



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Robert R. Scott, Commissioner

February 28, 2018

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

Re: Application of Public Service Company of New Hampshire (d/b/a Eversource Energy) for
Seacoast Reliability Project
NH Site Evaluation Committee (SEC) Docket No. 2015-04

Dear Ms. Monroe:

This letter is to notify you that the NH Department of Environmental Services (NHDES) Water Division staff have completed their technical review of the application and have made a final decision on the parts of the application that relate to NHDES permitting or regulatory authority relative to a Wetland permit, Alteration of Terrain permit, 401 Water Quality Certificate, and Shoreland permit. NHDES recommends approval of the application with the conditions that are enclosed with this letter.

In addition to the enclosed conditions, NHDES recommends that the Site Evaluation Committee (SEC) consider having the Applicant¹ conduct

- 1) a more thorough evaluation of the Horizontal Directional Drilling (HDD) method for installing cable under Little Bay and
- 2) a trial jet plow run (without cable) in Little Bay.

Both concepts were recommended by the Town of Durham and the University of New Hampshire (Durham/UNH) in their letter to NHDES (with copy to the SEC) dated October 30, 2017. Details regarding our recommendations are provided below.

NHDES Recommendation for Evaluation of Horizontal Directional Drilling (HDD)

Although there are environmental risks such as "frack-out"², as well as other challenges associated with horizontal directional drilling (HDD), it may be feasible and have less impact on surface water quality than the proposed jet plow method which will result in hundreds of cubic yards of sediment being temporarily suspended in the water column and deposited elsewhere in Little Bay. In Document 1 of their submittal dated September 19, 2017 to the SEC and in the pre-filed direct

¹ The Applicant is Public Service Company of New Hampshire (PSNH) d/b/a Eversource Energy.

² Frack-out is the term used to describe the release into the environment through cracks in the geology of the clay slurry used to lubricate the bore hole.

testimony of James Jiottis (an employee of Eversource Energy), the Applicant provided a relatively brief explanation as to why HDD was not selected and , in our opinion, did not provide sufficient information to support their conclusion. NHDES therefore recommends that the SEC consider having the Applicant prepare a more detailed evaluation (with supporting information) that compares the feasibility as well as surface water and other potential impacts of the currently proposed Jet Plow method (including diver hand-jetting) to the following two potential alternatives using the Horizontal Directional Drilling (HDD) method for installing cable across Little Bay:

- 1) crossing all of Little Bay using HDD within the existing cable corridor and
- 2) using HDD within the existing corridor but only in the areas where hand-jetting is currently proposed.

Preparation of the evaluation should be based on information provided by contractors experienced with these methods of cable installation. The Applicant should also consult with and obtain details from the New Hampshire Department of Transportation regarding the relatively recent HDD installation of a pipe across Little Bay in the vicinity of the Little Bay Bridge and include this information in the evaluation. For HDD installation, the evaluation should also

- identify ways to reduce the size of the on-shore set-up areas, including, but not limited to , on-site butt-fusing of plastic pipe sections ;
- explain why a bore hole smaller than the 40-inch bore hole diameter reported in the Application cannot be used for three 6- inch diameter cables;
- provide information regarding subsurface conditions, the potential for frack-out, ways to minimize the potential for frack-out in surface waters and measures to minimize the effects of frack-out on surface waters should it occur;
- provide information regarding disposal of material from the bore hole including the total volume and how it would be disposed; and
- explain why HDD cannot be conducted during normal work hours (instead of continuously [i.e., 24 hours per day] as reported in September 19, 2017 submittal).

The evaluation should address potential surface water quality impacts that include, but are not limited to, impacts on existing and designated uses, potential discharge of any pollutants and their anticipated fate and transport, whether water quality is expected to change and, if so, the estimated degree of change in water quality, and potential impacts on any high value resources. The evaluation should also address other factors that may impact feasibility such as impacts on local residents, time to complete installation, size of set up area, etc. If cost is the reason given for determining an alternative is not feasible, detailed cost estimate should be provided from at least two companies experienced with jet plowing and two companies experienced with HDD. The evaluation should also include the Applicant's final recommendations for installing cable across Little Bay.

The evaluation should then be submitted to the NHDES Watershed Management Bureau and the SEC at least 90 days prior to any proposed work in Little Bay. NHDES would then review the

evaluation and provide the Applicant and the SEC with its comments regarding method(s) for installing cable across Little Bay. Work in Little Bay should not proceed until authorized by the SEC.

NHDES Recommendation for Jet Plow Trial Run (without cable)

NHDES recommends that the SEC consider having the Applicant conduct a trial jet plow run (without cable) across a portion of Little Bay (e.g., approximately 1000 feet as recommended by Durham/UNH in their letter dated October 30, 2017). The trial would provide useful information regarding the following:

- how well the model predicts the sediment plume ;
- how well the water quality monitoring plan works (including communication between the monitors and jet plow operators) and what if, any, modifications to the plan are necessary;
- water quality within the mixing zone and at the boundary;
- how measures taken to reduce sediment suspension due to jet plowing (including, but not limited to jet plow speed and pressure reductions) impact water quality;
- if results suggest that cable installation by jet plowing is likely to meet NH surface water quality standards; and
- if any additional sediment suspension reduction measures are needed to help ensure surface water quality standards will be met.

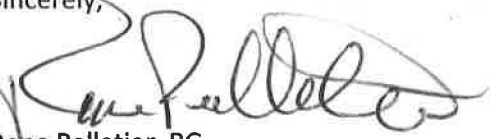
Having some field verification of the jet plow method, which, to our knowledge, has never been used in New Hampshire, should also benefit the Applicant as it would provide more assurance that cable installation will go as planned prior to investing more time and money on all the other arrangements that would need to be made to install cable under Little Bay.

If the SEC agrees, we recommend that at least 90 days prior to conducting the trial, the Applicant submit a Jet Plow Trial Plan for NHDES approval that describes in detail how the trial and monitoring will be conducted and how results will be reported. Following implementation of the approved plan, we recommend that the Applicant submit a report summarizing the jet plow trial that addresses the objectives above (including all monitoring results) to NHDES and the SEC at least 90 days prior to proposed cable installation. If results of the trial run indicate that NH surface water quality standards will not likely be attained during cable installation, or if results indicate that the model did not reasonably predict the suspended solids plume, the report should include recommendations regarding how these issues can be abated.

NHDES would then review this information and provide its recommendations to the Applicant and the SEC. Cable installation in Little Bay by jet plowing would not be allowed to proceed until authorized by the SEC.

This concludes NHDES' review of the project which we hope will assist the SEC with its deliberations. If you have any questions, please contact me at 271-2951 or email at: Rene.Pelletier@des.nh.gov

Sincerely,



Rene Pelletier, PG
Assistant Director
Water Division

cc: Michael J. Iacopino, Counsel SEC
Robert R. Scott, Commissioner, NHDES
Clark Friese, Asst. Commissioner, NHDES
Eugene J. Forbes, Water Division Director, NHDES

SEACOAST RELIABILITY PROJECT, NHSEC DOCKET # 2015-04
ALTERATION OF TERRAIN BUREAU
FEBRUARY 28, 2018 FINAL DECISION

RECOMMEND APPROVAL WITH THE FOLLOWING PERMIT CONDITIONS:

PROJECT SPECIFIC CONDITIONS:

