

April 14, 2017

Pamela G. Monroe, Administrator
New Hampshire Site Evaluation Committee
21 South Fruit Street, Suite 10
Concord, NH 03301

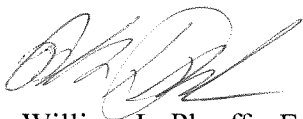
RE: New Hampshire Site Evaluation Committee Docket No. 2015-06
Joint Application of Northern Pass Transmission, LLC and Public
Service Company of New Hampshire d/b/a Eversource Energy
for a Certificate of Site and Facility for Construction of a New
High Voltage Transmission Line in New Hampshire

Dear Pam:

Enclosed for filing in the above matter is the Supplemental Joint Prefiled Direct Testimony of
Dr. Kenneth Kimball and Larry Garland on behalf of the Appalachian Mountain Club

If you have any questions regarding this enclosure, please feel free to contact me.

Sincerely,



William L. Plouffe, Esq.

WLP:kjl

Enclosure

cc: Susan Arnold
Dr. Kenneth Kimball
Larry Garland
Melissa Birchard, Esq.
Distribution List (as of March 31, 2017)

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 JOINT PREFILED DIRECT TESTIMONY OF

DR. KENNETH KIMBALL

And

LARRY GARLAND

ON BEHALF OF
APPALACHIAN MOUNTAIN CLUB

April 17, 2017

Background of Dr. Kenneth Kimball

Q. Please state your name, title and business address.

A. My name is Kenneth Kimball. I am the director of research for the Appalachian Mountain Club (AMC). My office is located at 361 Route 16, Gorham (Pinkham Notch), NH.

Background of Larry Garland

Q. Please state your name, title and business address.

A. My name is Larry Garland. I am the staff Cartographer for the AMC. My office is located at 361 Route 16, Gorham (Pinkham Notch), NH.

Q. What is the Purpose of AMC's joint testimony?

A. The purpose of AMC's joint testimony is to provide further analysis of the Visual Impact Assessment (aesthetics) conducted by Terrance J. DeWan & Associates (TJD), and whether it met professional standards and the SEC rules.

Q: What is the purpose of your supplemental testimony?

A. The purpose of our supplemental testimony is to address information that came forth or was clarified during the Technical Sessions relative to the Visual Impact Assessment conducted by TJD. It also updates the statistics on Public Comments received by the NH Site Evaluation Committee since we filed our prefile testimony.

Q. Did TJD use his cultural value rating as a primary screen to eliminate qualifying "scenic resources" from further analysis?

A. Yes he did.

Q. Did Mr. Dewan confirm during the Technical Sessions that he was not a cultural expert and that he had not consulted with any cultural experts when he rated scenic resources for their cultural value?

A. Yes he did.

Q. Do the NH SEC rules or visual assessment documents such as "The US Forest Service Agricultural Handbook 701 Landscape Aesthetics - A Handbook for Scenery Management" or "The Bureau of Land Management (BLM) Manual H-8410-1 Visual Resource Inventory" suggest using "cultural value" as a filter to eliminate scenic resources from further analysis?

1 **A. No.** They do not. Based on Discovery and Technical Session responses, the methodology used by
2 TJD appears to be a unique application of a screening device to limit the visual impact on qualifying
3 “scenic resources”. The NH SEC rules at ‘Site 301.05 Effects on Aesthetics (a)’ requires “*Each*
4 *application shall include a visual impact assessment ... prepared in a manner consistent with generally*
5 *accepted professional standards...*”. TJD provided no evidence during Discovery or the Technical
6 Session as to the legitimacy of his methodology, or that it was “*prepared in a manner consistent with*
7 *generally accepted professional standards...*”
8

9 **Q. Did TJD meet the SEC rules for selecting Key Observation Points (KOPs) used in photo**
10 **simulations?**

11 **A. No.** At Site 102.25 “*Key Observation Points*” means a viewpoint that receives regular public use
12 and from which the proposed facility would be **prominently visible**. Based on NPT VIA Methodology p.
13 M-10 and statements made by TJD in the Discovery sessions, TJD based his selection of KOPs for photo
14 simulations on the modeled number of towers visible, not whether the structures would be ‘*predominantly*
15 *visible*’. As we noted in our prefile testimony, only one of the 58 photo simulations presented by TJD
16 were within the immediate foreground where the towers would be most ‘prominently visible’, and the
17 majority of their photo simulations were in the mid-ground range (between 0.5 and 3 miles).

