Thomas & Mary Centner 1448 Lost Nation Road Groveton, NH 03582 April 24, 2017

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

Attn: Ms Monroe;

I recently wrote to Sr. Assistant AG Peter Roth regarding our concerns about the Northern Pass Powerline Project. Our property abuts the ROW on Lost Nation in Northumberland. He suggested that I send the SEC a copy of my letter. Enclosed is a copy of that letter along with an older letter regarding "Special Places" that were from last summers workshops. Along with the letters there are some maps with information about our location on Lost Nation Road which I got from the Town of Northumberland Assessment Report on Transmission Lines Proposal done in 2016. It shows that we are within their area of concern.

If you have any questions I can be reached at mcentn@netzero.net

Sincerely,

Thomas and Mary Centner

Thomas & Mary Centner 1448 Lost Nation Road Groveton, NH 03582 March 24, 2017

Mr. C. L. Peter Roth Senior Assistant Attorney General Environmental Protection Bureau Department of Justice Office of the Attorney General 33 Capitol Street Concord, NH 03301

RE: Northern Pass Workshops follow up letter & additional questions.

ATTN: Mr. Peter C. L. Roth:

Enclosed or attached is my letter from last August 2016 regarding identifying special places near our residences that would be affected. I am also enclosing more maps and excerpts from the Town of Northumberland April 2016 Assessment showing the areas which impacts our location.

We have some other specific questions regarding the Eversource Northumberland Power Sub-station ROW on Lost Nation Road where our property boundary is and which is a wetland boundary abutting the ROW. The points of concern are as follows:

- The Coos Loop runs along this route.
- The PNGTS Gas Pipeline runs underground along that route also. This raises safety questions, as well as the space needed for the Northern Pass proposed project.
- There is a fairly regular PNGTS helicopter that runs close range over the area checking for leaks.
- These bring up the question about whether the space needed for the existing structures along with the space needed for the proposed Northern Pass consisting of large and very high power lines could even fit into that same area as well. ? As an abutter this concerns us as it is still unknown how it will effect us. At a meeting with a group from Northern Pass they said they won't know how much land they will need until after they are along in the project.!?
- Our land is now in **current use** and we need to know if and how that will be effected.
- Burying the lines would make a lot of sense but even that would still cause a disruption along the ROW and interfere with natural habitat.

What are the legal ramifications of this project encroaching on our current use land? We have just a little over 10 acres in current use. What is involved with an easement and the lease fees for using the land?, should it come to that. Please advise us as what to do about this predicament.

In the other letter I had also mentioned health concerns which become a problem at or within 1,000 feet which is where we are. There is much material available on the health effects of the electromagnetic frequencies emitting from power lines and the illnesses they cause. Scientific studies mention several illnesses which include neuro-degenerative disorders and childhood leukemia. It may force us to leave and getting a fair price for our house will be compromised due to the resulting decline in real estate values, should the project go through. Power lines have a negative effect on real estate prices besides the health issue because they are so unsightly. Please reply to us on these concerns.

Sincerely,

Thomas & Mary Centner

Wetland and Wildlife Assessment, Northumberland, NH

Based on previous field work and review of submitted maps, it appears that wetlands were accurately delineated and documented. However, there are concerns with permanent and temporary impacts on all of these wetlands, particularly those which are part of perennial or intermittent streams and those that extend beyond the ROW boundaries. Many of the larger wetlands have active beaver populations and contain series of beaver pond systems. Disruption of these wetlands will not only affect the impact area, but also areas downstream, and in some cases upstream habitats. Moreover all streams eventually flow into the Connecticut River, affecting water quality. The Connecticut River is the largest river in New England. It flows 410 miles from its source only 300 yards from the Canadian border, to Long Island Sound. It drains 4.5 million acres (7,000 square miles) of New Hampshire and Vermont. In 1992, NH General Court designated the Connecticut River into the New Hampshire Rivers Management and Protection Program, and in 1998 the White House designated the Connecticut as an American Heritage River (CRJC, 2016).⁴

In the 2006 Wetland study in Northumberland, six wetland complexes were inventoried and ranked in the field after initial GIS analysis using available data. All six inventoried were large areas, ranging from nearly 90 acres to over 1,036 acres. Wetland complexes ranked 1st, 4th, and 5th are all found within and beyond the existing ROW where work is proposed. Please refer to the November 2006 report⁵, *Functional Assessment of Wetlands throughout Northumberland, NH* for descriptions on these wetlands as well as recommendations for protection of these wetland complexes. The report is publically available through the Northumberland Town Hall.

