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

PRE-FILED DIRECT TESTIMONY OF BARRY DRAPER, INTERVENOR Pemigewasset River Local Advisory Committee

November 15, 2016

- 1 Q. Please state your name and address.
- 2 A. Barry Draper. 423 Blake Hill Rd. New Hampton, NH.
- 3. Q. What were you thinking when you first chose to be an Intervenor?
- 4. **A.** When I first heard about the Northern Pass Project years ago, I thought: "Oh, no, another big corporation pushing our need for cheap electricity and your rates will be greatly reduced." It reminded me of Seabrook with PSNH's promises of low rates and here we are with some of the highest rates in the country.
- 5. Q. Was it only big corporations and higher rates that hooked you?
- **6. A.** No, not really. I'm a science teacher and an environmentalist. I try to live my life as simply as possible -- to keep my footprint and my use of resources as sustainable as possible. I believe how each person lives is directly tied to the health of our planet. This is what I teach and what I live.
- 7. Q. What's your background?
- 8. A. I grew up as an outdoor kid who loved everything about nature. In high school and college, I sought out the biology and life science courses. After college I worked at a goldfish hatchery as a fisheries assistant where I learned about the complexity of aquatic life. I went to Antioch Graduate School (VT) where I earned a Masters in Education. Most of my life has been teaching elementary, middle and high school students about the outdoors and the mysteries of the natural world. I continue to teach through my nature photography and Walks and Talks: Nature Under Our Noses.
- 9. Q. What is your connection with the Pemigewasset River Local Advisory Committee and New Hampton?
- 10. **A.** We built our house 40 years ago on a forested piece of land that looks over the Pemigewasset Valley. We were drawn to the Pemigewasset River for its natural beauty and opportunities for canoeing, kayaking, swimming, fishing, birdwatching and exploring. From my work on the

New Hampton Planning Board, I heard about PRLAC and what they did for the river under Max Stamp's leadership. I represent New Hampton as part of the citizen scientist organization managing and protecting the river.

11. Q. What's one way the NPT Project will affect your life and work?

12. **A.** I use photography as a tool for educating people about the world around them. Because of my training and care for natural resources, I've traveled the Pemigewasset from Franconia to Pembroke, paddling much of the way. I have many photographs of wild river scenes and the many diverse organisms that rely on the Pemi Watershed. This Project will diminish wild areas.

13. Q. What's a major concern you have for NPT's impact on the river?

A. A major concern of mine -- and river creatures in general-- is disturbed areas of shoreland. Over the years, I've observed huge changes in erosion and loss of habitat due to development along the river. The development and alteration of land is not only a problem on the river, but it also has significant impacts even when located far off in the watershed.

14. Q. What evidence have you seen of these disturbances?

13. **A.** The section of river from Plymouth to Ayers Island Dam in Bristol has at least 10 sites where some alteration of land has caused large swathes of erosion in the banking.

15. Q. What do you think caused this erosion?

16. **A**. Some of it is probably caused by overflowing drainage ditches due to more frequent and "more-than-2-inch" rain events. Also, I've observed that EverSource's ROWs with limited or disturbed vegetative buffers on steep slopes show the worst damage.

17. Q. Do you have specific examples of these sites?

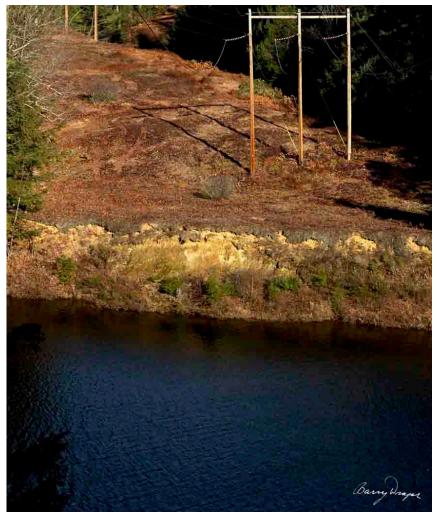
18. **A**. Yes. Where the transmission lines cross the river from Bridgewater to Ashland river and New Hampton to Hill. Both areas have considerable erosion with gullies over two feet deep and much exposed bare sand. (see photos on the next page).

19. Q. Do you think the Northern Pass Project as proposed will improve or degrade these sites?

20. **A.** The plans call for widening and clearing the ROWs for the new (huge) towers. This removes or degrades existing vegetative buffers from where they exist. At this point, EverSource/ PSNH is not adequately controlling storm water runoff. The construction and presence of the new proposed towers and maintenance schedule worries me greatly.

