

**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
MICHAEL BUSCHER
ON BEHALF OF
PETITIONERS**

November 26, 2007

Summary: The purpose of Mr. Buscher's rebuttal testimony is to respond to comments and recommendations submitted by other parties regarding aesthetics.

TABLE OF CONTENTS

1. Introduction..... 1

2. Overview..... 2

3. Country Club Estates and Valley Ridge 2

4. Memorandum of Understanding..... 7

5. Screening Plan for St. Michaels Alt #2 Route 8

6. Conclusion 8

EXHIBITS

Exhibit PET REB.6.1	Cross Section, Country Club Drive Estates
Exhibit PET REB.6.2	Memorandum of Understanding with the Department of Public Service
Exhibit PET REB.6.3	Landscape Mitigation Planting Plan

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PETITIONERS**

- 1 **1. Introduction**
- 2 Q1. Please state your name.
- 3 A1. My name is Michael Buscher.
- 4

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

2 A2. Yes. I submitted direct prefiled testimony on behalf of the Petitioners in this
3 docket.

4

5 **2. Overview**

6 Q3. What is the purpose of your rebuttal testimony?

7 A3. My rebuttal testimony responds to the October 12, 2007 testimony submitted by
8 Juli Beth Hinds on behalf of the City of South Burlington, regarding the potential
9 aesthetic impacts of the East Avenue Loop Project (“Project”). I also introduce a
10 Memorandum of Understanding (“MOU”) agreed upon between Petitioners and
11 the Vermont Department of Public Service (“Department” or “DPS”) regarding
12 the Project’s aesthetic impacts and mitigation plans to address same. Finally, I
13 provide a proposed plantings plan for the entrance to the field at St. Michaels
14 College, where an access route is proposed to reach structures N-41 and S-41.

15

16 **3. Country Club Estates and Valley Ridge**

17 Q4. Please identify the testimony offered by Ms. Hinds to which you respond.

18 A4. Ms. Hinds’ October 12, 2007 prefiled testimony, Q7&A7 - Q8&A8, which states
19 that the Project line design should be modified in the Country Club Estates and
20 Valley Ridge neighborhoods of South Burlington, from two side-by-side 115 kV
21 single pole structures, to single-pole, double-circuit configuration. Ms. Hinds
22 testimony at A7 states that the changes are necessary because “the mitigation

1 attached to the proposed design [in these areas] does not compensate for the
2 adverse visual impacts that will result from the combined effect of the number of
3 structures within the right-of-way, the width of the right-of-way, the less compact
4 nature of the design (compared to the existing H-frames) and the direct and
5 potential danger tree clearing in and along the edges of the right-of-way.” She
6 states further that “the placement of trees along National Guard Road will not be
7 in locations or at angles sufficient to offset the widened stance resulting from the
8 new poles, or the wider band of associated ROW clearing and potential danger
9 tree clearing,” and that “[i]n the case of Valley Ridge, the wider stance of the
10 proposed poles is of great concern because of the potential degree of ROW
11 clearing and danger tree clearing that may occur.”

12

13 Q5. Do you agree with her assessment of the visual impacts of the Project in these
14 locations?

15 A5. No. First, she fails to assess the impacts under the framework of the *Quechee* test,
16 and in particular overlooks the existing context of the landscape in these areas.

17 Ms. Hinds states that the mitigation does not compensate for adverse impacts,
18 such as views from National Guard Road (Avenue), but this does not seem to take
19 into consideration the existing conditions. At the Country Club Estates

20 neighborhood, unobstructed views of both the existing VELCO and Green

21 Mountain Power transmission lines exist from residences along Country Club

22 Drive East and from National Guard Road, neither of which currently have any

1 substantial screening in place. The area is not highly scenic except for distant
2 views of the Green Mountains to the east. While the Project results in adverse
3 impacts at this location, the addition of substantial landscape mitigation not only
4 mitigates the Project, but also improves upon the existing conditions.

5
6 Moreover, both the Country Club Estates and Valley Ridge neighborhoods were
7 built around the existing utility corridor. Converting the existing 115 kV double-
8 pole H-frame structures into two single-pole lines, does not add any more poles
9 into the landscape.

10
11 At Valley Ridge, there is more than 100 feet of existing woods between the
12 corridor and the closest residence. Visibility of the existing line is extremely
13 minor and will not change as a result of the Project upgrades. The new lines will
14 be at the top of an embankment, west of the buffer. The edge of the ROW is at
15 the bottom of a gully. This situation benefits the Project because it makes
16 danger trees much less of a threat. As Mr. Disorda has stated in his prefiled
17 rebuttal testimony, VELCO does not plan to expand the existing ROW, and this
18 ROW has been cleared for many decades to its full width.