Although temporary and permanent impacts on all wetlands should be carefully reviewed, we noted three large area containing Palustrine and Riverine wetland complexes which are a special concern based on the following:

- Wetlands extend through and beyond the ROW. Impacts in immediate area will affect wetland diversity, quality and function downstream.
- Existence of perennial streams
- The flow of water all leads to the Connecticut and Wild Ammonoosuc Rivers
- There are extensive aquifers under the Connecticut River and associated flood plain and wetland areas within and beyond Northumberland.

The large wetland complexes that are of particular concern with the proposed project are described below.

1. Northern Area of Concern: This wetland complex was called the Gun Club Wetland Complex (#4) in the 2006 wetlands report. It is nearly 300 acres in size and lies along the northern section of the Lost Nation Road, and adjacent to the gun club area.

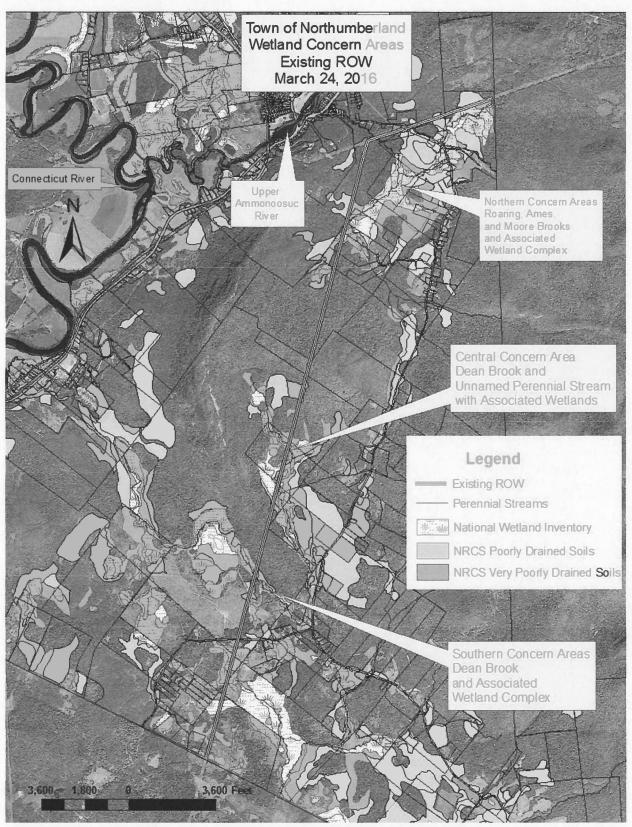
Northern and western sections of this wetland cross the existing Public Service of New

⁴ Connecticut River of Joint Commission, Inc. (CRJC), 2016. *Fast Facts*. Information and Education on the Connecticut River. http://www.crjc.org/facts.htm#top. Retrieved from the web on April 2, 2016).