1. Activities shall not cause or contribute to any violations of the surface water quality standards established in Administrative Rule Env-Wq 1700.
2. Revised plans shall be submitted for an amendment approval prior to any changes in construction details or sequences. The NHDES must be notified in writing within ten days of a change in ownership.
3. The NHDES must be notified in writing prior to the start of construction and upon completion of construction. Forms are available at:
<http://des.nh.gov/organization/divisions/water/aot/categories/forms.htm>.
4. All activities shall comply with the plans and information provided with the Alteration of Terrain application submitted as part of the application to the New Hampshire Site Evaluation Committee, dated April 12, 2016, and the conditions provided below. Any proposed modifications which may affect surface water quality or quantity, shall receive NHDES approval prior to implementation.
5. All activities shall comply with the following documents regarding Best Management Practices (BMP):
 - *Best Management Practices for Utility Maintenance In and Adjacent to Wetlands and Waterbodies in New Hampshire* . New Hampshire Department of Resources and Economic Development. Interim January 2010
 - *The National Grid Guidance Document (EG-303NE)*
 - *Construction Notes*, dated March 2016, as contained in the Alteration of Terrain Permit Application submitted as part of the application to the Site Evaluation Committee (Appendix 16).
6. No construction activities shall occur on the project after expiration of the approval unless the approval has been extended by the New Hampshire Energy Facility Site Evaluation Committee (SEC).
7. The Applicant shall identify to NHDES all marshalling yards, laydown areas, and off-right-of-way access ways not currently identified for review prior to their construction.
8. The Applicant shall comply with requirements of the EPA NPDES Construction General Permit (CGP) including, but not limited to, preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) and inspection, maintenance and reporting of construction activity. A copy of the SWPPP and/or construction inspection and maintenance logs shall be provided to NHDES within seven days (or other timeframe acceptable to NHDES) of receiving a request from NHDES.
9. Concrete and concrete washout water shall be managed in accordance with Section 4.2 of the *National Grid Guidance Document (EG-303NE)*.
10. Removal of vegetation within 50 feet of all surface waters (including wetlands) shall be minimized to the maximum extent practicable to reduce the potential for erosion and deposition of material into the surface waters, to protect rare, threatened and endangered species and habitats and to minimize the potential for increases in water temperature increases that could be harmful to

aquatic life. Limits of clearing will be clearly marked in the field prior to construction to prevent inadvertent excursion of clearing beyond what is necessary.

11. The Applicant shall minimize use of all pesticides to the maximum extent practicable and shall comply with all applicable state, federal and local laws and regulations regarding application of pesticides, including, but not limited to, Pes 1001.01 and 1001.02. If requested by NHDES, the Applicant shall provide NHDES with a list of pesticides applied, the name of the applicator and their NH pesticide license or permit number within 30 days of receiving the request.
12. This permit does not relieve the Applicant from the obligation to obtain other local, state or federal permits that may be required (e.g., from US EPA, US Army Corps of Engineers, etc.). Projects disturbing over 1 acre may require a federal stormwater permit from EPA. Information regarding this permitting process can be obtained at:
<http://des.nh.gov/organization/divisions/water/stormwater/construction.htm>.
13. The smallest practical area shall be disturbed during construction activities.
14. The Applicant shall employ the services of an environmental monitor ("Monitor"). The Monitor shall be a Certified Professional in Erosion and Sediment Control or a Professional Engineer licensed in the State of New Hampshire and shall be employed to inspect the site from the start of alteration of terrain activities until the alteration of terrain activities are completed and the site is considered stable.
15. During this period, the Monitor shall inspect the subject site at least once a week, and if possible, during any ½ inch or greater rain event (i.e. ½ inch of precipitation or more within a 24 hour period). If unable to be present during such a storm, the Monitor shall inspect the site within 24 hours of this event.
16. The inspections shall be for the purposes of determining compliance with the permit. The Monitor shall submit a written report to the NHDES within 24 hours of the inspections. The reports shall describe, at a minimum, whether the project is being constructed in accordance with the approved sequence, shall identify any deviation from the conditions of this permit and the approved plans, and identify any other noted deficiencies.
17. The Monitor shall provide technical assistance and recommendations to the Contractor on the appropriate Best Management Practices for Erosion and Sediment Controls required to meet the requirements of RSA 485-A:17 and all applicable NHDES permit conditions.
18. Within 24 hours of each inspection, the Monitor shall submit a report to NHDES via email (to Ridgely.Mauck@des.nh.gov).
19. Unless otherwise authorized by NHDES, the Applicant shall keep a sufficient quantity of erosion control supplies on the site at all times during construction to facilitate an expeditious (i.e., within 24 hour) response to any construction related erosion issues on the site.

SEACOAST RELIABILITY PROJECT, NHSEC DOCKET # 2015-04
WETLANDS BUREAU
FEBRUARY 28, 2018 FINAL DECISION

RECOMMEND APPROVAL WITH THE FOLLOWING PERMIT CONDITIONS:

PROJECT DESCRIPTION:

Dredge and fill a total of 643,358 square feet (14.7 acres) of wetlands, surface waters, and upland tidal buffer zone, including 637,188 square feet of temporary impacts for installation of timber access mats and stream crossings in freshwater wetlands (342,816 square feet), excavation within the upland tidal buffer zone (21,166 square feet), and hand trenching and jet plowing to install a submarine cable in the Little Bay estuary (273,206 square feet); 6,170 square feet of total permanent impacts for transmission structure installation in freshwater wetlands (823 square feet) and upland tidal buffer zone (11 square feet), and placement of concrete mattresses over shallow cable installation in Little Bay (5,336 square feet); for construction of a new 12.9 mile 115v transmission line within the existing ROW and designated cable crossing, extending from Madbury Substation, through the towns of Durham and Newington, to the substation in Portsmouth.

Compensatory mitigation for permanent and US Army Corps of Engineers wetland impacts consists of a one-time payment of \$349,834.26 dollars into the Aquatic Resource Mitigation Fund ("ARM") based on the impacts determined to date. The funds may be designated to a project in the Town of Durham for a living shoreline and salt marsh restoration effort at Wagon Hill Farm, and to a project in the Town of Newington for conservation of a 10 acre parcel near Knight's Brook.

PROJECT SPECIFIC CONDITIONS:

GENERAL CONDITIONS

1. All work shall be in accordance with plans dated September 14, 2017, submitted as part of the application to the New Hampshire Site Evaluation Committee on April 14, 2016 and supplemental information dated September 15, 2017 and received by the NH Department of Environmental Services (NHDES) on April 14, 2016 and September 15, 2017.
2. At least thirty (30) days prior to the start of construction, the Applicant shall conduct a training program for construction staff, contractors, sub-contractors, environmental inspectors, the independent environmental monitor, and NHDES staff. The training program shall include, but not limited to, spill prevention and cleanup responses, a review and description of the allowable environmental conditions and methods to be implemented during construction, and contingency plans that will be implemented in the event that environmental conditions are exceeded.
3. At least sixty (60) days prior to the start of construction, final diversion and dewatering plans shall be provided for the crossing of College Brook for NHDES review and approval.
4. Appropriate siltation/erosion/turbidity controls shall be in place prior to construction, shall be maintained during construction, and remain in place until the area is stabilized. Silt fence(s) must be removed once the area is stabilized.

5. Any erosion control matting used shall be wildlife friendly. No welded plastic webbing, netting, or other similar form shall be used in erosion/siltation controls to avoid entrapment of snakes and other wildlife within the project area.
6. Discharge from dewatering of work areas shall be to sediment basins that are: a) located in uplands; b) lined with hay bales or other acceptable sediment trapping liners; c) set back as far as possible from wetlands and surface waters, in all cases with a minimum of 20 feet of undisturbed vegetated buffer.
7. Temporary culverts, water diversion, and access matting shall be removed immediately upon conclusion of pole and wire installation work unless further authorization to remain for a stated purpose is reviewed and approved by NHDES.
8. All dredged and excavated material and construction-related debris shall be placed outside of the areas subject to RSA 482-A. Any spoil material deposited within 250 feet of any surface water shall comply with RSA-483-B.
9. Dredged materials, whether stockpiled or disposed of, shall be dewatered in sedimentation basins lined with siltation and erosion controls, and located outside of wetland areas.
10. Extreme precautions shall be taken within riparian and areas located adjacent to tidal waters, surface waters or wetland areas ("transition zones") to prevent unnecessary removal of vegetation during construction. Cleared area within transition zones shall not be stumped or grubbed and ground disturbances shall be limited to those associated with logger equipment. Additionally, low growing native shrubs and other species common within riparian buffers shall not be removed and shall remain as thermal barriers to streams.
11. Transmission structures to be removed shall be cut at ground level and removed rather than pulled from the ground or foundation, to minimize impacts to surrounding habitat.
12. The proposed temporary stream crossings shall span the natural stream channel and not impede stream flows.
13. Mulch used within any wetland/stream bank restoration areas shall be natural straw or equivalent non-toxic, non-seed-bearing organic material.
14. Within three days of final grading or temporary suspension of work, all exposed soil areas shall be stabilized by seeding and mulching during the growing season, or if not within the growing season, by mulching with tack or netting and pinning on slopes steeper than 3:1.
15. Construction equipment shall have specialized low-ground-pressure tracks that impact less than four (4) pounds per square inch when loaded, or the Applicant shall use timber or plywood mats beneath machines when driving over wetland areas.
16. No excavation shall be done in flowing freshwater. No construction equipment shall be operated in flowing freshwater.
17. Filter fabric shall be installed under temporary wetland fill areas to isolate fill from the natural hydric soils.
18. Use of construction equipment shall adhere to the best management practices ("BMP's") described in "Best Management Practices for Fueling and Maintenance of Excavation and Earthmoving Equipment (WDDWGB226)".
19. Construction equipment shall be inspected daily for leaking fuel, oil, and hydraulic fluid prior to entering surface waters or wetlands or operating in an area where such fluids could reach groundwater, surface waters, or wetlands.
20. All refueling of equipment shall occur outside of surface waters or wetlands during construction. Machinery shall be staged and refueled in upland areas only.

