



January 25, 2017

Christopher Morgan, Chair
Concord Conservation Commission
City Hall, 41 Green Street
Concord, NH 03301

Re: Wetland File SEC 2-15-02817
Northern Pass LLC NHDES Wetlands Permit and Shoreland Permit

Dear Mr. Morgan:

On behalf of Northern Pass Transmission LLC ("NPT"), we are responding below to the comments you sent to Craig Rennie and Darlene Forst of the New Hampshire Department of Environmental Services ("NHDES") on July 25, 2016 related to the Northern Pass Project. We are providing this response to complete the wetlands permitting record. We address your comments separately below.

Hydroelectricity is one of the cleanest forms of power used today. By adding 1,090 megawatts of clean energy into the New England grid, the Northern Pass Project will reduce our need to burn fossil fuels and reduce greenhouse gas emissions by over three million tons a year, and help New Hampshire achieve the goals of the NH Climate Action Plan and the Regional Greenhouse Gas Initiative. All methods of harnessing and distributing energy have some type of environmental impact. NPT has committed to minimizing Project related impacts and restoring temporary impacts. In addition, NPT has proposed a robust natural resource mitigation plan for unavoidable impacts, which includes the conservation of over 1,500 acres of land and Aquatic Resource Mitigation fund payments of over three million dollars. NPT contributions to the National Fish and Wildlife Foundation are also supporting dam demolition projects in Vermont and New Hampshire that would open 140 miles of rivers and streams to migratory fish.

The Northern Pass Project spans 192 miles, and in that distance, direct permanent wetland impacts are only 2.54 acres. At every local point along that line, scientists and engineers have worked to reduce impacts to wetlands, wildlife habitats, and rare plants by relocating and redesigning elements of the Project. The resulting permanent wetland impacts in Concord are 501 square feet. Measures to avoid and minimize rare plant and wildlife impacts are being developed carefully with agency input, and a pine barrens mitigation site is being proposed (see further discussion below). NPT has fully explained how it avoided and minimized impacts in accordance with NHDES rules, and it has recently provided additional information at NHDES's request.

We appreciate that this application is much larger than the norm, and we appreciate the time and effort your Commission has expended on the review of this Project. NPT is required under Chapter 482-A:3 (amended 2014) and as a part of the NHDES Wetland Permit Application (“WPA”) process to furnish complete copies of its WPA and NHDES Shoreland applications to affected municipalities. The WPA instructions dictate the format and content of the application and are intended to ensure that the required information is provided to the NHDES. Within the application documents, there are sections and/or tables which provide data specific to each town/city. Appendix B of the NHDES WPA which is titled, “Wetlands, Rivers, Streams and Vernal Pools Resource Report and Impact Analysis”, also provides tables and summaries specific to each municipality along the Project route. In addition, detailed permitting plans are arranged in a linear fashion along the Project alignment (from north to south) and the plan sheets and their extent for each town are clearly depicted on the index map located above the Northern Pass logo in the lower left-hand corner of the sheet. The Northern Pass team, including natural resource experts, met with the Concord Conservation Commission on November 12, 2015 at your request, to assist in identifying the portions of the applications of greatest relevance to Concord and discuss Concord-specific wetland resources and proposed impacts. The minutes/summary of that meeting are attached.

You commented to DES that the Project timeline has been extended for many reasons, including routing and design revisions that significantly reduced natural and visual impacts, and requests for additional review time by the permitting authorities. Despite these schedule extensions, the continued accuracy of the wetland data has been confirmed by the USACE as they accompanied Project scientists during delineation reviews in 2014 and 2015. Furthermore, NPT has committed to reflagging sensitive resources, including wetlands, prior to construction to insure that construction personnel will effectively implement impact avoidance and minimization measures.

Tree removal within the existing transmission ROW has been avoided where practicable and will be done only to the extent required to meet safety requirements. The trimming along the edge of the existing ROW in Concord is less than 20 feet wide in most places (less than one mature tree canopy width) and will not contribute measurably to habitat fragmentation. Although some minimum tree removal is necessary, the removal will allow the expansion of meadows, shrublands, and early successional forest that already exist and are maintained in the ROW. Such habitat is of high value to many wildlife species that are rare or are becoming rare as these early successional habitats disappear from our landscape. The open habitat of the ROW has unique host plants for rare insects, suitable sites for basking and nesting reptiles, and habitat for shrubland birds. In some locations, Eversource has maintenance agreements with New Hampshire Fish & Game to manage the ROW specifically to benefit these species. This Project will not have a detrimental long-term effect on these open habitats or the species that require them.