18 TJD’s only photo simulation of a transition station (Moose Path/Connecticut River Scenic ByWays
19 (Rt. 145) – Underground road crossing, Clarksville, NP Application Appendix 17 Northern Pass Visual
20 Impact Assessment at Subarea 1 at page 1-23) is taken such that the transition station is barely visible. By
21 moving to a slightly different location on Rt 145, the transition station would be ‘prominently visible’
22 (e.g. see Counsel for Public TJ Boyle photo simulation NH Route 145 Looking West – Clarksville, New
23 Hampshire, Appendix F to Review of the Northern Pass Line VIA, pp. 95-97).

24 Similarly in the Deerfield Historic District KOP, TJD used trees to screen the Project’s visibility
25 behind the historic church in their photo simulations, whereas both the Dodson (Visual Impact
26 Assessment Northern Pass Transmission Project, Dodson & Flinker, pp. A75-A77) and Counsel for
27 Public’s photo simulations (Church Street/Deerfield Center Historic District – Deerfield, New Hampshire,
28 Appendix F to Review of the Northern Pass Line VIA, pp. 113-115) illustrate the proposed monopoles
29 prominently visible and flanking the church steeple to the left and right respectively.

30 TJD produced four simulations where it is specifically noted that proposed structures would not be
31 clearly visible: Catamount Pond (NPT VIA pp. 6-16 to 6-17); Veterans Memorial Park, Hill (NPT VIA
32 pp. 4-36 to 4-37); Webster Lake - Legace Beach, Franklin (NPT VIA pp. 4-42 to 4-43); Green Grove
33 Cemetery, Route 3, Ashland (VIA Supplement Attachment 8 March 2016, pp 8-32 to 8-33). Clearly,

photo simulations where the “Number of transmission structures visible” is zero cannot satisfy the SEC criteria that the proposed facility would be prominently visible.

In summary TJD’s selection of KOPs and photo simulations are biased and many fail to meet the intent of the SEC rules.

Q. Did TJD meet the SEC rules for an Application at Site 301.03 Contents of an Application?

A. No. Under aesthetics at Site 301.05(b) (1) it states “A *description and map depicting the locations of the proposed facility and all associated buildings, structures, roads, and other ancillary components, and all areas to be cleared and graded, that would be visible from any scenic resources, based on both bare ground conditions using topographic screening only and with consideration of screening by vegetation or other factors;*” TJD or the Applicant provided no evidence during Discovery or the Technical Sessions that it asked for, or received a waiver to not describe “**any scenic resources based on bare ground conditions using topographic screening only**” as required by this rule. The bare ground data (a.k.a. DTM) was not produced until requested during Discovery (TS 4-4; NPT_DIS 166703 to NPT_DIS 166792), and furthermore, it was provided without any reference to or identification of impacted ‘scenic resources’ as required by SEC rules.

As we noted in our prefile testimony, the total acreage of the visible area in the bare ground viewshed map is 631,000 acres, or 30.7% of the total area within the 10-mile APE, and 386,988 acres, or 71% of the area within 3 miles of the Project. This compares to 26,800 acres (just 1.3% of the APE) in the “Final Proposed-Existing Viewshed” data provided by the Applicant, e.g., the Project viewshed based on topographic and vegetative/development screening (aka DSM). TJD’s failure to actually analyze such a large area visible to the Project under bare earth conditions and not analyzed under the vegetation screening model results in numerous ‘scenic resources’ not being analyzed for Project visibility impacts as required by the SEC Rules. This makes the Application lacking and incomplete based on the SEC rules.

Q. Has the Public Record on Expectations and Concerns Relative to this Project’s Potential Visual Impact on Aesthetics changed since you filed your prefile testimony?

A. Yes. At the time we submitted our prefile testimony there were 1,102 SEC filed public comments, hearing testimony, and intervention petitions submitted of which 742 were non-repeating persons, municipalities, or organizations.