21. Faulty equipment shall be repaired immediately prior to entering areas that are subject to RSA 482-A jurisdiction.
22. The Applicant's contractor shall maintain appropriate oil/diesel fuel spill kits on site that are readily accessible at all times during construction, and shall train each operator in the use of the kits.
23. The contractor responsible for completion of the work shall use techniques described in the "New Hampshire Stormwater Manual, Volume 3, Erosion and Sediment Controls during Construction (December 2008)".
24. Erosion control measures shall further adhere to the requirements to NH Department of Resources and Economic Development's "Best Management Practices Manual for Utility Maintenance in and Adjacent to Wetlands and Waterbodies in New Hampshire (Interim January 2010)".
25. Any further alteration impact areas for the project beyond the application materials received September, 2017, that are subject to RSA 482-A jurisdiction will require a new application and further permitting.
26. Tree clearing, vegetation removal, and associated access shall additionally adhere to "Best Management Practices for Forestry: Protecting NH's Water Quality (UNH Cooperative Extension, date pending)".
27. Rock blasting shall adhere to "Rock Blasting and Water Quality Measures That Can Be Taken to Protect Water Quality and Mitigate Impacts (NHDES, Kernan, 2010)".
28. This approval does not relieve the Applicant from the obligation to obtain other local, state or federal permits, and/or consult with other agencies as may be required including, but not limited to, US Environmental Protection Agency, US Army Corps of Engineers, NH Department of Transportation, and NH Division of Historical Resources.

MONITORING (OTHER THAN IN LITTLE BAY)

29. At least sixty (60) days prior to the start of construction, the Applicant shall retain an independent environmental monitor to assure compliance with permit conditions during and after construction activities, including one year of post-construction corridor monitoring after one full growing season and preparation of appropriate compliance reports for submittal to NHDES. The monitoring shall include a site inspection, vegetation cover estimates in restored freshwater wetlands, salt marsh, and uplands, including tidal buffer zone and protected shoreland, by species in random plots, photographs, and wildlife observations. Areas with less than 80% cover at the end of the growing season will require additional seed or other appropriate enhancements. Areas with erosion shall be repaired immediately. Invasive species shall be removed from restoration areas and disposed of in a manner and location to preclude their survival and spread. A monitoring report shall be submitted to NHDES by November 1 of the year following construction impacts.
30. The Applicant shall notify the NHDES Wetlands Program in writing of the independent environmental monitor who will be responsible for monitoring the project. The Applicant shall re-notify the NHDES Wetlands Program if the identity of the individual changes during the project.
31. All temporary wetland and stream bank impact areas shall have at least 75% successful establishment of wetlands vegetation (or where applicable appropriate stream bank vegetation) after one full growing season, or it shall be replanted and re-established in a manner satisfactory to the NHDES Wetlands Program.

WILDLIFE, FISHERIES, BOTANICAL RESOURCES, ESSENTIAL FISH HABITAT

32. At least sixty (60) days prior to the start of construction, the Applicant shall notify and coordinate with NH Natural Heritage Bureau ("NHB") and NH Fish and Game Department ("NHFGD") to the satisfaction of NHB and NHFGD, to establish protocols for encounters with any rare, threatened, or endangered species during the project, and shall submit the agreed protocols to NHDES. Applicant shall then implement the approved protocols as a condition of this approval.
33. NHB and NHFGD shall be notified in writing immediately upon encountering any rare, threatened, or endangered species that are found within the project area during construction.
34. A NH Certified Wetland Scientist or similarly qualified professional shall walk the areas of proposed activity and the wetland impact areas, in particular, prior to construction to survey for any rare, threatened, or endangered species, and prior to ground disturbance each day to check timber mats for basking turtles and snakes. Animals shall be safely relocated if found by the qualified professional. Contractors shall avoid moving or disturbing any of the species.
35. At least sixty (60) days prior to the start of construction, project specific BMP's shall be developed in coordination with NHB and NHFGD and submitted to NHDES for review and approval, and implementation, for the following activities:
 - a. construction mat use in areas identified as sensitive;
 - b. ground-based construction techniques and use of smaller, lighter, or low ground pressure equipment for sensitive areas;
 - c. fenced exclusion zones and wildlife survey areas;
 - d. on-site construction monitoring for protection of resources.
36. At least sixty (60) days prior to the start of construction, the Applicant shall coordinate with NHB, NHFGD, NOAA-National Marine Fisheries Service ("NMFS"), and US Fish and Wildlife Service ("USFWS") to produce a report which examines time of year restrictions for all rare, threatened, endangered, or Essential Fish Habitat ("EFH") species found to be associated with the project, and which provides the best resource protection timing requirements practicable as agreed to by the agencies to the agencies satisfaction, in consideration of the construction temperature, logistics, and desired schedule for this project. This report shall be submitted to NHDES for review and approval. Applicant shall then implement the approved NHDES timing restrictions.

NHDES WASTE MANAGEMENT DIVISION COORDINATION

37. At least sixty (60) days prior to the start of construction of the submarine cable crossing in Little Bay, the Applicant shall coordinate with the NHDES Waste Management Division Spill Response and Complaint Investigation Section ("SRCIS") to identify a specific staff contact representative for both NHDES and the Applicant. The Applicant's representative shall notify the NHDES contact upon each commencement of work and upon completion of work involving cable installation, so that cable installation does not impede NHDES oil spill incident command emergency response capability, and to avoid the interaction of an incident or its response with active cable installation resulting in greater environmental impact than the cable installation on its own would ordinarily produce.
38. At least ninety (90) days prior to conducting dewatering activities in the vicinity of the Pease International Tradeport [i.e., the former Pease Air Force Base (Pease)] and the Daruis Frink Farm property in Newington, the Applicant shall consult with the Pease Development Authority, NHDES Waste Management Division, and US Environmental Protection Agency to determine if groundwater

has been contaminated by perfluorinated compounds (e.g., PFOA, PFOS) to levels which would require special treatment. Should special treatment be necessary, the Applicant shall submit a plan to the NHDES Waste Management Division for approval and then implement the approved plan.

LITTLE BAY CABLE CROSSING

39. Time of Year: Work in Little Bay shall comply with the Time of Year restrictions identified in condition 36 above.
40. Independent Environmental Monitor: At least sixty (60) days prior to installing cable in Little Bay, the Applicant shall retain an Independent Environmental Monitor for work in Little Bay at the Applicant's expense. The selection of the Independent Environmental Monitor shall be approved by NHDES. The Independent Environmental Monitor shall be empowered to order corrective actions related to surface water quality and to order the temporary cessation of construction activities until corrective action has been implemented.
41. Eelgrass Survey: To assess the impact of work associated with laying cable in Little Bay on eelgrass, the Applicant shall conduct an eelgrass survey in the Little Bay estuary the summer before construction commences and approximately one year after work is completed. At least ninety (90) days prior to the scheduled date for conducting the pre-construction survey, the Applicant shall submit a plan describing
- how, when and where the survey will be conducted;
 - how results will be assessed to determine impact on eelgrass;
 - how and when results will be reported to NHDES;
 - mitigation measures that will be implemented based on eelgrass impacts and recovery; and
 - when the data will be input electronically into the NHDES Environmental Monitoring Database.

The Applicant shall then implement the approved plan. To the maximum extent practicable, the methodology for conducting the survey shall be consistent with recent surveys conducted for the Piscataqua River Estuaries Program (PREP). Results of the pre-construction survey shall be submitted to NHDES no less than thirty (30) days prior to the scheduled cable installation date and shall be approved by NHDES prior to cable installation in Little Bay. A report comparing the pre to post-construction survey results shall be submitted to NHDES for approval no more than ninety (90) days after the post-construction survey is completed.

