

**STATE OF VERMONT  
PUBLIC SERVICE BOARD**

Joint Petition of Vermont Transco, LLC, )  
Vermont Electric 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; (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 TESTIMONY OF  
JEFFREY A. NELSON AND DANIEL J. PRASCH  
ON BEHALF OF  
PETITIONERS**

July 6, 2007

The purpose of the testimony is to supplement the Natural Resources Report submitted with the Petition, in order to address several of the “Act 250” criteria in accordance with 30 V.S.A. § 248(b)(5).

## TABLE OF CONTENTS

<b>1. Introduction.....</b>	<b>1</b>
<b>2. Overview .....</b>	<b>2</b>
<b>3. Wetland and Stream Impacts .....</b>	<b>5</b>
<b>4. RTE / RINA Impacts .....</b>	<b>8</b>
<b>5. Conclusion .....</b>	<b>11</b>

## EXHIBITS

Exhibit PET 10.5      Supplemental Natural Resources Report

**STATE OF VERMONT  
PUBLIC SERVICE BOARD**

Joint Petition of Vermont Transco, LLC, )  
Vermont Electric 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; (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 TESTIMONY OF  
JEFFREY A. NELSON AND DANIEL J. PRASCH  
ON BEHALF OF  
PETITIONERS**

- 1           **1.     Introduction**
- 2    Q1.    Please state your names and business addresses.

1    A1.   Jeffrey A. Nelson

2           My name is Jeffrey Nelson and the business address of Pioneer Environmental  
3           Associates LLC (“Pioneer”) is 48 Green Street, Suite 2, Vergennes, Vermont.

4           Daniel J. Prasch:

5           My name is Daniel Prasch and the business address of Pioneer where I am  
6           employed is 48 Green Street, Suite 2, Vergennes, Vermont.

7

8    Q2.   You both are familiar with the East Avenue Loop Project (“EAL” or “Project”)?

9    A2.   All:

10           Yes, we have both acquired familiarity with the Project, as evidenced by our  
11           prefiled testimony submitted with the petition for Certificate of Public Good for  
12           the Project on April 16, 2007 (the “Petition”). See especially Tab 10 of the  
13           prefiled testimony in the binder containing the Petition. Please also see Exhibits  
14           PET 10.1 through 10.4 for our résumés, the Natural Resources Report (“Report”),  
15           and a Watershed Map of the areas in which the Project will be located.

16

17           **2.    Overview**

18    Q3.   What is the purpose of your testimony?

19    A3.   All:

1 This testimony is intended to supplement the Report previously submitted with  
2 the Petition (Exhibit PET 10.1) in order to further demonstrate the Project's  
3 compliance with certain of the so-called "Act 250" criteria, and more specifically  
4 10 V.S.A. §§ 6086(a)(1)(E) (streams), 6086(a)(1)(G) (wetlands), 6086(a)(8)(A)  
5 (necessary wildlife habitat and endangered species), all as incorporated into the  
6 Certificate of Public Good process by virtue of 30 V.S.A. § 248(b)(5). Pioneer's  
7 "Supplemental Report" is included with this submission as Exhibit PET 10.5.

8  
9 Q4. Why have the Petitioners chosen to supplement the Natural Resources Report?

10 A4. Pioneer's field work for the Report was completed in the Fall of 2006. Since  
11 2006, the Petitioners – and VELCO in particular – have settled upon the preferred  
12 construction access routes for the Project off of the existing 115 kV right-of-way  
13 extending from VELCO's Essex Substation to the East Avenue Substation  
14 (hereinafter, the "ROW"). Pioneer was retained to assess the proposed off-ROW  
15 construction routes and evaluate the Project's impact on natural resources in those  
16 areas, if any.

17  
18 In addition to the off-ROW construction routes, VELCO identified new right-of-  
19 way in Williston near poles S3, N4 and N5 (near Dorset Lane), and N14 through  
20 N17 (near River Cove Road) that will need to be acquired for a variety of reasons.  
21 These new areas adjacent to the ROW required an assessment of potentially-  
22 impacted natural resources.

1 Finally, a Supplemental Report was necessary to verify the original 2006  
2 observations in the Natural Resources Report concerning rare, threatened and  
3 endangered species (“RTEs”). The Vermont Agency of Natural Resources  
4 (“ANR”) had specifically requested of Petitioner representatives that the plant  
5 species along the ROW identified in the Report as RTE be subject to further field  
6 verification, given that the original work had only been completed in the late  
7 Summer 2006 (i.e., after the flowering period for certain plant species). Based on  
8 ANR’s request, Pioneer undertook to investigate the affected areas in the Spring  
9 and early Summer 2007 in order to follow up the prior field work when these  
10 plants would be flowering. The supplemental work included both RTE sitings  
11 and the rare and irreplaceable natural areas (“RINAs”) identified in the Report  
12 (i.e., the Twin Bridges area, Gorge Island).