As of April 12, 2017, there are 1,207 recorded responses of which 814 are from non-repeating entities. Of these 814, 72% expressed opposition to the Project as proposed, and 53% specifically stated their opposition was based, in whole or in part, on potential visual impacts.

Of those not specifically articulating their reason for opposition, it is quite possible that visual impact concern was a common factor for many.

In addition filed with the SEC on March 13 2017 was a petition submitted by “NH citizens opposed to Northern Pass”¹, which was signed by 3,365 different individuals from within and outside of NH. The petition stated “*the need to protect the environment, **scenic value** and communities of New Hampshire by denying Northern Pass the permission to **ruin our landscapes and scenic roads.***”(emphasis added) It requests full Project burial to protect the state’s landscape from the visible impact of towers and conductors.

TJD in their testimony and supporting reports and during Discovery and the Technical Session never acknowledged or addressed the existence of this extensive and overwhelming public record that is most relevant to ‘user expectations’. This record by the very users themselves strongly contradicts TJD’s interpretation that the user’s perception of the proposed Project will not be unduly adverse on aesthetics. TJD instead relies on Terry DeWan’s sole professional judgement to conclude that the visual impact will not be unduly adverse on aesthetics relative to the typical viewer. To completely ignore this public record is not in “*a manner consistent with generally accepted professional standards...*”as required by SEC rules. And it fails to justify TJD’s ‘Low’ to ‘Medium’ rankings relative to SEC rules at Site 301.5(b)(6) which stipulates “*A characterization of the potential visual impacts of the proposed facility, on identified scenic resources as high, medium or low based on consideration of the following factors:*

(a) the “*expectations of the typical viewer*”; (emphasis added)

(b) *The effect on future use and enjoyment of the scenic resource;*”

Q. Did TJD adequately describe during the Technical Sessions the rationale for their Delta visibility maps which show “Increased Areas with Structure Visibility” (VIA Appendix A) to account for the difference between existing conditions and proposed conditions structure visibility?

A. No. TJD’s “Delta” maps only illustrate locations where new proposed structures would be visible (purple), but fail to account for how many new towers would be visible at locations presently impacted (orange). TJD’s maps also fail to illustrate the “*intensity*” of visual impacts by masking the increased number of structures that would be visible at any location or account for the additional height or size of towers exposed to view (on average 40+ feet taller and well above the tree canopy). Furthermore, the cross arm structures on horizontal monopoles (believed to be up to 60 feet across) can often be exposed

¹ http://www.nhsec.nh.gov/projects/2015-06/public-comments/2015-06_2017-03-13_comment_m_elandar_petition.pdf

1 above typical tree height, yet these components are not evaluated for visibility in their “Delta” visibility
2 maps or discussion.

3
4 **Q. Did TJD provide any documentation that they made site-specific recommendations on rerouting**
5 **options, vegetative screening, or changes to tower configurations to minimize visual impacts or**
6 **address their practicality?**

7 **A. No.** During Discovery and the Technical Session we requested site-specific information related to
8 rerouting options, vegetative screening and reconfiguration of tower structures, but no such information
9 was provided with the exception of one rough sketch during Discovery of the transition station in
10 Clarksville. All evidence provided to date supports the understanding that TJD was given the route and
11 tower specification and had no role in re-routing or burial of all or part of the Project. The only mitigation
12 measures TJD offered were more generic or appear retroactive to previous decisions made by others. Nor
13 did TJD address site-specific challenges as to the practicality of vegetative screening which is problematic
14 within the ROW, and outside of the ROW would require landowner permission that may not be
15 forthcoming. In summary much of TJD’s actually proposed mitigation is speculative at best.

16
17 **Q. Does this conclude your supplemental prefile testimony?**

18 **A. Yes.**

CERTIFICATE OF SERVICE

I hereby certify that on this day, April 14, 2017, a copy of the foregoing
SUPPLEMENTAL JOINT PREFILED DIRECT TESTIMONY OF DR. KENNETH KIMBALL
AND LARRY GARLAND ON BEHALF OF THE APPALACHIAN MOUNTAIN CLUB was
sent by electronic mail to all persons named on the Service List in this docket.



William L. Plouffe