42. Benthic Habitat Monitoring: At least sixty (60) days prior to the start of construction in Little Bay, the Applicant shall obtain NHDES and NHFGD approval of a Benthic Habitat Monitoring Plan (BHMP). The purpose of the plan is to determine if substrate conditions (topography and grain size distribution) in the Little Bay estuary in the vicinity of the proposed underground cables were significantly altered during construction. The plan shall include, but not be limited to, details regarding the method, accuracy and extent of the bathymetric survey, when the study will be conducted, the locations and methods for sampling and analyzing grain size distribution, how the data will be assessed, how data will be reported and provisions for inputting the data electronically into the NHDES Environmental Monitoring Database. The Applicant shall then implement the approved plan.
43. Benthic Infaunal Community Plan: To assess the impact of work associated with laying cable in Little Bay on the benthic infaunal community, the Applicant shall conduct pre and post-construction monitoring of the benthic infaunal community in the Little Bay estuary. At least ninety (90) days

prior to the scheduled date for conducting the pre-construction monitoring, the Applicant shall submit a plan to NHDES describing

- how, when and where the monitoring will be conducted;
- how results will be assessed to determine impact on the benthic infaunal community;
- how and when results will be reported to NHDES;
- mitigation measures that will be implemented based on benthic infaunal community impacts and recovery; and
- when the data will be input electronically into the NHDES Environmental Monitoring Database.

The Applicant shall then implement the approved plan. Results of the pre-construction monitoring shall be submitted to NHDES for approval no less than thirty (30) days prior to the scheduled cable installation date. A report comparing the pre to post- construction monitoring results shall be submitted to NHDES for approval no more than ninety (90) days after the post-construction monitoring is completed.

44. Mixing Zone Plan: At least sixty (60) days prior to the start of construction in Little Bay, the Applicant shall submit a mixing zone request to the NHDES Watershed Management Bureau for approval that includes a description and map showing the proposed mixing zone in Little Bay, justification for the proposed limits of the mixing zone and documentation demonstrating that the proposed mixing zone complies with the minimum criteria in administrative rules Env-Wq 1707.02. The mixing zone shall be established for all jet plow and hand-jetting activities. Prior to submitting the proposed mixing zone request, the Applicant shall determine if there are any new aquaculture operations in Little Bay. The mixing zone shall not include any existing aquaculture operations.
45. Water Quality Monitoring and Adaptive Management Plan: At least ninety (90) days prior to in-water work in Little Bay, the Applicant shall submit to the NHDES Watershed Management Bureau for approval, a Water Quality Monitoring and Adaptive Management Plan for work in Little Bay. The Applicant shall then implement the approved plan.

In general, the plan shall include, but not be limited to, the following for jet plow and hand-jetting activities:

- parameters that will be monitored;
- monitoring locations (including latitude, longitude and a plan showing the locations);
- how and when sampling will be conducted;
- the number of sampling teams;
- when and how training will be conducted;
- the lab methods and field equipment that will be used (including meter accuracy);
- quality assurance/quality control provisions;
- how monitors will communicate real-time monitoring information to jet plow operators;
- the use of drones (especially in the shallower areas) to assist with real-time tracking of sediment plumes;
- how decisions will be made and communicated to modify jet plow operation based on real-time monitoring results to minimize sediment resuspension due to jet plow operation;
- how and when results will be reported;
- when data will be input electronically in the NHDES Environmental Monitoring Database.

Parameters shall include, but not be limited to, the following:

Field measurements:

Turbidity (reported as NTU), dissolved oxygen and salinity.

Samples for Laboratory Analysis:

Total nitrogen, nitrate/nitrite nitrogen, total Kjeldahl nitrogen (TKN) and, ammonia nitrogen;

TSS;

Dissolved copper and arsenic (filtered in the field using a 0.45-micron filter prior to collection);

Total copper and arsenic (unfiltered);

Fecal coliform; and

Other parameters (if directed by NHDES).

The plan shall include criteria, based on real-time turbidity measurements, that will be used in the field to determine when jet plow operations must stop or otherwise be modified to minimize sediment resuspension, as well as when operations can resume. The plan shall also include all methods that can be used to minimize sediment resuspension due to jet plow operation (including but not limited to changing the jet speed and pressure) and how long work can be temporarily suspended.

Sample collection shall include samples taken at multiple depths and times as well as at multiple locations, including, but not limited to, stations at the mixing zone boundary and stations within the mixing zone. Results for parameters specified by NHDES from samples collected for an individual cable installation shall be received and distributed to NHDES and the Independent Environmental Monitor prior to subsequent cable installations. The Applicant shall not conduct subsequent cable installations unless authorized by NHDES. NHDES may require modifications to the plan based on water quality results.

46. NHDES Shellfish Program Monitoring and Reporting Requirements:

Two-week Prior Notification:

At least two-weeks prior to the start of jet plowing activities, the Applicant shall notify the NHDES Shellfish Program of the dates and times of all activities that will resuspend sediments and introduce turbidity to the water column of Little Bay, so that NHDES may assess possible changes in water column fecal coliform concentrations that may warrant temporary closure of shellfish harvest areas

Plan to Assess Shellfish Tissue Before and After Little Bay Cable Crossing:

At least six months prior to the start of jet plowing activities (or other time frame acceptable to NHDES) the Applicant shall submit a plan to the NHDES Shellfish Program for approval for assessing molluscan shellfish tissue concentrations of selected chemical contaminants before and after the project. The Applicant shall then implement the approved plan. The plan shall include provisions for the following :

Species to be tested: Blue mussels and American oysters shall be the primary species to be tested. To the extent practical, native species shall be used at all sites. If transplanted species must be used, NHDES Shellfish Program and the NH Fish and Game Department will need to approve the source of the shellfish, and the contractor will need to include provisions for additional shellfish tissue testing to document contaminant levels in the shellfish prior to transplant.

Location of testing sites: A total of at least four sites shall be monitored, with two sites inside the area affected by the plume, and two sites outside of the area affected by the plume.

Sites Affected by the Plume: At least two sites in areas that the Applicant believes will be affected by the sediment plume created by jet plowing will be identified. One of these sites shall be on the upstream side of the project, and the other shall be on the downstream side of the project. At least one of these two sites shall be in the vicinity of subtidal commercial oyster aquaculture farms in Little Bay. Water temperature and salinity shall be monitored with continuous data loggers (15-minute interval) at all sites.

Sites Not Affected by the Plume: At least two sites in areas that the Applicant believes will not be affected by the sediment plume created by jet plowing will be identified. One of these sites shall be on the upstream side of the project, and the other shall be on the downstream side of the project. To the extent practical, these sites shall be located at or near sites used for the NH GulfWatch program so that data generated from this monitoring program can be compared to historical data.

Water temperature and salinity shall be documented with continuous data loggers (15-minute interval) at all sites. QA procedures to quantify data logger performance, accuracy, and precision shall be included in the plan and reported.

Timing of Sample Collection: All sites shall be sampled 1-2 two weeks before dredging or jet plowing begins and within one week of the completion of all dredging or jet plowing activities. A final round of sampling shall be completed within one week of the completion of all dredging activities.

All collected samples shall be immediately transported to the analytical laboratory(ies). The Applicant and/or its contractor shall assure the analytical laboratory completes testing as soon as possible, and report the results as soon as they are completed.

Constituents for Tissue Analysis:

Parameters Specified in the National Shellfish Sanitation Program shall be tested:

Deleterious Substances

Aldrin/Dieldrin, Chlordane, Chlordecone, DDT, DDE, TDE, Diquat, Glyphosate, Carbaryl, Endothall and its Monomethyl ester, Methyl Mercury, Heptachlor / Heptachlor Epoxide, Mirex, Polychlorinated Biphenyls (PCBs), 2,4-D

Chemotherapeutics

Chloramphenicol, Clenbuterol, Diethylstilbestrol (DES), Demetridazole, Iprnidazole and other nitroimidazoles, Furazolidone and other nitrofurans, Fluoroquinolones, Glycopeptides,

Additional Parameters that are part of the NH GulfWatch Program (note that some of the parameters below are also in the NSSP list).

Metals:

Aluminum, Cadmium, Chromium, Copper, Iron, Lead, Mercury, Nickel, Silver, Zinc.