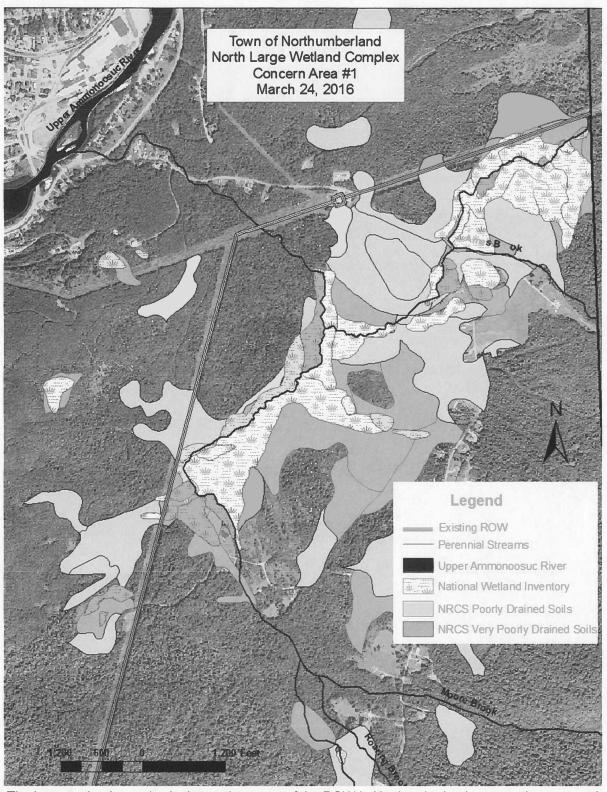
⁵ Watershed to Wildlife and North Country Council. 2006. Functional Assessment of Wetlands throughout Northumberland, NH. Report prepared for the Town of Northumberland – Northumberland Conservation Commission. Work funded by the Upper Connecticut River Mitigation and Enhancement Fund.

Hampshire (PSNH) or ROW transmission line. The wetland complex crosses the ROW more than once Roaring, Ames and Moore Brooks feed this wetland. All streams eventually all merge into Roaring Brook, and then confluence with the Wild Ammonoosuc River. The Wild Ammonoosuc River then flows into the Connecticut River. There is a large aquifer under the Wild Ammonoosuc and Connecticut Rivers in this area. The wetland complex and associate perennial streams play an important role here in slowing large amounts of runoff from the adjacent mountain slopes before they reach the main rivers and downtown area. This area of concern contains a diversity of wetland types ranging from open water, emergent, scrub-shrub, and forested wetlands. Additionally, there are 10 different types of very poorly and poorly drained soils. Because of the diversity in soils, wetland types, and surrounding upland habitats, this wetland also has the potential to be home to many species of concern.

- 2. Central Area of Concern: This wetland complex along the ROW was called the Lost Nation Wetland Complex (#5) in the 2006 study. It is located between the Lost Nation Road, near the junction with Page Hill Road, and the Cape Horn Ridge. Dean Brook and an unnamed perennial stream flow from the northwest to southeast across the ROW: crossing the ROW more than once. The wetland mapped was 176 acres lying within narrow valley between steep slopes surrounding it. It is considered an important wetland not only because it contains a variety of wetland types, but also because there are large amounts of forested habitat surrounding it acting as excellent buffers and protection from erosion. The diversity of wetlands is also impacted by beaver forested, scrub shrub, emergent and open water. The streams flow directly into the Connecticut River. If water quality is degraded during construction it will directly affect the water quality of the Connecticut River downstream.
- 3. Southern Area of Concern: This large wetland complex was called Page Hill Wetland Complex (#1) in the 2006 report, and was the highest ranked wetland in Northumberland. It spans over 1,036 acres. Due to its large size and topography, there is a great deal of diversity throughout and within it. This wetland complex lies between Northumberland/Lancaster town line and the Lost Nation Road, with a portion of Page Hill Road and the ROW bisecting it. Moreover, this complex extends for over 1,800 acres into neighboring town of Lancaster. The NWI data and classification mapped by the National Fish and Wildlife Service classified 22 different types/combinations of wetlands (Palustrine and Riverine) within this wetland, most of which were observed during field work. Extensive beaver activities are well documented in this area. Forested bogs and northern white cedar wetlands were documented.



Overall all map of the larger wetland complexes all containing perennial streams. The map shows the location of the 3 large areas identified with greatest concern for wetland and adjacent upland impacts.



