

**THE STATE OF NEW HAMPSHIRE
BEFORE THE
SITE EVALUATION COMMITTEE
DOCKET NO. 2015-06**

**SUPPLEMENTAL PRE-FILED TESTIMONY OF ROBERT W. VARNEY
(Land Use and Orderly Development)**

**IN SUPPORT OF THE
APPLICATION OF NORTHERN PASS TRANSMISSION LLC
AND PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
D/B/A EVERSOURCE ENERGY
FOR A CERTIFICATE OF SITE AND FACILITY TO CONSTRUCT A NEW HIGH
VOLTAGE TRANSMISSION LINE AND RELATED FACILITIES IN NEW
HAMPSHIRE**

April 17, 2017

1 **Q. Please state your name and business address.**

2 A. My name is Robert W. Varney and my business address is 25 Nashua Road,
3 Bedford, NH 03110.

4 **Q. Who is your current employer and what position do you hold?**

5 A. I am President of Normandeau Associates, Inc.

6 **Q. What is the purpose of this supplemental testimony?**

7 A. The purpose of my testimony is to provide updated information to supplement
8 Appendix 41 – *Review of Land Use, and Local, Regional and State Planning* in the Northern
9 Pass Transmission Project (“Northern Pass” or “Project”) Application submitted by Northern
10 Pass Transmission LLC (“NPT”) and Public Service Company of New Hampshire d/b/a
11 Eversource Energy (“PSNH”) (collectively the “Applicants”), and to offer information in
12 response to concerns about land use and orderly development raised by some intervenors.

13 **Q. Please summarize updates to the information contained in Appendix 41 –**
14 ***Review of Land Use, and Local, Regional and State Planning.***

15 A. Updates to Appendix 41 include a description of amendments adopted by the NH
16 Scenic & Cultural Byways Council to the Scenic Byways designations. These include the White
17 Mountain Trail, Moose Path Trail, Woodland Heritage Trail, Presidential Range Trail, River
18 Heritage Trail, Lakes Region Tour, and Canterbury Shaker Village Byway. A summary of the
19 changes is provided on the Applicants’ Track 2 Exhibit List.

20 In addition, the Town of Allenstown adopted a new master plan (April, 2016), the
21 summary of which was included in *Review of Master Plans Northern Pass Transmission Project,*
22 *October 2016 Working Draft*, provided in response to Intervenor Discovery Requests. This
23 report is provided on the Applicants’ Track 2 Exhibit List. A number of communities are in
24 varying stages of updating their master plans including Lancaster, Whitefield, Dummer,
25 Bethlehem, Sugar Hill, Franconia, Campton, Plymouth, New Hampton, Bristol, and Pembroke.
26 The work on these updates ranges from early discussions to final review drafts of chapters and
27 plans. I have reviewed publicly available draft chapters and plans and will continue to monitor
28 town websites periodically for new information.

29 I also include a list of the professional planners from host communities as well as the
30 executive directors and staff of the four Regional Planning Commissions (RPCs) that I personally
31 met with prior to filing the Application on October 19, 2015. This list is provided on the

1 Applicants' Track 2 Exhibit List. These RPCs cover all of the Project area towns and cities.

2 **Q. Does this updated information change any of your conclusions in your**
3 **previously filed testimony regarding the effects of construction and operation of the Project**
4 **on land use or on orderly development of the region?**

5 A. No.

6 **Q. Have you reviewed the pre-filed testimony submitted by the municipal**
7 **groups and others relating to land use and orderly development?**

8 A. Yes, I reviewed pre-filed testimony and attended a number of the SEC technical
9 sessions relating to land use and orderly development.

10 **Q. Please respond to concerns expressed by some intervenors that the Project is**
11 **incompatible with existing land use, inconsistent with master plans and zoning, would be**
12 **detrimental to future economic growth and development, and will have negative impacts on**
13 **conservation and recreation.**

14 A. Nothing provided by the intervenors changes my opinion that the Project is
15 consistent with local land use patterns and will not interfere with the orderly development of the
16 region.