Physical:

Lipid Content, Percent Solids

PAHs:

Acenaphthene, Acenaphthylene, Anthracene, Benzo(A)anthracene, Benzo(A)pyrene, Benzo(B)fluoranthene, Benzo(E)pyrene, Benzo(GHI)perylene, Benzo(K)fluoranthene, Biphenyl, Chrysene, Dibenzo(AH)anthracene, Dibenzothiophene, Fluoranthene, Fluorene, Indeno(123CD)pyrene, Naphthalene, Perylene, Phenanthrene, Pyrene
C1-Chrysene, C1-Dibenzothiophene, C1-Fluoranthene, C1-Fluorene, C1-Naphthalene, C1-Phenanthrene,
C2-Chrysene, C2-Dibenzothiophene, C2-Fluoranthene, C2-Fluorene, C2-Naphthalene, C2-Phenanthrene,
C3-Naphthalene, C3-Chrysene, C3-Phenanthrene, C3-Dibenzothiophene, C3-Fluorene,
C4-Chrysene, C4-Fluorene, C4-Naphthalene, C4-Phenanthrene,
Total PAHS

Pesticides:

A_BHC (Alpha Lindane), A-Endosulfan, Aldrin, B-Endosulfan, CIS-Chlordane, Dieldrin, Endrin, G-Chlordane, Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Lindane (G-HCH), Methoxychlor, Mirex, O,P'-DDD, O,P'-DDE, O,P'-DDT, P,P'-DDD, P,P'-DDE, P,P'-DDT, Total DDT, Transnonachlor, Permethrin, Cypermethrin, Deltamethrin.

Polychlorinated Biphenyls (PCBs):

101 ; 90; 105; 118; 126; 128 ; 138; 153 ; 132; 169; 170; 190; 18; 15; 180; 187; 195; 208; 206; 209; 28; 29; 44; 50; 52; 66; 95; 77; 8; 5; 87; Sum PCBs.

Field and Laboratory Methods and Protocols: Field and laboratory methods and protocols shall be consistent with methods and protocols specified in the *National Shellfish Sanitation Program, Guide for the Control of Molluscan Shellfish (2015 Revision)* and in documentation describing the NH GulfWatch Program, including number of organisms in each sample, and number of duplicates as specified in the GulfWatch program documentation.

Data Management and Communication of Results: All data will be digitally provided to the NHDES Shellfish Program in Microsoft Excel files and in a format consistent with NHDES Environmental Monitoring Database protocols, procedures, and reporting formats.

Compliance with all laws: The Applicant and/or its contractor shall be responsible for complying with all applicable local, state, and federal laws to execute this monitoring program, including but not limited to a NH Fish and Game Department permit to collect and test shellfish.

47. Mitigation: If violations of surface water quality standards (Env-Wq 1700) occur that are associated with the proposed Activity, the Applicant shall, if directed by NHDES, submit a mitigation plan to NHDES for approval within sixty (60) days of being notified. The Applicant shall then implement the approved plan.
48. Spill Prevention and Cleanup Plan: : At least ninety (90) days prior to in-water work in Little Bay, the Applicant shall submit to the NHDES Watershed Management Bureau for approval, a Spill Prevention and Cleanup Plan. The Applicant shall then implement the approved plan. The plan shall describe responses to potential spills associated with work in Little Bay (such as from fuel, hydraulic fluid and other potentially hazardous fluids).

49. Existing Cable Removal Remedial Response Plan: : At least ninety (90) days prior to in-water work in Little Bay, the Applicant shall submit an emergency remedial response plan to address the potential disintegration of the existing cable upon removal from the benthic substrate of Little Bay, to NHDES for approval. This plan shall apply in the event that the existing cable is so deteriorated that it, in part or in whole, disintegrates upon removal resulting in loose debris in the water column and/or debris scattered or embedded in the substrate. The plan shall identify remedial actions necessary to be taken to contain the cable debris, and actions required to remove this debris or structure from the tidal resource including, but not limited to, dredging or other disturbance. The plan shall include specific means of controlling turbidity, and means of removal and transport of debris to shore. In no instance is it expected that any debris will remain in the substrate or be allowed to migrate away from the removal location as a result of the cable removal. The Applicant shall implement the approved plan if cable failure occurs resulting in any impacts greater than that ordinarily anticipated by the cable removal as described in the wetlands application. Impacts ordinarily anticipated from intact cable removal, or cut sectional removal, would be limited to the turbidity from sediment disturbance accounted for in the application.
50. Training: At least thirty (30) days prior to the scheduled start of cable installation in Little Bay, the Applicant shall conduct a training program for construction staff, contractors, sub-contractors, environmental inspectors, the independent environmental monitor, and NHDES staff. The training program shall include, but not limited to, a review of the cable installation methods, spill prevention and cleanup responses, allowable environmental conditions and measures (i.e., contingency plans) that will be implemented in the event that environmental conditions are exceeded.
51. Aquaculture Licensee Notification: At least fourteen (14) days prior to the start of cable installation in Little Bay, the Applicant shall notify, in writing, the aquaculture licensees in Little Bay of the schedule for work in Little Bay so that the licensees have time to plan ahead and implement any operational changes they may need to take. The Applicant shall keep the aquaculture licensees apprised, in advance, of any changes to the cable installation schedule. Evidence that the aquaculture licensees have been notified shall be provided to NHDES prior to cable installation.
52. Notify Marine Patrol regarding Concrete Mattresses: Prior to the placement of concrete mattresses in Little Bay, the Applicant shall coordinate with the NH Division of Ports and Harbors ("DPH") and/or the NH Department of Safety Marine Patrol ("Marine Patrol"), to determine if the placement of the mattresses creates a navigational hazard which will require navigational marker(s). If navigational markers are required, then the Applicant shall comply with any request to install such markers that the DPH or Marine Patrol requires.
53. Weather: At least seven (7) days prior to the start of cable installation across Little Bay, the Applicant shall check the weather forecast for the area, shall maintain a written weather log, and shall not proceed with jet plowing for cable installation if the forecast predicts a storm event or excessive wind, which, in combination with tidal influences shall exacerbate the sediment turbidity plume beyond that predicted in the turbidity plume modelling presented in the application.
54. Wind: Beginning at least twelve (12) hours prior to planned cable installation activities, the independent environmental monitor shall monitor the latest National Weather Service weather forecast for Great Bay/Adams Point. If sustained wind speeds in excess of fifteen (15) mph are forecast, the environmental monitor shall, based upon predicted and observed conditions within Little Bay, and in conjunction with NHDES, decide if cable installation should be allowed to commence.

55. Cable Depths and As-Builts: To the maximum extent practicable, the maximum jet plow and hand-jetting trench depths shall be in accordance with the Document 1 of the supplemental information filed with the Site Evaluation Committee on June 30, 2017 titled "Revised Modeling Sediment Dispersion from Cable Burial for Seacoast Reliability Project, Upper Little Bay, New Hampshire, June 2017. Of the approximate 4265 total feet of cable to be buried under Little Bay, no more than approximately 2431 feet shall be buried with a maximum of 5 feet of cover and the remaining cable shall be buried with a maximum of 3.5 feet of cover. As-Builts (including plan and profiles) showing the actual depths and locations of the cable as well as the location of concrete mattresses shall be provided to NHDES within sixty (60 days) following completion of cable installation. If directed by NHDES, as-built information for the portion of cables installed by jet plow (not hand-jetting) shall be provided to NHDES after each individual cable installation and prior to the next cable installation.
56. Silt Curtains: To the maximum extent practicable, silt curtains shall be used to minimize turbidity during installation of the underground cables in the Little Bay Estuary. As a minimum, silt curtains shall be installed when divers hand-jet the cables on the west side of Little Bay and along approximately 311 feet (of the total 541 feet) of cable that is to be hand jetted on the east side of the estuary. At least ninety (90) days prior to removal of the silt curtains, the Applicant shall consult with and receive NHDES approval of, a plan to remove the silt curtains in a manner that will minimize turbidity associated with resuspension of the sediment deposited within the silt curtains due to hand-jetting. Monitoring to determine the effectiveness of the plan shall comply with the Water Quality Monitoring and Adaptive Management Plan (condition 45).
57. Water-lift devices to assist the diver operated hand-jetting of sediment in Little Bay shall not be used.
58. Timing of Hand-Jetting and Jet Plowing: Unless otherwise authorized by NHDES, and to limit the combined impacts of construction activities on Little Bay water quality, hand-jetting shall not be conducted for the period beginning six hours before and ending six hours after jet plow cable installation or within six hours of turbidity criterion exceedances at the mixing zone boundary in the vicinity of the hand-jetting operation(s).
59. Minimum Time Between Cable Installations: After a cable is buried by jet plowing, installation of the next cable by jet plowing shall not commence for at least five (5) days.
60. Screen on Jet Plow Intake: The end of the jet plow intake pipe shall be equipped with a screen with openings no greater than ¼-inch in diameter.

