which produce a high stem
21 density of shrub cover beneath the lines. As stated by Mr. Eiseman in South

1 Burlington Exhibit CE-2, ROW maintenance activities are conducive to early
2 successional habitat types that provide cover for bobcat and habitat for prey
3 species, such as cotton-tail rabbits.

4

5 **7. St. Michael's / Twin Bridges Access Route**

6 Q27. Please describe ANR's concern regarding the construction access route to St.
7 Michael's College.

8 A27. Mr. Popp explained in his testimony and discovery responses that ANR believes
9 that a new entrance into the woods to the south of St. Michael's College off VT
10 Route 15 could encourage hiking on the peninsula, which could in turn jeopardize
11 the rare plants identified in Pioneer's report.

12

13 Q28. Do you share this concern?

14 A28. We do, but we believe that this issue can be addressed through a combination of
15 modifying and screening the proposed access route, and using flagging and/or
16 barrier taping around the rare and threatened plants. Also note that there is an
17 existing trail and that the area is visited by hikers from other access points. A
18 field visit was held with Mr. Popp to review the proposed alternative access route
19 in context of the locations of rare and threatened plants.

20

1 Q29. Are Petitioners proposing to modify the access route as presently shown in
2 Exhibit PET 8.1.1?

3 A29. Yes, we are, as noted in Mr. Ostrander's prefiled rebuttal testimony. Sheets 14A
4 and 14B contained within the Attachment of Exhibit PET REB.8.1 show the
5 access route, "St. Michaels Alt. #2." This was chosen as the preferred alternative
6 based on consideration of aesthetic concerns and to avoid tree clearing to the
7 extent practicable. Petitioners also chose this route to stay close to the edge of the
8 field, answering another concern that was raised by ANR.

9

10 Q30. Have plants and species along the new route been surveyed?

11 A30. Wetland, stream, and RTE plant/natural community surveys have been conducted
12 during Fall 2007 for this access route. A follow-up survey of RTE plants is
13 proposed for Spring 2008 to locate and flag any additional identified occurrences
14 prior to construction activities.

15

16 Q31. Is extensive tree clearing involved in creating a path from St. Michael's College
17 to the structure site?

18 A31. Extensive tree clearing will not be necessary in order to gain access from St.
19 Michaels's College to Structures N/S 41 located at the Twin Bridges site. The
20 access route from St. Michael's College to these structures was chosen
21 specifically to avoid clearing of mature trees to the extent practicable, as an

1 existing walking trail is located along much of this route. The limited clearing
2 associated with access to these structures is proposed to be mitigated through a
3 planting and screening plan prepared by Mr. Buscher and submitted as Exhibit
4 PET REB.6.3.

5

6 Q32. How do Petitioners propose to limit the use of the construction access route, both
7 during and following construction?

8 A32. As previously mentioned, the Petitioners have proposed utilizing a combination of
9 flagging and taping during the limited duration of construction activities, followed
10 by a landscape mitigation plan prepared by Mr. Buscher for the St. Michael's
11 College access route.

12

13 **8. Precise Locations of RTE Species**

14 Q33. Will Petitioners provide the precise location of rare species near Twin Bridges?

15 A33. Yes. Pioneer has produced the locations in a separate report that will be
16 submitted to ANR under seal.

17

18 Q34. What is the rare species located near Patchen Road that Pioneer mentioned in
19 Exhibit 10.5?

20 A34. Smooth sedge (*Carex laevivaginata*) was identified east of Patchen Road during
21 the Spring 2007 RTE Plant and Natural Community Survey. As previously

1 mentioned, Pioneer will produce the precise GPS-based survey locations and rare
2 plant reporting forms for identified RTE plants in the report to be submitted to
3 ANR under seal.

4

5 Q35. Is any corridor clearing required at Twin Bridges in order to complete the project?

6 A35. No. Any clearing in the corridor would be done purely as a result of VELCO's
7 vegetation maintenance cycle, presently scheduled for 2008. Activity to construct
8 Structures N/S 41 will take place after the clearing cycle is complete.

9

10 Q36. How do Petitioners propose to protect threatened and endangered species at Twin
11 Bridges during construction?

12 A36. As we discussed with ANR personnel on November 8, all identified rare and
13 threatened plants within State Significant Natural Areas or rare irreplaceable
14 natural areas will be flagged in the field and/or cordoned off with barrier tape
15 during construction activities.

16

17 **9. Stormwater Impacts**

18 Q37. Have Petitioners investigated the Project's impacts on stormwater discharges
19 associated with construction activity?

20 A37. Yes. The project will require permit authorization from Department of
21 Environmental Conservation ("DEC") under the delegated National Pollutant

1 Discharge Elimination System construction stormwater discharge program. This
2 permitting phase will involve determination of amounts of disturbed area, phasing
3 of earth disturbance, temporary and permanent earth stabilization measures, and
4 construction phase measures to prevent erosion and minimize sediment export
5 from the work areas. DEC currently administers the program through a general
6 permit (GP 3-9020) as well as through individual discharge permits. The
7 determination of which permitting track is used for a given project is made based
8 on a risk analysis which considers potential impacts to water quality of receiving
9 waters due to construction stormwater discharges. It is uncertain at this point
10 whether the Project will be eligible for coverage under GP 3-9020 or whether an
11 individual permit will be required.

12

13 Q38. How do Petitioners propose to obtain construction stormwater permits for the
14 project?

15 A38. It is anticipated that a Notice of Intent for coverage under GP 3-9020 or an
16 individual permit application will be filed for work on the 115 kV project
17 corridor. Consistent with past practice for substations on the Northwestern
18 Vermont Reliability Project (“NRP”) and Lamoille Project, VELCO will seek a
19 separate permit/authorization for its work at the East Avenue Substation. BED
20 will apply for separate coverage under the Certificate of Public Good for its own
21 work within the 34.5 kV line and at the McNeil Substation, as required.

1

2 Q39. Will an operational stormwater permit be required for the Project?

3 A39. No. The project will not result in the addition, re-development, or expansion of
4 impervious area such that 1 acre or more of impervious area would exist. This
5 represents the jurisdictional threshold for DEC operational phase stormwater
6 permitting. Therefore, no permit will be required.

7

8 **10. Natural Resources in Laydown Areas**

9 Q40. Have you become familiar with the laydown area for the Project?

10 A40. Yes, Pioneer completed a supplemental report concerning natural resources
11 impacts in this area. That report is being provided as Exhibit PET REB.8.1.

12

13 Q41. Please summarize the laydown area report.

14 A41. Exhibit PET REB.8.1 discusses recent additional off-ROW construction access
15 routes, as well as the results of delineations at the laydown area located off of VT
16 Route 2A in Williston, Vermont. In short, we do not believe use of this area will
17 have an undue adverse impact on natural resources.

18

19 **11. Conclusion**

20 Q42. Does this conclude your testimony at this time?

21 A42. Yes, it does.