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I'm also concerned with access to these ROWs needed during construction, post construction and maintenance. Because the ROW parallels much of the Pemigewasset, feeder streams must run under these ROWs or the access roads. These feeder streams are also showing signs of increased sediment from run-off of the ROW.



21. Q. How do you think this Project will affect existing wetlands?

22. **A.** Amphibians are already struggling to adapt to warmer, drier conditions. Hubbard Brook research has found increased mortality of amphibians and terrestrial salamanders due to decreased moisture levels.

On top of climate change, wetlands will be damaged or changed by canopy cutting, alteration of terrain, loss of shrub cover and the overall upheaval of construction. Wetlands are a complete unit. They cannot be fragmented. Wetlands can clearly be impaired by changing the plants around their borders, but the water is a complete entity -- which can not be limited to just the ROW.

It's all connected. When the access roads are cut and widened to allow in large scale construction equipment, more sun falls on vulnerable feeder streams and raises the water temperature. This warmer water then flows into the Pemi and raises its temperature -- and that limits the water's ability to carry oxygen and limits cold water species (i.e. trout and salmon).

23. Q. Who finds the Pemigewasset River unique in their lives?

24. **A.** Ask an angler who travels a hundred miles to fish its waters. Ask a kayaker from Proctor Academy or the White Mountain School.

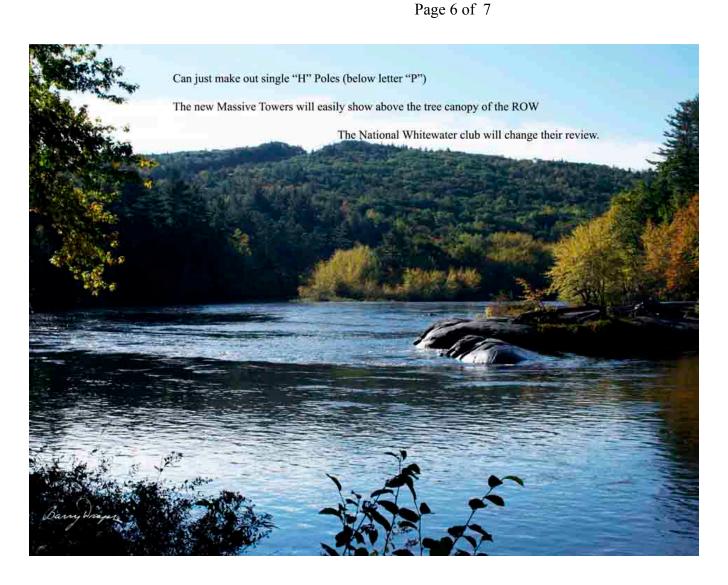
Ask a fourth grader who was involved with Cheri Blessing's River Day. Ask the young man who took a boat to and from high school so he could fish going and coming each way.

Then there's the university students who investigate archeological sites and the biology of the river and its surroundings. We can't forget photographers, birders, hunters of all ages. There's the runners, the bikers and the dog walkers.

The American White Water national organization says of the Pemi: "Good forest scenery and not many signs of civilization except the dam and the bridge."

As someone who goes to the Pemi almost daily (over 40 years), I would say it is unique <u>now</u> without Northern Pass' huge steel towers marching along the ridge over Coolidge Woods Rd.

It's the potential loss of this special place and natural resources that worries me. The Pemi is not only unique to humans -- it is a unique watershed, recognized by NH Fish and Game and NH DES. Their maps and designations of habitat quality and species of concern cover much of the watershed from New Hampton to Sanbornton and into Hill.



25. Q. Tell us more about the watershed from New Hampton to Sanbornton and Hill.

26. **A.** New Hampton's ROW has some of the most least visible towers **now** because of the terrain. With the new proposed project, it will become one of the more visually and physically impacted areas. The plans include 40 plus new steel lattice towers, most of them over 80 feet tall.

Also, over 30 wetlands will be disturbed -- temporarily and/or permanently. The 10 brooks that flow directly under the ROW into the Pemi have the potential to increase siltation significantly.

I feel this New Hampton to Hill section has been seriously understudied for this Project, while it has some of the most at-risk areas.

The digital data does not support what we find when our boots are on the ground and when we're focused on the nature under our noses.

27. Q. Do you feel there are any positive gains from the proposed Northern Pass Project?

28. **A.** There is only positive aspect of this project: It has brought together a powerful community of people who value the uniqueness and importance of natural habitats.