SALT MARSH AND SHORELINE RESTORATION

61. The salt marsh vegetation shall be removed with at least 18 inches of soil intact in blocks as large as practicable to be set aside, right side up, in a windrow to be protected from desiccation to ensure replacement and support existing functions.
62. After the utility line is installed in the trench, the blocks of soil and vegetation shall be placed back with exceptional care being taken to reestablish the same surface elevation as the surrounding marsh.
63. Final estimates of the area of salt marsh to be restored and linear feet of shoreline shall be provided for review and approval by NHDES and ACOE.
64. Preliminary plans of the living shoreline and salt marsh restoration shall be submitted and approved by NHDES and ACOE.

65. The living shoreline and salt marsh restoration shall be monitored for a minimum of five (5) years. Performance standards shall be established and approved by NHDES and the ACOE to evaluate the project.
66. Seed mix used within the restoration areas shall be a wetland seed mix appropriate to the area and shall be applied in accordance with manufacturers' specifications.

WETLANDS MITIGATION

67. The approval is not valid until NHDES receives payment of \$349,834.26 dollars into the Aquatic Resource Mitigation Fund ("ARM"). The total may be revised during final design and the SEC permitting process. The final payment amount shall be confirmed by NHDES and the one-time payment received within 120 days of the SEC certificate.
68. The mitigation package may include the designation of mitigation funds to the Towns of Durham and Newington. The preliminary payment amounts equal \$213,763.28 and \$120,990.23 respectively. The two projects will provide benefit to tidal and non-tidal resources and the combination of funds going to these efforts meet the requirements of RSA 482-A:28.
69. The final mitigation payment as determined during final design and SEC permitting process would be made to NHDES to be held in an account specific to each project. Payment shall be provided to NHDES after SEC approval, upon determination of final impact amounts, and prior to construction.
70. Any funds remaining after the Durham and Newington projects are completed shall revert to the ARM fund for use in the next ARM Fund competitive grant round.
71. This permit is contingent upon the execution of conservation easement on 10 acres of land in Newington as depicted on plans and information prepared by Normandeau Associates as received by NHDES on October 18, 2016.
72. The draft deed for the conservation parcel proposed in Newington shall be reviewed and approved by NHDES and the ACOE prior to approval. Forestry activities must follow a forest management plan and shall only be conducted specifically for wildlife habitat management.
73. The conservation parcel proposed in Newington shall have a minimum of a 100 foot no-cut buffer adjacent to aquatic resources and there shall be no increase in agriculture on the property. If these measures cannot be achieved the funds will revert to the ARM Fund for issuance during a future competitive grant round.
74. The conservation parcel proposed in Newington shall be protected through a conservation easement to the Town of Newington within 240 days of the issuance of the SEC certificate.
75. Following permit issuance and prior to recording of the conservation deed, the natural resources existing on the conservation parcel proposed in Newington shall not be removed, disturbed, or altered without prior written approval of NHDES and the easement holder.
76. The conservation deed to be placed on the conservation parcel proposed in Newington shall be written to run with the land, and both existing and future property owners shall be subject to the terms of the restrictions.
77. The plan noting the conservation easement with a copy of the final easement language shall be recorded with the Registry of Deeds Office for conservation parcel proposed in Newington. A copy of the recording from the County Registry of Deeds Office shall be submitted to NHDES prior to the start of construction.
78. The Applicant shall prepare a final baseline documentation report that summarizes existing conditions within the conservation area. Said report shall contain photographic documentation of

the easement area that have been taken in the absence of snow cover, and shall be submitted to the NHDES within 240 days of the issuance of the SEC certificate to serve as a baseline for future monitoring of the area.

79. The conservation area shall be surveyed by a licensed surveyor, and marked by monuments [stakes].
80. NHDES shall be notified of the placement of the parcel boundary monuments to coordinate on-site review of their location.
81. Activities in contravention of the conservation easement shall be construed as a violation of RSA 482-A, and those activities shall be subject to the enforcement powers of NHDES (including remediation and fines).

INVASIVE PLANTS

82. Precautions shall be taken to prevent import or transport of soil or seed stock containing nuisance or invasive species such as Purple Loosestrife, Knotweed, or Phragmites. The contractor responsible for work shall appropriately address invasive species in accordance with the NHDOT "Best Management Practices for Roadside Invasive Plants (2008)".
83. To prevent the introduction of invasive plant species to the site, the Applicant's contractor(s) shall clean all soils and vegetation from construction equipment and matting before such equipment is moved to the site.
84. The Applicant shall control invasive plant species such as Purple loosestrife (Lythrum salicaria) and Common reed (Phragmites) by measures agreed upon by the NHDES Wetlands Program if any such species is found in the stabilization areas during construction or during the early stages of vegetative establishment.

FINDINGS:

1. NHDES recommends granting a waiver of Env-Wt 304.11(b) which limits the timing of dredging in tidal water between November 15 and March 15 based on support in writing by NH Fish and Game Department (NHFGD) and NOAA Fisheries staff..
2. This project is classified as a Major Project per administrative rule Env-Wt 303.02(c), as wetland impacts are greater than 20,000 square feet and Env-Wt 303.02 as work is proposed in tidal waters. .
3. On April 14, 2016, NHDES received a wetlands application (file #2016-00965) that requested 643,358 square feet of wetlands, surface waters, and upland tidal buffer zone impact as part of the 12.9 mile project, of which 6,170 square feet is permanent impact, and 637,188 square feet is temporary.
4. The project proposes all work to be within an existing powerline right-of-way (ROW).
5. NHDES finds the need for the proposed impacts has been demonstrated by the Applicant per administrative rule Env-Wt 302.01, as described and detailed in the wetland and SEC applications.
6. NHDES finds that the project is necessary to provide a parallel path to enhance the existing 115kV loop between the Deerfield and Scobie Pond Substations in order to address reliability concerns in the New Hampshire seacoast region, which has been identified by the Independent System Operator-New England (ISO-NE).
7. The Applicant, working with ISO-NE, conducted a Needs Assessment study ("Needs Assessment") finding that the New Hampshire seacoast region requires additional transmission capacity to support the reliable delivery of electric power to meet the region's current demand and future increased demand.

8. The Applicant's Needs Assessment found that there were violations of the transmission system criteria in the seacoast area under certain potential system operating conditions. As a result, a Solution Study was conducted to identify potential solutions to correct the violations.
9. The Applicant's Solution Study provided solution alternatives, one of which included the Madbury to Portsmouth project. The Madbury to Portsmouth project was selected by ISO-NE as the preferred alternative solution, consistent with regional transmission planning standards as the lowest cost and best alternative.
10. The Applicant indicates their application and plan is the alternative with the least adverse impact to areas and environments under the department's jurisdiction per administrative rule Env-Wt 302.03(a)(2), and with Conditions ("NHDES Permit Conditions") and are listed in greater detail as follows:
 - a) Permanent impacts to freshwater wetlands are minor (823 square feet) and have been avoided or minimized where possible.
 - b) Temporary impacts to surface freshwater are associated with temporary access across freshwater wetlands to the work sites along the existing ROW.
 - c) The majority of small streams will be temporarily bridged with timber matting and temporary culverts necessary in only two locations.
 - d) Construction Best Management Practices (BMP's), on-site monitoring and restoration of temporarily impacted areas will be employed.
 - e) Permanent impacts to estuarine wetlands (5,336 square feet) have been avoided or minimized where possible. The impacts associated with the placement of the concrete mattresses are limited to surficial protection measures that are required by the National Electrical Safety Code for submarine cables that cannot be buried to the required depth due to bedrock or other limiting material.
 - f) Impacts to estuarine wetlands are restricted to an existing cable crossing corridor which has been utilized in the past and contains de-energized cables that are obsolete.
11. The Applicant has provided the type, classification, and function and value of the impacted wetlands as required by Env-Wt 302.04(a)(3) and Env-Wt 302.04(a)(17).
12. The Applicant has characterized the type of wetlands to be impacted as: freshwater wetlands (49%) associated with the project are combinations of palustrine scrub-shrub and emergent with other combinations of scrub-shrub, emergent, forested, and open water. Estuarine wetlands associated with the project are primarily intertidal flat, subtidal, saltmarsh, and rocky shore. The Applicant indicates the functions and values of the impacted wetlands will not have an adverse impact by employing construction BMP's, on-site monitoring, and restoration of temporarily impacted wetlands.
13. On November 10, 2016, and after NHDES review of the proposed project, additional information was requested in the form a written Progress Report to the Site Evaluation Committee (SEC), in which several comments specifically requested that the Applicant provide additional information to clarify the project and further avoid and minimize wetland and surface water impacts.
14. The Applicant provided partial responses to the NHDES Progress Report on January 11, 2017 and June 30, 2017.
15. On March 29, 2017, the Applicant requested an amendment to the wetlands application to modify the project in four ways: (a) siting an additional 2,680 square feet of the project underground across the Darius Frink Farm in the Newington Center Historic District and in the Hannah Lane residential neighborhood; (b) altering the route for the underground design in Newington through Gundalow