17 Principally in response to these claims by the intervenors, though, I and my staff at
18 Normandeau Associates prepared the attached *Review of Land Use Development Along*
19 *Transmission Line Corridors in Bedford, Londonderry, and Concord, NH* submitted as
20 Attachment A. As the intervenors who expressed concerns did not provide information to
21 support their claims, we explored these issues further by examining other high voltage
22 transmission corridors and a few New Hampshire communities in which they are located.
23 Normandeau looked for examples of communities where a transmission line was sited and
24 constructed within an existing right-of-way ("ROW"), where the overhead line is visible to the
25 public, and where zoning would enable the development of various land uses along the corridor.

26 Perhaps the best example of new high voltage transmission lines being added to an
27 existing corridor is the Hydro-Québec Phase II (HQ Phase II) project which was completed in
28 1990. According to the 1986 SEC Decision (DSF-85-155), the HQ Phase II line is an extension
29 of the HQ Phase I line, a 107-mile, 450 kV direct current overhead transmission line which
30 transmits about 2,000 MW of hydroelectric power between Quebec and Monroe, NH
31 (approximately 6.1 miles of the HQ Phase I corridor is in New Hampshire). The HQ Phase II

1 facilities extend from Monroe, NH to Groton, MA. The New Hampshire segment of the HQ
2 Phase II project is approximately 121 miles long, running from Monroe to the state line in
3 Hudson, and was constructed over an existing utility corridor right of way (ROW) and utility-
4 owned land. The ROW is approximately 350 feet, and also contains two 230 kV AC lines.
5 Except for the last 8 miles of the project through Hudson, the structures are lattice steel H frame
6 structures ranging from 75 to 115 feet tall, with a typical height of about 90 feet.

7 Since the Applicants propose to site a 345 kV line within an existing transmission
8 corridor in the segment south of Franklin, we also looked at another existing PSNH corridor
9 where the Merrimack Valley Reliability Project (“MVRP”) recently received approval from the
10 SEC to add a 345 kV line to the existing transmission ROW. This corridor, which runs from
11 Scobie Pond Substation in Londonderry to Pelham, includes an 8.1 mile segment in
12 Londonderry, of which 2.1 miles in the southwest corner of Londonderry is co-located with the
13 HQ Phase II line.

14 Normandeau selected the towns of Bedford, Londonderry and the City of Concord along
15 these two transmission lines as examples of communities with high voltage transmission lines
16 that are visible to the public in certain locations, have areas along or near the ROW that are
17 zoned for a variety of uses such as commercial, multi-family development and agriculture, and
18 have extensive master plans that are current (<10 years) and that have been updated since
19 completion of the HQ Phase II line. In addition, in consideration of the concerns expressed by
20 the City of Concord about the City’s Gateway District near the transmission line corridor and
21 Loudon Road, Normandeau also reexamined our initial land use evaluation of the commercial
22 and multi-family residential area near Loudon Road where the Applicants propose to relocate
23 existing structures and add a 345 kV line within the existing PSNH corridor.

24 **Q. How do land use patterns along the three transmission corridors that you**
25 **looked at relate to the assertions made by intervenors?**

26 A. I address each one separately below.

27 HQ Phase II corridor in Concord, Bedford and Londonderry – The City of Concord is
28 crossed by the HQ Phase II line in the western part of the City near the border with Hopkinton.
29 The corridor crosses a number of protected open space properties including the Keating
30 Conservation Easement, Laura M. Jobin Family Trust Easement, Broad Cove Forest, Mast Yard
31 State Forest, and is connected to Lehtinen Park by the NH Heroes Recreational Bridge that

1 crosses the Contoocook River. The development in the area is consistent with the zoning which
2 allows for single family residential, forestry, agriculture, and other similar open space uses. In
3 Bedford, the areas near and along the HQ Phase II corridor have seen a significant amount of
4 growth consistent with local zoning: commercial, office, restaurants, a supermarket, multi-family
5 and single family residential uses. The uses in Londonderry along this corridor are primarily
6 conservation, recreation, and residential.

7 PSNH transmission corridor in Londonderry – As described in Attachment A, the existing
8 PSNH corridor in Londonderry is approximately 8.1 miles long and extends from the Scobie
9 Pond substation to Hudson. Most of the route is residential, although there are several businesses
10 near the crossing of Route 28, individual businesses at the crossing of Route 128, and near the
11 crossing at Route 102. Age restricted 55+ residential developments include Parrish Hills, located
12 on South Parish Drive, and Hickory Woods, located on Tavern Hill Road. There also are many
13 conservation lands along the corridor, including the 1,100 acre Musquash Conservation Area
14 with over 20 miles of trails, and agricultural lands such as Elwood Orchards, which is featured as
15 part of the Apple Way, a state-designated scenic byway which crosses under the transmission
16 lines. Approximately 2.15 miles of the corridor (the portion just south of the Musquash
17 Conservation Area) also accommodates the HQ Phase II line.