Eversource does not have the right to prevent access to private property, and the company is not responsible for ATV use or other access issues in the ROW if owned by others. Many portions of the existing ROW are utilized by the public, with some activities including unregulated ATV and other

similar uses resulting in erosion and sedimentation problems. These unregulated activities often take place in locations previously restored following ROW maintenance or construction activities.

The existing transmission ROW predates the designation of all conservation lands along the route in Concord, therefore, the presence of the transmission corridor within or adjacent to a conservation parcel is an existing use, and no change in this use or impact beyond the ROW is planned. Potential impacts to sensitive natural resources on all lands have been avoided and minimized to the extent practicable, regardless of size, function, or political boundary. However, NPT recognizes that conservation lands are highly valued by their local communities, and Turtle Pond is one of the larger and deeper wetlands that the Project will cross. After avoidance and minimization, working in ponded areas is most easily accomplished under winter/frozen conditions typically experienced in late December through late February in New Hampshire. Impacts to wetlands can be minimized through simple practices including:

- The removal (plowing) of snow from underlying ice to reduce the natural insulating action of snowpack thereby increasing the depth and strength of the ice;
- Application of water to plowed icy areas to strengthen ice; and
- Utilizing timber matting over ice or deep snow.

Temporary impacts to most non-ponded wetlands are associated with the placement of temporary construction matting, and the restoration of these areas is generally quite fast, as seed banks and root systems remain and re-sprout.

NPT also recognizes the unique value of the pine-barrens in Concord and Pembroke, and NPT has devoted much study to the rare species it supports. In fact, some of the Northern Pass surveys in Concord were conducted by Dan Sperduto, the author of the 2010 report, "Conservation Priorities, Concord, NH," that you attached to your emailed comments. Most of the rare plants, insects, reptiles and birds in the pine barrens are adapted to disturbances, and require open land for at least part of their lifecycle. The existing ROW is an important open habitat that supports these species, and will continue to contribute to their conservation in the long term. Nonetheless, construction impacts to these species, particularly the Karner blue butterfly ("Kbb"), must be avoided and minimized, and we have developed impact minimization and mitigation measures with input from New Hampshire Fish and Game Department ("NHF&G") and the U.S. Fish and Wildlife Service ("USFWS"). NPT has evaluated 21 properties in the area, and visited several of them with agency experts in efforts to secure a parcel suitable for Kbb impact mitigation. NPT acquired a 6.9-acre parcel adjacent to the core Kbb population that meets with approval by NHF&G and USFWS Kbb experts. The site is an early successional pine barrens community with potential value for threatened and endangered lepidoptera, including Karner blue butterfly, pine pinion moth, Persius dusky wing skipper, and frosted elfin. It is adjacent to the existing Karner blue butterfly National Wildlife Refuge. In addition, Eversource has developed a ROW management plan for the pine barrens in Concord and Pembroke with input from the USFWS, NHF&G and NH Natural Heritage Bureau. This plan will protect and benefit a variety of pine barrens species.

The Soucook River is another sensitive location where the Project will be implementing the appropriate erosion and sedimentation measures and other BMPs to protect the River and its shoreland, and environmental monitors will be working with the Project to achieve this goal. The contractors will be instructed in the necessary measures to avoid and minimize wildlife impacts as well. Spanning the river with overhead lines will have no long term impact on the Soucook River. It is worth remembering that rivers are dynamic systems, and there is always some level of erosion and sedimentation that is part of the natural hydrogeomorphic process.

We believe the foregoing information addresses the comments raised in your letter. We appreciate the time and effort your organization has expended on the review of this Project.

Sincerely,



Lee E. Carbonneau
As agent for Northern Pass Transmission, LLC.
Senior Principal Scientist
Normandeau Associates, Inc.