19
20 As to Ms. Hind's statement regarding the less compact nature of the design, it
21 should be recognized that the standard design for a new 115 kV transmission line
22 would be H-frame configuration in a 150-foot ROW. The use of side-by-side 115

1 kV single-pole structures involves the demolition of the existing 115 kV
2 transmission line in order to accommodate two 115 kV transmission lines within
3 the existing cleared 150-foot ROW. The alternative would be expanding the
4 existing ROW or obtaining an entirely new corridor elsewhere. The City of South
5 Burlington's 2001 Comprehensive Plan encourages construction of new
6 transmission lines within existing corridors.

7
8 Both Mr. Raphael and I agree that while the Project's impacts in these areas may
9 be considered adverse, the impacts are not unduly adverse, because:

10 At Country Club Estates:

- 11 1. Structures #27 - #29 have been relocated to remove one set of structures from the
12 common green between Mountain View Drive and Country Club Drive;
- 13 2. Landscape mitigation plantings as shown on Exhibit PET 9.2, Sheets L2.5-L2.6,
14 provide reasonable and effective mitigation measures for the residences and two
15 road crossings in the area; and
- 16 3. Single poles without davit arms are proposed for structures #30 to minimize
17 clearances and preserve buffer between residences;

18 At Valley Ridge:

- 19 1. Clearing between the corridor and Valley Ridge neighborhood is limited to the
20 current ROW and an adequate buffer will be maintained with no expected danger
21 tree clearing in the area due to the topography; and

1 2. Landscape mitigation plantings as shown on Exhibit PET 9.2, Sheet L2.9, provide
2 reasonable and effective mitigation for the Valley Ridge Neighborhood area.

3
4 Q6. Do you agree that a single-pole, double-circuit design would be an aesthetic
5 improvement in this area to the design proposed by Petitioners?

6 A6. No. As noted in Mr. Fossum's rebuttal testimony, a single-pole, double-circuit
7 design would mean introducing structures in this area that are approximately 15
8 feet taller than the proposed Project poles (i.e., 14 feet for the structures, and one
9 foot for the concrete base). (See PET REB.4.1.) These poles would also be
10 significantly bulkier than the side-by-side single-pole structures that are currently
11 proposed and would utilize self-weathering steel as opposed to wood. The use of
12 steel structures in such close proximity to residential properties, in combination
13 with increased size, will result in a more industrial character. Elsewhere within
14 the Project corridor the steel structures being used eliminate guying; no such
15 benefit would be achieved using steel at this location. Other locations that utilize
16 steel poles are not within close proximity to residential properties. Structures #30
17 are exceptions to this, but are not within dominant views from the adjacent
18 residences, and measures have been taken in the current proposal to screen these
19 structures from those adjacent residences and from Country Club Drive.

20
21 In addition to review of comparative elevations provided by Mr. Fossum, I have
22 also created a cross section from Country Club Drive East, through the VELCO

1 ROW, provided with my testimony as Exhibit PET REB.6.1. This cross-section
2 further illustrates that structures required for the single-pole, double-circuit
3 configuration compared to the side-by-side 115 kV single-pole structures, would
4 be further out of scale with the surrounding residential properties. The increase in
5 height would also result in increased visibility. In my opinion, using steel single-
6 pole, double-circuit structures would result in greater aesthetic impacts in
7 comparison to the smaller, wooden structures that are currently proposed.

8
9 **4. Memorandum of Understanding**

10 Q7. Please describe the aesthetics MOU that you and Mr. Raphael agreed upon.

11 A7. Mr. Raphael and I met on November 6, 2007 to review the GIS 3-dimensional
12 model (Exhibit PET 9.4), to discuss the areas of aesthetic sensitivity along the
13 Project corridor, and to review the proposed mitigation. The MOU sets forth our
14 mutual assessments of the Project's aesthetics impacts as a whole, and at the
15 locations along the Project corridor that he and I identified as being visually
16 sensitive. We also reviewed the proposed landscape mitigation plans (Exhibit
17 PET 9.2) to determine if there were areas that merited further planting or changes,
18 but agreed the current plans provide adequate landscaping. The MOU is attached
19 to my testimony as Exhibit PET REB.6.2.

20

1 **5. Screening Plan for St. Michaels Alternate #2 Route**

2 Q8. Please describe the landscape plantings proposed for the access route entrance at
3 the south side of the St. Michaels field and south of the railroad.

4 A8. The landscape mitigation planting plan (Exhibit PET REB.6.3) provides screening
5 for the clearings created by the access route designated by Pioneer Environmental
6 Associates as “St. Michaels Alt #2” where it enters the woods on the south side of
7 the field and south of the railroad. It is thought that these clearings may entice
8 recreational use of this route, which is not desirable. After construction of the
9 Project has been completed, the access routes will be narrowed by these plantings,
10 which will also be offset on either side of the access route and will attempt to
11 create the visual appearance that there are no access routes at either location.

12

13 **6. Conclusion**

14 Q9. Does this conclude your testimony at this time?

15 A9. Yes, it does.