- Landing; (c) relocating the site of the underground-to-overhead transition structure in Newington and; (d) altering segments of the overhead design to accommodate concerns raised by the NH Department of Transportation, residents, and town officials.
16. On August 1, 2017, and after NHDES review of the Applicant's responses of January 11, 2017 and June 30, 2017, additional information was requested in the form a written Progress Report to the Site Evaluation Committee (SEC), in which several comments specifically requested that the Applicant provide additional information to clarify the project and further avoid and minimize wetland and surface water impacts.
 17. On September 15, 2017, the Applicant provided responses to the NHDES Progress Report of August 1, 2017.
 18. Based on the latest revised plans submitted on September 15, 2017, the Applicant is requesting 643,358 square feet of wetland impact as part of the project, of which 6,170 square feet is permanent wetland impact, and 637,188 square feet is considered temporary wetland impact that will be restored upon completion.
 19. The Applicant has coordinated directly with the Natural Heritage Bureau (NHB) regarding impacts to plant communities from the proposed project, and the Applicant will directly coordinate with the NHB prior to and during construction to minimize other potential impacts to sensitive plant species and exemplary natural communities. Additional coordination and review and approval as required by NHDES Permit Conditions are intended to address the requirements of Env-Wt 302.04(5) and (7)e.
 20. The Applicant has coordinated directly with the NH Fish and Game Department (NHFGD) regarding impacts to sensitive species and habitats from the proposed project, and the Applicant will directly coordinate with the NHFGD prior to and during construction to minimize other potential impacts to sensitive species and habitats. Additional coordination, review and approval as required by NHDES Permit Conditions are intended to address the requirements of Env-Wt 302.04(a)(7).
 21. The Applicant has provides support with plan and example that each factor listed in Rule Env-Wt 302.04(a), Requirements for Application Evaluation, has been considered in the design of the project and through NHDES Permit Conditions.
 22. All temporary wetland impact areas will be stabilized and restored once construction is completed in each section, and in accordance with the Temporary Impacts Restoration Plan as described in Section 3.3.6 of the Natural Resource Impact Assessment dated March 2017 and Salt Marsh Protection and Restoration Plan plans dated June 30, 2017. NHDES understands that the temporary nature of the surface areas to be impacted and these areas will be fully addressed through plan and approved associated permit conditions addressing Env-Wt 302.04(a)(6).
 23. The Applicant will coordinate with the U.S. Coast Guard, Pease Development Authority-Division of Ports and Harbors and NH Marine Patrol to ensure that a Notice to Mariners is issued to minimize impacts on public commerce, navigation, recreation and the extent to which the project interferes with or obstructs public rights of passage or access to address the requirements of Env-Wt 302.04(a)(8) and Env-Wt 302.04(a)(10).
 24. Per Env-Wt 501.01(c), abutter notification is not required for projects within ROW's.
 25. All work is within the Applicant's existing ROW which convey the right to construct and replace transmission lines in support of the reliability of the transmission system. The majority of the wetland impacts are temporary and restored upon completion of work and Best Management Practices ("BMP's") will be employed throughout construction to minimize the impact upon abutters

and fully addressed through plan and approved associated permit conditions addressing Env-Wt 302.04(a)(11).

26. The Applicant prepared a Visual Assessment ("VA") dated October 7, 2016 which demonstrated that the project will not have an unreasonably adverse effect on aesthetics to address the requirements of Env-Wt 302.04(a)(9).
27. The Applicant has demonstrated that the project will benefit the health, safety, and well-being of the general public by improving the existing network of electrical delivery system in seacoast New Hampshire to address the requirements of Env-Wt 302.04(a)(12). The project will facilitate the transfer of power through the seacoast region to ensure the availability of sufficient electricity during high demand periods, which frequently occurs during the summer months.
28. Pursuant to RSA 482-A:11,IV, the associated prime wetlands permitting process is waived, for projects occurring within designated prime wetland located in Newington. The Applicant has demonstrated that the project represents primarily temporary wetland disturbance and minimal permanent impact for necessary installation of a public utility and will not affect the functions and values of the prime wetlands. Temporary impacts to the prime wetlands will be restored to original condition upon completion of work.
29. Compensatory mitigation for wetland impacts may include the preservation of approximately 10 acres of land on a 13 acre parcel on Old Post Road (Map 17/Lot 15) that borders an existing conservation parcel and encompasses a section of Knights Brook Prime Wetland. Compensation for impacts in the Salmon Falls-Piscataqua service area includes a payment into the Aquatic Resource Mitigation (ARM) Fund of \$349, 834.26. The funds may be designated to the Town of Newington for conservation of the 10 acre parcel near Knight's Brook, as described above, and a project in the Town of Durham for a living shoreline and salt marsh restoration effort at Wagon Hill Farm.
30. The mitigation package described above also accounts for all secondary wetland impacts (e.g. clearing upland buffer adjacent to wetlands), as determined and required by the Army Corps of Engineers.
31. Overall, NHDES has determined that the proposed mitigation plan meets the intent of the Mitigation Rules of Chapter 800.
32. Public hearings will be held by the New Hampshire SEC to allow citizens the opportunity to comment on the overall project.
33. The New Hampshire SEC has jurisdiction over the entire project and therefore will ultimately decide if the project is approved or denied.
34. NHDES' decision is issued in letter form and upon approval by the NH SEC, and receipt of the ARM fund payment, the NHDES shall issue a posting permit in accordance with Rule Env-Wt 803.08(f).
35. The payment into the ARM fund shall be deposited in the NHDES fund for the "Salmon Falls-Piscataqua Rivers" watershed per RSA 482-A:29.
36. The surface waters (including wetlands) affected by the Activity, are surface waters under Env-Wq 1702.44 and are therefore subject to New Hampshire Surface Water Quality Standards (Env-Wq 1700).

SEACOAST RELIABILITY PROJECT, NHSEC DOCKET # 2015-04
WATERSHED MANAGEMENT BUREAU – 401 WATER QUALITY CERTIFICATION
FEBRUARY 28, 2018 FINAL DECISION

RECOMMEND APPROVAL WITH THE FOLLOWING CONDITIONS:

PROJECT SPECIFIC CONDITIONS:

The proposed Activity³ involves the discharge of dredge or fill material into surface waters of the U.S. and, therefore, requires a federal Clean Water Act (CWA) Section 404 (33 U.S.C. 1344) permit from the U.S. Army Corps of Engineers (Corps). In accordance with Section 401 of the CWA (33 U.S.C. 1341) and New Hampshire (NH) statute RSA 485-A: 12, III, the Activity therefore requires a Section 401 Water Quality Certification from the NH Department of Environmental Services (NHDES).

On April 12 2016, the Corps indicated that the Section 404 general permit (GP) applies to the proposed Activity. The Corps issues GPs every five years; the last GP [which now consists of 23 general permits] was issued in 2017. A 401 Water Quality Certification (WQC # 2017-404P-001) for the current GPs was issued by NHDES on August 17, 2017. WQC # 2017-404P-001 is applicable to all activities covered by the GPs. Since the proposed Activity is covered by the GPs, the Applicant³ for the proposed Activity must comply with the conditions of WQC #2017-404P-001, which are provided below:

Unless otherwise authorized by NHDES, the following conditions shall apply:

E-1. Compliance with Certification Conditions: Construction and operation of all projects covered by the GPs shall comply with this Certification.