13  
14 Q5. Please describe your approach to assessing natural resources within the off-ROW  
15 areas.

16 A5. Generally, a 50-foot wide investigation corridor for the 33 proposed off-ROW  
17 access routes was established. The intent of this approach was to assess existing  
18 natural resources with a wide enough band to allow for some flexibility in the  
19 field for determining the exact placement of the construction access route, while  
20 avoiding impacts to natural resource features.

21

22

1           **3.     Wetland and Stream Impacts**

2    Q6.    Please summarize your conclusions from the Supplemental Report concerning  
3           off-ROW construction access routes and the new ROW on wetlands and streams.

4    A6.    Pioneer identified existing wetlands located within the off-ROW construction  
5           routes and the new ROW, and determined the classification of these wetlands  
6           (Class Two or Three) pursuant to the Vermont Wetland Rules. Pioneer also  
7           identified excavated, non-jurisdictional water features such as stormwater ponds  
8           located within or near certain of the proposed off-ROW construction routes.

9  
10           The identified wetlands range from natural systems that have not been  
11           significantly impacted, to disturbed wetlands that have been impacted or  
12           enhanced by anthropogenic influences, including road construction, hydrologic  
13           alterations, and other modifications to the surrounding land. Additionally, many  
14           of the hydrologic features along the off-ROW construction routes are isolated  
15           wetland systems; others are extensions of wetland features along the ROW  
16           corridor previously identified in the Report.

17  
18           Streams within or near the off-ROW construction routes included perennial and  
19           intermittent streams, along with ephemeral drainages and non-jurisdictional  
20           excavated ditches. The streams are primarily unnamed tributaries to the Winooski  
21           River, and some are associated with wetlands.

22

1 Q7. What are the potential areas of impact associated with the off-ROW access  
2 routes?

3 A7. Generally, the proposed off-ROW access routes are located along existing roads,  
4 trails, or paths, including private driveways, field-drives, forested trails, and  
5 existing parking lots and access roads within commercial areas. Existing off-  
6 ROW travel routes were utilized to the maximum extent possible to minimize  
7 proposed clearing and temporary access road construction, and to avoid impacts  
8 to wetlands and other natural resources. The following routes will require special  
9 consideration:

- 10 1. St. Michaels #1: The Twin Bridges Area with proposed access from  
11 College Ave./VT Route 15 near St. Michael's College. Access will be  
12 provided to proposed structures N/S-41;
- 13 2. Winooski Park #2: This route follows an existing transmission corridor  
14 through a wetland within the Winooski Park area, from a proposed access  
15 at Canal Street. Access will be provided to proposed structures N/S-44  
16 through N/S-48; and
- 17 3. S.D. Ireland #1: This route follows an old access path crossing a wetland  
18 on the S.D. Ireland Company concrete plant property. Access is to  
19 proposed structures N/S-49 through N/S-50.

20  
21 Q8. Where will wetlands be crossed by the off-ROW construction access routes?

1 A8. There are only two locations where wetland crossings will be required. These are  
2 as follows:

- 3 1. Winooski Park #2: This route crosses a distance of approximately 1,200  
4 feet of wetland 2007-11, a VT Class Two wetland, to reach the ROW at  
5 proposed structures N/S-45; and
- 6 2. S.D. Ireland #1: This route crosses a distance of approximately 250 feet  
7 of wetland 2007-12, a VT Class Two wetland, to reach the ROW in the  
8 vicinity of proposed structures N/S-50.

9

10 Q9. Where will streams be crossed by the off-ROW construction access routes?

11 A9. There are only two locations where stream crossings will be required, and only  
12 one which will result in any potential impacts. These locations are as follows:

- 13 1. Winooski Park #2: This route crosses a perennial stream, 2007-SC-3,  
14 utilizing a preexisting concrete culvert under an established gravel drive,  
15 and thus no impacts are anticipated.
- 16 2. S.D. Ireland #1: This route crosses stream 2007-SC-4, an intermittent  
17 stream located within wetland 2007-12. A temporary crossing of this  
18 stream will be necessary.

19

20 Q10. What measures do Petitioners propose to minimize potential impacts associated  
21 with crossings of the identified wetlands?

1 A10. With respect to wetlands, as described previously in the prefiled testimony of  
2 John Stamatov with respect to on-ROW areas, crossing during winter conditions  
3 over frozen ground is ideal with respect to minimizing impacts. For access during  
4 periods when frozen ground conditions do not exist, crossing under dry conditions  
5 will be preferred. Finally, as a last alternative, the use of “swamp” mats will be  
6 used for temporary wetland crossings where frozen or dry conditions do not exist.  
7 No permanent fill in wetlands is anticipated. Moreover, the EPSC plans and best  
8 management practice implementation that will be put in place through permits the  
9 Petitioners will be required to obtain should suffice to ensure only a marginal,  
10 temporary impact during construction.