This is a community that stands on values and heritage. There are unsung heroes here who refused the money and promises from this Elective for profit corporation.

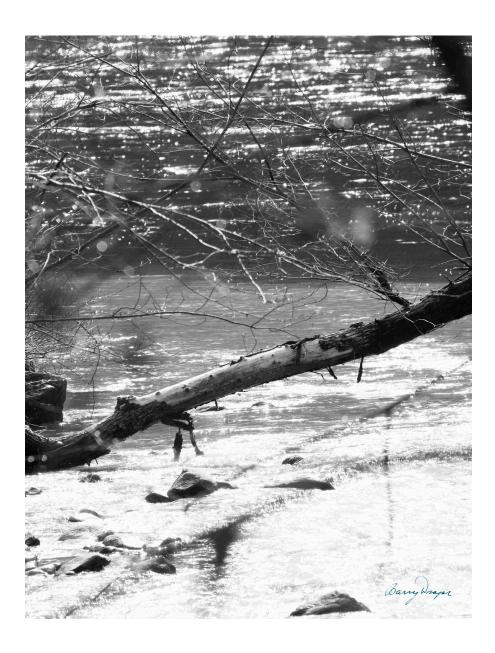
This always brings me to ask: Why are we doing this? Why Northern Pass?

29. Q. Do you have additional testimony to present to the SEC?

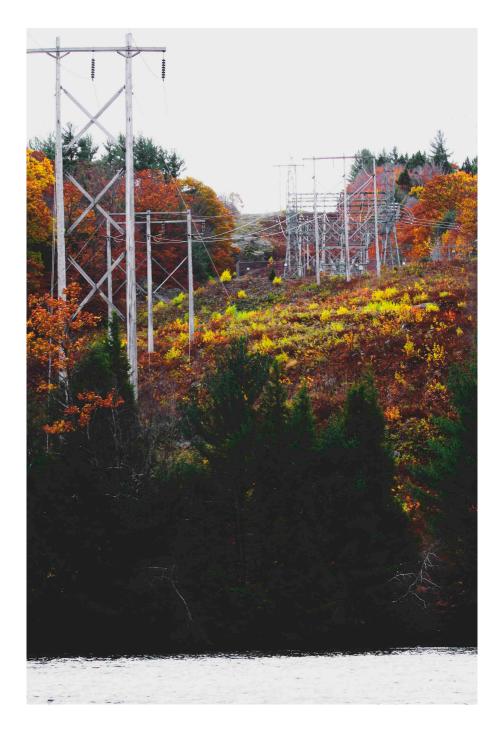
30. **A.** Yes, PRLAC requests the opportunity to provide testimony to the Applicant's Responses to the Department of Environmental Services. Our pre-filed testimony will be ready on or before December 30, 2016.

Respectfully submitted, Barry Draper, Intervenor with the Pemigewasset River Local Advisory Committee

Attached full photos of the Pemigewasset River watershed.



Outflow of Blake Brook to the Pemigewasset



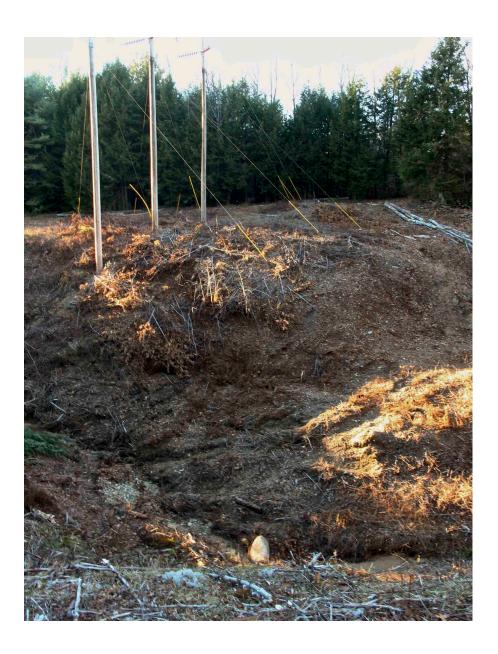
Transmission Lines Crossing from Bristol to New Hampton (Ayers Dam area of Bristol) Looking up into New Hampton



Pemigewasset River

Lines crossing from New Hampton to Bristol at Ayers Island Dam

Looking up towards Peaked Hill Road



Ashland to Bridgewater Crossing

Pemigewasset River



Pemigewasset River

New Hampton crossing to Hill

New Hampton side



On the ROW in Bridgewater, NH (Gilpatricks)

Part of the Pemigewasset Watershed