

**STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE**

Docket No. 2015-06

**JOINT 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**

**SUPPLEMENTAL PREFILED DIRECT TESTIMONY OF
MICHAEL BUSCHER, JAMES PALMER AND JEREMY OWENS**

**ON BEHALF OF
COUNSEL FOR THE PUBLIC**

April 17, 2017

1 **Q. Who is responsible for drafting this Supplemental Pre-filed testimony?**

2 A. Michael J. Buscher, James F. Palmer, and Jeremy B. Owens.

3 **Q. Is this the same group from T. J. Boyle Associates (Boyle) that prepared the Pre-**
4 **filed Direct Testimony submitted on December 30, 2016?**

5 A. Yes.

6 **Q. Does Boyle wish to make any changes to its Pre-filed Direct Testimony submitted on**
7 **December 30, 2016 or associated exhibits?**

8 A. Yes. Please see Exhibit CFP-Boyle-6 for Appendix H Corrections to the Review of the
9 Northern Pass Transmission Line Visual Impact Assessment. This table includes editorial
10 corrections, as well as clarifications relating to comments made during the Aesthetics
11 Technical Sessions. These changes did not alter the conclusions reached in our previously
12 pre-filed direct testimony or in Exhibit CFP-Boyle-4 (Review of the Northern Pass
13 Transmission Line Visual Impact Assessment).

14 **Q. Did Boyle need to revise a simulation? If so, please explain.**

15 A. Yes. Please see Exhibit CFP-Boyle-7 for the revised Cross Country Road Simulation
16 (Viewpoint PE-1 at page PE-1d), which replaces the previously filed simulation on page
17 PE-1d of Exhibit CFP-Boyle-4. The proposed structure on the right side of the simulated
18 image was incorrectly depicted too short, and the revised simulation now shows a taller
19 structure in this location based on the NPT proposed structure height.

20 **Q. Please refer to your Pre-filed Direct Testimony, page 7, lines 17-18 where the**
21 **testimony states: “Using the SEC’s more expansive definition, in Chapter 4 and**
22 **Appendix D we identify over 18,000 potential scenic resources using readily**
23 **available databases, and identified categories of scenic resources that could be**

1 **inventoried with additional effort (e.g., historic sites, lands given a public use**
2 **recreation tax abatement).” Have you since refined the number of potential scenic**
3 **resources? If so, please explain.**

4 **A.** Yes. We examined the more than 18,000 initial potential scenic resources in an attempt to
5 further refine the identification of potential scenic resources. The overall methods to
6 further refine this data removed or consolidated 11,516 resources, leaving a total of 7,417
7 potential scenic resources. The most significant form in reduction was to combine
8 separately mapped resources that have the same name. However, this simplification does
9 not recognize that a scenic resource may have distinct parts that need to be evaluated
10 individually.

11
12 It is important to note that the general purpose of this analysis and the original analysis
13 was to demonstrate that the NPT VIA did not adequately identify scenic resources. The
14 specific number is not critical. Our initial analysis and now this refined analysis clearly
15 indicates that several thousand scenic resource should have been identified by the NPT
16 VIA. The analysis that Boyle provided in the Review of the NPT VIA is an example of a
17 logical first step to satisfy Site 301.05(b)(6), which NPT should have provided. Several
18 additional steps would need to then be completed to meet the SEC rules. A full
19 explanation and the results of this refined analysis are presented in Exhibit CFP-Boyle-5,
20 Appendix G: Analysis to Reduce Duplication of Scenic Resources.

21 **Q. Please refer to the screened viewshed provided in Appendix D to Exhibit CFP-**
22 **Boyle-4 that includes existing structures between the Bethlehem and Bridgewater**

1 **transition stations. Do you wish to clarify your approach here? If so, please**
2 **explain.**

3 **A.** The screened viewshed was developed as part of the analysis for the DOE EIS and VIA.
4 In the DOE EIS, the visual magnitude of the new NPT structures, the new structures that
5 will replace removed PSNH structures, and existing PSNH structures that will remain is
6 compared to the visual magnitude of the existing PSNH structures. In the terminology of
7 the DOE EIS, this is a comparison of Alternative 7 – Proposed Action to Alternative 1 –
8 No Action. The screened viewshed provided in Appendix D to Exhibit CFP-Boyle-4 uses
9 the results from an intermediate step of the visual magnitude analysis.