18 PSNH corridor in the vicinity of Loudon Road in Concord – As described in Attachment
19 A, the area of the Heights in Concord at which the existing PSNH corridor and Loudon Road are
20 located consists of recent strip developments such as Carrier Place, which was constructed in
21 2015/2016 adjacent to the ROW between Loudon Road and Old Loudon Road, and includes a
22 Chipotle restaurant. A similar plaza across from Carrier Place includes Starbucks and Jos A.
23 Banks, and is located adjacent to a Shaw's Supermarket where the transmission lines cross over
24 the parking lot. Other commercial establishments in the area include Applebee's Restaurant,
25 Target, Best Buy, Dick's Sporting Goods, PetSmart, and several other restaurants. Nearby
26 multifamily residential developments include Alton Woods and McKenna's Purchase, as well as
27 Cobblestone Pointe Senior Village, which is currently under construction.

28 **Q. What did you find in your review of these transmission line corridors?**

29 A. After reviewing land use development, demographics, master plans, conservation
30 and recreation areas, and other uses along and near these transmission corridors, we found that:

- 1 • These communities have continued to grow in population, tax base and income
2 levels since the construction of the HQ Phase II line and other transmission
3 lines within existing corridors.
- 4 • The transmission line corridors are addressed in each of the three local master
5 plans, but the plans do not identify or discuss the existing transmission lines as
6 inconsistent with the plans or vision statements, as inconsistent with or in
7 conflict with land uses or zoning, or as a factor in the potential for future
8 residential or commercial development.
- 9 • All three communities' master plans discuss utility corridors as important to
10 open space planning. The Town of Bedford's Open Space Plan (adopted as
11 part of the town's master plan) identifies utility corridors as "key connectors"
12 (p. 29); the Town of Londonderry's Master Plan identifies them as part of the
13 town's Green Print Initiative, which "represents a vision for how to create a
14 network of open space" (p. 194); and the City of Concord Master Plan
15 identifies utility rights of way as "linkage devices," helping to create an open
16 space system that "will provide recreational opportunities for hiking, cross-
17 country skiing, snowmobiling, horseback riding, bicycling and the like" and
18 also notes that these corridors may also "serve as wildlife corridors, linking
19 large areas of unfragmented habitat as well as providing access for wildlife to
20 sources of water." (p. VII-22)
- 21 • A significant amount of commercial and multi-family residential development
22 activity has occurred along transmission lines in Bedford, Londonderry and
23 Concord, consistent with local zoning.
- 24 • There are numerous conservation and recreation uses along and near the HQ
25 Phase II electric transmission line in Concord, Londonderry and Bedford.
26 These communities have continued to increase the number of acres of
27 conservation and recreation land near these powerline corridors, and have
28 identified additional priority areas nearby for future conservation and
29 recreation.
- 30 • Agricultural uses have continued within or near the HQ Phase II line in
31 Londonderry and Concord, including Elwood Orchards, and agricultural lands

1 in Concord and Hopkinton near the Contoocook River and the HQ Phase II
2 corridor.

3 Based on our review, there is no evidence to suggest that the presence of a new high
4 voltage transmission line in an existing corridor, such as the HQ Phase II line that was
5 constructed over 25 years ago, has had a negative impact on a community's economic
6 development or growth potential. This is consistent with our review of over 70 local master
7 plans, where we found that transmission lines and corridors are not mentioned in any of these
8 plans as incompatible with land uses or inconsistent with local zoning. They are not identified as
9 detrimental to future economic growth and development, or as presenting any particular
10 challenges or barriers to the achievement of goals, objectives and recommendations in their
11 master plans.

12 We also found evidence that communities were experiencing, and in some instances were
13 seeking to increase, activity along the HQ Phase II ROW and other transmission corridors.
14 These increased activities or uses included residential, commercial, recreation, conservation,
15 agriculture, and forestry. This further reinforces our conclusion that locating the Project in
16 existing corridors minimizes impacts on land use, is consistent with existing land use patterns,
17 and does not interfere with the orderly development of the region.