The large wetland complex in the northern part of the ROW in Northumberland crosses the proposed NP project several times. Ames, Moore and Roaring Brook enter the Upper Ammonoosuc and then the Connecticut Rivers, where there is an extensive stratified drift aquifer. Concerns with loss of wetland value from both permanent and temporary wetland impacts.

Thomas and Mary Centner 1448 Lost Nation Road Groveton, NH 03582 August 18, 2016

Peter C.L.Roth
Senior Assistant Attorney General
Environmental Protection Bureau
Department of Justice
Office of the Attorney General
33 Capitol Street
Concord, NH 03301

ATTN: Peter C.L. Roth

RE: Northern Pass Workshops

We were unable to attend the Northern Pass Workshop held in Lancaster which was to identify the scenic, historical and cultural areas within ten miles of our residence. Lost Nation is scenic by itself and the ROW through the Lost Nation sub-station was replanted after the gas pipeline was installed. Our house on Lost Nation is approximately 1000 Feet of the ROW and natural gas pipeline which borders our property line. That part of the property line is also a wetland boundary.

First a list of our immediate concerns, which include:

- Lower property values in an already slow market.
- · How will our land in current use would be effected.
- · Negative effects on health such as headaches, leukemia, etc,
- The safety of locating such a project over a existing gas pipeline and on a wetland boundary.
- The negative effect on wildlife ie more diminished numbers and bird species dropping off.

Wetlands also supports wildlife, and aesthetics also play a major part.

As regards to the area the Town of Northumberland has a report, "Northumberland Rich in Wetlands" compiled a few years ago.

List of Scenic Areas - Closest to our residence;

- · White Mountain National Forest borders some of our neighbors, criss-crossing around us.
- · Northumberland Watershed Forest off Lost Nation
- Waterway or creek which feeds into Ames Brook and crosses under Lost Nation Road and merges with Roaring Brook then heading south under the COOS LOOP transmission lines and then to town. There have been Beaver Dams at the end of Ames Brook. Another interruption in this area would have a negative environmental impact.
- · A growing sugarhouse next door.
- · Heartstrong Farm and apple orchard up the road

List of Scenic, Cultural and Historical Areas within ten miles of our residence:

• White Mountain National Forest and NH statelands.

- Kilkenny Mountains
- Percy Peaks
- · Northumberland State Park
- · Northern Forest Canoe trail
- Upper Ammonoosuc River and Cultural Heritage
- · Bag Hill Town Forest
- · Cohos Trails, Percy Peak Trails,
- · Snowmobile trails
- · Fishing, hunting, camping and ohrv trails
- Tourism
- Upper Ammonoosuc Covered Bridge
- The Meetinghouse, now known as the Northern Historical Society Museum built in 1799.
- Fort Wentworth built in 1755 during the French and Indian War.
- · Northumberland Historical cemetary
- Potter Farm Conservatory
- Connecticut River seen along Route 3

Cape Horn State Forest - where the Connecticut River meets the Upper Ammonoosuc River in Northumberland. It is a 2,074 acres forest centered around a 2040 foot ridge known as Cape Horn. In a report done in 2001 the New Hampshire National Heritage Bureau conducted an ecological analysis of New Hampshire state lands. The highest priority or TIER 1 identified was given Cape Horn. It contains rare plant species, exemplary natural communities, and natural community systems on the property.

Other Notes;

U.S. Fish and wildlife 2007 Wetlands Summary and maps.

Town of Northumberland "Rich in wetlands report"

Topographical Maps including Northumberland and White Mountain National Forest Ecological Inventory of Cape Horn State Forest compiled by New Hampshire National Heritage Bureau DRED Division of Forests and Lands and The Nature Conservancy Concord, NH in June 2007 report.

Fact Sheets for Wetland Systems in New Hampshire by NH Heritage Bureau December 2015.

We hope that you would take this into consideration and will be awaiting your reply. We will follow up this letter with a hard copy through regular mail. The mailed copy will have some attachments, including Map of Cape Horn area, and recent Northumberland article regarding concern over wetlands.

Sincerely,

Thomas & Mary Centner