10
11 That analysis used higher quality NEXTMap terrain and land cover heights for the area
12 within 1.5 miles of the proposed ROW. These data were licensed only for use in
13 preparing the DOE EIS. As a result, it is not permitted to use them to evaluate the SEC
14 permit application.

15
16 Exhibit CFP-Boyle-6, Appendix H Corrections to the NPT VIA Review includes
17 corrections where the screened viewshed is referenced that make it clear that it is for
18 “proposed and existing-to-remain structures.”

19 **Q. Please refer to Site 301.05(a)(10) and Site 301.14(a)(7) regarding aesthetic**
20 **mitigation. Please explain your understanding of how the SEC should consider cost**
21 **in relation to of mitigation.**

22 **A.** Per Site 301.05(a)(10), the Applicant is required to provide “(a) description of the
23 measures planned to avoid, minimize, or mitigate potential *adverse* [emphasis added]

1 effects of the proposed facility... and the alternative measures considered but rejected by
2 the applicant.” Site 301.14(a)(7) requires the SEC to consider “(t)he effectiveness of the
3 measures proposed by the applicant to avoid, minimize, or mitigate unreasonable adverse
4 effects on aesthetics, and the extent to which such measures represent best practical
5 measures.” The term ‘cost’ is not mentioned as a consideration when evaluating
6 mitigation as outlined in either Site 301.05(a) or Site 301.14(a)(7), however the SEC is
7 required to evaluate whether measures represent “best practical measures.” Within
8 Review of the NPT VIA, T. J. Boyle has suggested several strategies to avoid, minimize,
9 and mitigate the Project including, undergrounding, alternative corridor alignment, co-
10 locating infrastructure, matching structures and alternate structure design, reconfiguration
11 of existing corridors, use of alternate materials, use of non-specular conduct, and
12 proposed landscape plantings to provide screening of the Project. These are strategies
13 that are commonly implemented into electrical transmission projects within New England
14 and have been found to be ‘practical’. Each area where adverse impacts are likely to
15 occur should be assessed for possible mitigation and cost should be considered as a
16 practical measure against the benefit of the mitigation strategy.

17 **Q. Can you clarify the title and discussion in section 3.7.1.5 of the Boyle report (page**
18 **26)?**

19 **A.** Yes. The title to section 3.7.1.5 is not as clear as it should be. It should read
20 “Photosimulations Must Illustrate Visual Impacts.” This correction is included in Exhibit
21 CFP-Boyle-6, Appendix H: Corrections to Review of the Northern Pass Transmission
22 Line Visual Impact Assessment.

23 The first sentence in this section is misstated and should read:

1 Site 301.05(b)(7) requires that the photosimulations “illustrate the potential
2 change in the landscape that would result from construction of the proposed
3 facility and associated infrastructure.”

4 Site 301.05(b)(7) identifies three types of photosimulations that are to be used “to
5 illustrate the potential change in the landscape that would result from construction of the
6 proposed facility and associated infrastructure, including land clearing and grading and
7 road construction, and from any visible plume that would emanate from the proposed
8 facility;” (emphasis added)

9 1. Representative key observation points: Site 102.25 states ““Key observation
10 point’ means a viewpoint that receives regular public use and from which the
11 proposed facility would be prominently visible.” (emphasis added)

12 2. Scenic resources for which the potential visual impacts are characterized as
13 “high”—which requires the project to be visible.

14 3. Private property observation points within the area of potential visual impact: Site
15 102.10 states ““Area of potential visual impact’ means a geographic area from
16 which a proposed facility would be visible, and would result in potential visual
17 impacts, subject to the areal limitations specified in Site 301.05(b)(4).” (emphasis
18 added)

19 Visibility of the project is required for all three types of photosimulations.

20 **Q. Does this conclude your testimony?**

21 **A. Yes.**

Exhibits

- A. Appendix G: Analysis to Reduce Duplication of Scenic Resources
- B. Appendix H: Corrections to Review of the Northern Pass Transmission Line Visual
Impact Assessment
- C. TJ Boyle NPT DOE FEIS VIA Simulation - PE-1 CORRECTED.pdf