18 **Q. You indicated that a new 345 kV line was approved for construction within**
19 **the PSNH ROW in Londonderry. Please explain.**

20 A. According to the SEC Decision in the MVRP proceeding, the structures associated
21 with the new 345 kV transmission line will be approximately 40 to 50 feet taller than the nearest
22 existing structures, and requires the relocation of existing facilities along some sections of the
23 corridor, including the existing 115 kV line, in order to accommodate the proposed new
24 transmission line. The structures that will be constructed to accommodate the relocation will
25 range from approximately 3 feet to 30 feet taller than the nearest existing structures. See Docket
26 No. 2015-05, Decision and Order Granting application for Certificate of Site and Facility, p. 7-8.

27 Counsel for the Public stipulated that: (i) utilizing pre-existing corridors is consistent with
28 the orderly development of the region; (ii) construction and operation of the Project will occur
29 entirely within an existing right-of-way; and (iii) the Project's impacts on local land use during
30 construction of the Project will be temporary. (p. 20) In its decision, the Subcommittee found
31 that there was credible evidence demonstrating that the construction and operation of the 345 kV

1 line was consistent with Master Plans and Ordinances, and that “construction of the Project
2 within an already existing and used right-of-way is consistent with the orderly development of
3 the region.” (p. 58)

4 This is consistent with the 1986 findings of the SEC in its decision approving the HQ
5 Phase II line, in which it found that the addition of a 450 kV line to an existing ROW did not
6 interfere with land use or the orderly development of the region. The SEC made findings that the
7 applicants in that case provided evidence to show that the line would be constructed on “rights-
8 of-way that have been used by transmission lines for many years,” and that “industrial,
9 commercial, and residential development has taken place adjacent to the existing rights-of-way
10 with no apparent adverse effect, and there is no reason to expect the Phase II transmission line to
11 interfere with additional development,” and that “potential impacts on adjacent land uses would
12 be minimal and would be related primarily to incremental visual impacts.” See Docket DSF 85-
13 155, Findings of the Bulk Power Facility Site Evaluation Committee, p. 13. The Applicants also
14 provided evidence to show that the addition of the 450 kV line would not have a “detrimental
15 effect on market value of nearby properties” and that the “likely effects of the Phase II facilities
16 on transportation and utilities, on agricultural areas, socioeconomic impacts, and on the
17 recreational resources of the region” would be minimal. (pp. 15-16)

18 This SEC precedent lends full support to our conclusions that siting a new transmission
19 line in an existing corridor is consistent with existing land use patterns, and does not interfere
20 with the orderly development of the region.

21 **Q. Please respond to the claims asserted by the City of Concord that the Project**
22 **would potentially cause blight and negatively impact new development in the Gateway**
23 **District.**

24 A. Blight is a term typically used in urban planning and redevelopment to describe
25 areas in which there is a number of deteriorating structures, dilapidation, decay, and unsanitary or
26 unsafe conditions which impair a municipality’s ability to grow and prosper. See *A Planners*
27 *Dictionary*, published by the American Planning Association (PAS 521-522, April 2004). The
28 assertion that the Project would potentially cause blight is not borne out by examples of growth
29 and development near transmission lines in New Hampshire. As stated above, I examined
30 development and other land use changes along transmission line corridors in Bedford,
31 Londonderry and Concord. From this review, it appears that the construction of the HQ Phase II

1 line within an existing transmission line ROW has not interfered with overall community growth
2 and opportunities for new development along the corridor, nor is there evidence that it has caused
3 blighted areas. To the contrary, substantial investment in new development has occurred along
4 these corridors as allowed by zoning, including high-end residential homes and multi-family
5 units, commercial areas, restaurants, grocery stores, and office space which provide for local and
6 regional needs such as housing, goods and services, employment, and tax revenues.