Attachments

Cc: Collis Adams (collis.adams@des.nh.gov)
Craig Rennie (craig.rennie@des.nh.gov)
Darlene Forst (darlene.forst@des.nh.gov)
Pamela Monroe, Administrator- NH Site Evaluation Committee
(pamela.monroe@sec.nh.gov)

Concord Conservation Commission Meeting
Concord City Hall
11/12/15 7:00 PM

NPT Project Attendees:

Bonnie Kurylo, Eversource
Kevin McCune, Eversource
Lee Carbonneau, Normandeau Associates
Jake Tinus, Burns & McDonnell

Conservation Commission Attendees:

Christopher Morgan, Chair
Beth Fenstermacher, Assistant Planner
Tracey Boisvert
Frederick Chormann
Pamela Hunt
Christopher Kane
Jan McClure
James E. Owers
Kristine Tardiff

After introductions by Bonnie Kurylo, Lee Carbonneau provided an overall description of the project route, and data on the length, ROW width, clearing and other physical aspects of the project. Lee then described the studies and surveys that were conducted including wetlands, streams and vernal pools, wildlife, and rare, threatened and endangered (RTE) plants and animals. Lee emphasized that the amount of permanent wetland impact is minimal (501 square feet) and that temporary impacts to wetlands amounting to 7.3 acres are primarily the result of crossing wetlands with mats and due to the installation of the construction work pads for the new structures. She indicated that if the project were only located in Concord, it would not trigger the need for compensatory mitigation. However, since the project is part of the whole project, compensatory mitigation is required as the sum of the impacts in total does meet the threshold.

Several questions (below) were posed by the members of the Conservation Commission and responses to the questions were provided by members of the NPT team. No questions were asked by the few members of the public in attendance.

Q1) How long does the Concord Conservation Commission have to review the wetlands application?

A1) The Commission should contact Bill Thomas at NHDES Wetlands Bureau to discuss this.

Q2) How were the streams shown on the permit plans determined? Were they obtained from USGS mapping?

A2) Perennial, intermittent and ephemeral streams were mapped in the field. For streams greater than 6 feet in width, the banks of the streams were determined and then located using GPS equipment. For smaller streams, the centerline was determined and the width was measured from the centerline.

Q3) Can the Conservation Commission be supplied with a written summary report of the information presented at this meeting?

A3) Yes, a summary report can be provided.

Q4) How tall are the structures in Concord? Are they taller than in other portions of the project further to the north?

A4) The structure heights vary in Concord. New distribution poles range from approximately 35 feet to 50 feet and most of the transmission structures are approximately 85 feet to 110 feet. They are approximately the same height as other structures along the project route.

Q5) How will access to the ROW occur? From cross streets, public roads, other properties?

A5) Access to the ROW will be from existing public roads. No off-right-of-way access is occurring from private properties in Concord. However, NPT or its contractors may determine that less impacting access points from areas outside the ROW are desirable and they may initiate discussions at some point in the future.

Q6) You mentioned that there are approximately 10 acres of tree clearing in Concord for the project. Is this due to the construction access roads on the ROW?

A6) No, for the most part the access roads are located in the center of the ROW along cleared areas and away from locations with trees. Tree clearing is very limited along the project area as it is a regularly maintained ROW. Trees are generally located only in spotty areas along the edges of the ROW. NPT will clear the trees or trim them wherever necessary in the ROW to ensure that the proper amount of safety/clearance is provided to construct the lines.

Q7) What is being done to protect the rare, threatened and endangered species during construction?

A7) Various best management practices will be used by the contractors to protect RTE plant populations. Measures include flagging off areas, erecting barrier fencing, regular monitoring of sensitive areas, contractor training to make sure that workers do not mistakenly travel into an area with RTE plant species. For RTE wildlife, sweeps of the areas with known locations of sensitive animal species will be performed prior to commencing with construction activities. Contractors will be trained on avoiding impacting animals.

Q8) What is being done to compensate for impacts to the Karner blue butterfly?

A8) NPT is currently pursuing acquisition of land in the Concord area that will be managed for Karner blue butterfly. Since NPT is still in negotiation with property owners, the locations cannot be divulged at this time.

Q9) What is the value of compensatory mitigation for impacts in Concord as related to the Aquatic Resources Mitigation (ARM) Fund?

A9) The ARM Fund payment would be approximately \$41,000.

At the end of the meeting, one of the commission members asked if they could have the paper copies of the wetlands plans that the NPT team was using. Lee and Jake provided two copies of the plans to the commission. Beth Fenstermacher offered to make paper copies of the wetlands plans for the rest of the members. She also offered to contact NHDES to inquire about review time of the application.