11

12 Q11. What measures do Petitioners propose to minimize potential impacts associated  
13 with crossings of the identified streams?

14 A11. With respect to streams, as described previously in the our original prefiled  
15 testimony with respect to on-ROW areas, crossing of streams will use temporary  
16 bridges or timber mats as needed to protect water quality.

17

18 **4. RTE / RINA Impacts**

19 Q12. Please summarize your conclusions from the Supplemental Report concerning  
20 RTE in the ROW.

21 A12. Pioneer’s field visits to the ROW and the off-ROW construction routes in the  
22 Spring and Summer of 2007 included a vegetative survey by Biologist Darien

1 McElwain. Pioneer determined that two additional threatened plant species –  
2 slender mountain rice and low bind-weed – are found in the Twin Bridges area on  
3 rocky, calcareous terrain near the Winooski River. On the other hand, Pioneer  
4 concluded that two of the RTE species identified as “classification pending” in the  
5 original Report – red mulberry and harsh sunflower – were determined to have  
6 been common, non-RTE species. In the Supplemental Report, Pioneer has  
7 revised its RTE table to reflect these conclusions.

8  
9 Q13. How will impacts to RTE plant species be avoided?

10 A13. As described in our original testimony with respect to on-ROW occurrences, RTE  
11 species that have been found within the off-ROW access corridors will be flagged  
12 in the field and will be cordoned off by construction fences and silt fences prior to  
13 the commencement of construction activities. In addition, access roads identified  
14 in the vicinity of RTE species will be modified to avoid these species and other  
15 sensitive areas.

16  
17 Q14. Did the field research in Spring and Summer 2007 reveal additional RINAs?

18 A14. No new unique natural communities were identified within the ROW or along  
19 proposed off-ROW access routes as a result of the 2007 survey. However, three  
20 proposed off-ROW access routes will cross through previously-identified RINAs:

- 21 1. St. Michaels #1: The Twin Bridges site is mapped as a Temperate  
22 Calcareous Outcrop and Cliffs and includes the southern end of the

1 proposed off-ROW access route to that area; a White Pine-Red Oak-Black  
2 Oak Forest grading to a Pine-Oak Heath Sandplain Forest is located along  
3 the access route.

4 2. Winooski Park #2: The Gorge Island or Winooski Park area is mapped  
5 as a Silver Maple-Ostrich Fern-Riverine Floodplain Forest and includes  
6 the entirety of the proposed off-ROW access route in that area.

7 3. S.D. Ireland #1: A portion of this off-ROW access route is also mapped  
8 as a Silver Maple-Ostrich Fern-Riverine Floodplain Forest.

9

10 Q15. What measures are recommended to mitigate impacts in the three RINAs  
11 identified in the Supplemental Report?

12 A15. To ensure that the integrity of RINAs and the associated ecological communities  
13 is maintained, the limits of clearing and disturbance where off-ROW access routes  
14 cross these areas will be absolutely minimized. The use of Environmental  
15 Monitors, as described in the testimony of John Stamatov, with a special emphasis  
16 on these areas will provide additional protection. Finally, the prompt and careful  
17 restoration of these areas, with a particular focus on preventing the introduction of  
18 invasive plant species, will help to assure that the integrity of these areas is  
19 maintained.

1           **5.     Conclusion**

2     Q16. Do you have any overall sense concerning the suitability of the proposed off-  
3           ROW construction routes?

4     A16. Yes. The majority of the proposed off-ROW access routes are stable established  
5           travel-ways and suitable for use by construction equipment with limited  
6           enhancements. Three areas – St. Michael’s #1, Winooski Park #2, and S.D.  
7           Ireland #1 – require special consideration with respect to accessing the ROW due  
8           to wetlands, RTE plant species, and natural communities, as well as existing land-  
9           uses.

10

11    Q 17. Do you anticipate any undue adverse impact to the identified natural resource  
12           features within the access routes?

13    A17. No. The sensitivity of these off-ROW access routes will be considered in  
14           developing the project-specific EPSC plan, and preparing subsequent permit  
15           applications to state and federal agencies. With the specific measures and  
16           practices as described above implemented, maintained and monitored, Pioneer is  
17           confident that the use of these proposed off-ROW access routes can be conducted  
18           in a manner that would not result in an undue adverse impact to the resource  
19           features that we have evaluated.

20

21    Q18. Does this conclude your testimony at this time?

22    A18. Yes, it does.