7 For example, in Bedford, NH, there has been a significant amount of development along
8 the HQ Phase II corridor, including: (1) a new Market Basket Supermarket; (2) the Bedford Hills
9 and Bedford Springs Developments, a mixed use area with 388 residential units and about
10 238,175 square feet of commercial space; (3) the Constitution Drive Business Park totaling over
11 350,000 square feet of commercial space, home to about 60 businesses; (4) the GPS NH Soccer
12 Complex; (5) the Bixby Farm Lane residential subdivision; and (6) Fizzhome Gardens. An
13 example in Londonderry is Hickory Woods Condominiums, an age restricted 55+ community
14 which is sited west of the HQ Phase II ROW with access from Route 102. All of the residences
15 in Hickory Woods have been constructed or are under contract, and the developer has announced
16 plans to expand this development. In the commercial area of Concord on the Heights, several
17 businesses have located near the transmission line, including a development called Carrier Place
18 which was recently constructed adjacent to the ROW between Loudon Road and Old Loudon
19 Road. Six of the eight commercial spaces are already occupied, including a Chipotle Restaurant.
20 Other commercial space constructed near the transmission line's crossing of Loudon Road
21 includes a five-unit plaza with a Starbucks, which opened in April 2006, as well as the Shaw's
22 Supermarket, Applebee's Restaurant, Jos A. Banks clothing store, and Home Depot. The Shaw's
23 in Concord is similar to the Market Basket in Bedford with the building sited adjacent to the
24 corridor and much of the parking lot constructed within the ROW and under the power lines.
25 Shaw's has indicated that it does not oppose the Project. Target, Best Buy, Dick's Sporting
26 Goods, PetSmart, and several restaurants such as the "99" and Newick's also have located in this
27 area, and much of Loudon Road can be characterized as strip commercial development between
28 I-93 and Route 106, consistent with local zoning. Nearby multifamily residential developments
29 include Alton Woods and McKenna's Purchase, as well as Cobblestone Pointe Senior Village,
30 which is currently under construction. There is no reason to expect that the Project will interfere
31 with additional development in Concord as permitted by local zoning.

1 **Q. Did you also look at adjacent communities to gauge the full extent of the**
2 **claimed inconsistencies with local master plans?**

3 A. Yes. I reviewed and summarized the master plans of the communities abutting
4 Project host communities. This report is provided on the Applicants' Track 2 Exhibit List.
5 Although the communities in this document are strictly defined as "affected communities" by the
6 NH SEC's rules, the abutting communities are often a considerable distance from the Project
7 and, regardless of distance, likely will not be affected.

8 **Q. Please respond to the claim asserted by Patricia O'Donnell that the Project is**
9 **in conflict with the orderly development of the region.**

10 A. Ms. O'Donnell's opinion on the question of orderly development of the region
11 lacks substantive support, and is based exclusively on statements of intent in community master
12 plans and zoning ordinances. It is narrowly focused on historic resources and does not address
13 any broader aspects of orderly development. Even from a land use perspective, as I have said in
14 my testimony and report, the Project will not affect land use along the existing ROW corridor.

15 **Q. Have you reviewed the supplemental testimony submitted by James**
16 **Chalmers, Mitch Nichols, Julia Frayer & Lisa Shapiro?**

17 A. Yes. I reviewed the supplemental pre-filed direct testimony of James Chalmers,
18 Mitch Nichols, Julia Frayer, and Lisa Shapiro in which they update their testimony and respond
19 to issues raised by some intervenors with respect to their prior testimony. In each case, their
20 overall conclusions have not changed.

21 (1) James Chalmers concludes there is no evidence that high-voltage transmission lines
22 result in consistent measurable effects on property values, and, where there are effects, the effects
23 are small and decrease rapidly with distance; and overall, there is no basis to expect that the
24 Project would have a discernable effect on property values or marketing times in local or regional
25 real estate markets;

26 (2) Mitch Nichols confirms his conclusions that the Project will not affect regional travel
27 demand, and that it will have no measurable effect on the State's tourism industry;

28 (3) Julia Frayer concludes that the Project will have positive impacts on employment and
29 the economy locally, regionally, and state-wide; and

30 (4) Lisa Shapiro indicates that the Project will substantially increase the property taxes
31 received by local communities, counties, and the State.

1 **Q. Does this supplemental testimony change anything in your previously filed**
2 **testimony regarding the orderly development of the region?**

3 A. No, it does not.

4 **Q. Does supplemental testimony and updated information on issues relating to**
5 **orderly development change the conclusions in your pre-filed testimony of October 16,**
6 **2015?**

7 A. No, they do not. The Project will not unduly interfere with the orderly
8 development of the region.

9 **Q. Does this conclude your supplemental pre-filed testimony?**

10 A. Yes.