E-2. Compliance with Surface Water Quality Standards: Construction and operation of all projects covered by the GPs shall comply with NH surface water quality standards.

E-3. NHDES Review of Specific Projects and Modification of Certification: Applications for projects included under the GPs shall be subject to NHDES review to determine if additional conditions are needed and if an individual 401 Certification application is necessary to ensure compliance with surface water quality standards. If NHDES determines that surface water quality standards are being violated by a specific project or there is reasonable potential to expect that water quality standards will be violated, NHDES may modify this 401 Certification or issue an individual 401 Certification for the specific project to include additional conditions to ensure compliance with surface water quality standards when authorized by law, and after notice and opportunity for hearing.

³ The Applicant is Public Service Company of New Hampshire (PSNH) d/b/a Eversource Energy. The proposed Activity is described in the application submitted to the New Hampshire Site Evaluation Committee (SEC) on April 12, 2016, and supplemental materials submitted since then up to and including September 19, 2017 which included an application and supplemental information for 401 Water Quality Certification, the Alteration of Terrain Permit and the Wetlands Permit.

E-4. Obtain and Comply with all other Applicable Permits: Construction of any specific project permitted under the GPs shall not commence until all other applicable permits and approvals have been granted, including, but not limited to, those permits issued by the NHDES Wetlands Bureau (which includes compensatory mitigation where required) and, if necessary, the NHDES Alteration of Terrain Bureau. Activities falling under the GPs shall comply with the GPs and all other applicable permits.

E-5. Compliance Inspections: In accordance with applicable laws, NHDES reserves the right to inspect any project permitted under the GPs and the effects of the project on surface waters to monitor compliance with the conditions of this Certification.

NHDES has reviewed the information provided by the Applicant and has determined that compliance with WQC #2017-404P-001, and the conditions for the Alteration of Terrain and Wetlands permits, provides reasonable assurance that construction and operation of the Activity will not violate surface water quality standards (RSA 485-A:8 and Env-Wq 1700).

SEACOAST RELIABILITY PROJECT, NHSEC DOCKET # 2015-04
SHORELAND PROTECTION PROGRAM
FEBRUARY 28, 2018 FINAL DECISION

RECOMMEND APPROVAL WITH THE PERMIT CONDITIONS INCLUDED WITH THE ENCLOSED 7 PAGE LETTER FROM NHDES TO THE NHSEC DATED NOVEMBER 30, 2016.



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

November 30, 2016

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

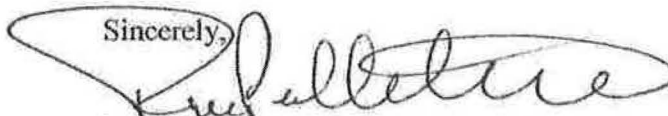
Re: NH Site Evaluation Committee Docket No. 2015-04
Clarification Regarding NHDES Shoreland Impact Permits

Dear Ms. Monroe:

In response to your recent inquiry regarding the issuance of Shoreland Impact Permits 2016-00968, 2016-00969 and 2016-00970 (attached) to Public Service of New Hampshire for proposed impacts adjacent to the Oyster River in Durham and Little Bay in Durham and Newington, the NH Department of Environmental Services (NHDES) offers this clarification. The subject permit applications were submitted to NHDES with no apparent reference that the proposed impacts were associated with the overall Seacoast Reliability Project before the New Hampshire Site Evaluation Committee (SEC). This resulted in the applications being reviewed and approved within the established administrative rules and processes of the NHDES Wetlands Bureau.

The project specific and general conditions included in the attached may be considered as draft permit terms and conditions for consideration by the SEC.

If you have any questions, please contact me at 271-2951 or email at:
Rene.Pelletier@des.nh.gov

Sincerely,

Rene Pelletier, PG
Assistant Director
Water Division

cc: Michael J. Iacopino, Counsel NHSEC
Brian Buonamano, Asst. Attorney General, NH Department of Justice
Thomas S. Burack, Commissioner, NHDES
Clark Freise, Asst. Commissioner, NHDES
Eugene J. Forbes, Water Division Director, NHDES
Barry Needleman, McLane Middleton PA
Kurt Nelson, PSNH

SHORELAND IMPACT PERMIT 2016-00968

Permittee: Public Service of New Hampshire
c/o Kurt Nelson
13 Legends Drive
Hooksett, NH 03106

Project Location: 44 Gundalow Landing, Newington
Newington Tax Map/Lot No. 22 / 5

Waterbody: Little Bay

APPROVAL DATE: 05/12/2016

EXPIRATION DATE: 05/12/2021

Based upon review of the above referenced application, in accordance with RSA 483-B, a Shoreland Impact Permit was issued. This permit shall not be considered valid unless signed as specified below.

PERMIT DESCRIPTION: Impact 15,918 sq. ft. within the protected Shoreland in order to run transmission lines within a right-of-way. The project includes the removal of trees and trenching.

THIS APPROVAL IS SUBJECT TO THE FOLLOWING PROJECT SPECIFIC CONDITIONS:

1. All work shall be in accordance with plans by Normandeau Associates dated January 7, 2016 and received by the NH Department of Environmental Services (DES) on April 14, 2016.
2. This permit does not authorize the removal of trees or saplings within the waterfront buffer that would result in a tree and sapling point score below the minimum required per RSA 483-B:9, V, (a), (2), (D), (iv).
3. No more than .7% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.
4. All activities conducted in association with the completion of this project shall be conducted in a manner that complies with applicable criteria of Administrative Rules Chapter Env-Wq 1400 and RSA 483-B during and after construction.
5. Erosion and siltation control measures shall be installed prior to the start of work, be maintained throughout the project, and remain in place until all disturbed surfaces are stabilized.
6. Erosion and siltation controls shall be appropriate to the size and nature of the project and to the physical characteristics of the site, including slope, soil type, vegetative cover, and proximity to wetlands or surface waters.
7. No person undertaking any activity in the protected shoreland shall cause or contribute to, or allow the activity to cause or contribute to, any violations of the surface water quality standards established in Env-Ws 1700 or successor rules in Env-Wq 1700.
8. Any fill used shall be clean sand, gravel, rock, or other suitable material.

9. This permit shall not be interpreted as acceptance or approval of any impact that will occur within wetlands jurisdiction regulated under RSA 482-A including all wetlands, surface waters and their banks, the tidal-buffer zone, and sand dunes. The owner is responsible for maintaining compliance with RSA 482-A and Administrative Rules Env-Wt 100 - 900 and obtaining any Wetland Impact Permit that may be required prior to construction, excavation or fill that will occur within Wetlands jurisdiction.

10. This permit shall not preclude DES from taking any enforcement or revocation action if DES later determines that any of the structures depicted as "existing" on the plans submitted by the applicant were not previously permitted or grandfathered.

GENERAL CONDITIONS THAT APPLY TO ALL DES SHORELAND IMPACT PERMITS:

1. A copy of this permit shall be posted on site during construction in a prominent location visible to inspecting personnel;
2. This permit does not convey a property right, nor authorize any injury to property of others, nor invasion of rights of others;
3. The Wetlands Bureau shall be notified upon completion of work;
4. This permit does not relieve the applicant from the obligation to obtain other local, state or federal permits, and/or consult with other agencies as may be required (including US EPA, US Army Corps of Engineers, NH Department of Transportation, NH Division of Historical Resources (NH Department of Cultural Resources), NHDES-Alteration of Terrain, etc.);
5. Transfer of this permit to a new owner shall require notification to and approval by the Department;
6. This permit shall not be extended beyond the current expiration date.
7. This project has been screened for potential impacts to known occurrences of rare species and exemplary natural communities in the immediate area. Since many areas have never been surveyed, or have received only cursory inventories, unidentified sensitive species or communities may be present. This permit does not absolve the permittee from due diligence in regard to state, local or federal laws regarding such communities or species.

APPROVED: _____

Craig W. Day
DES Wetlands Bureau

BY SIGNING BELOW I HEREBY CERTIFY THAT I HAVE FULLY READ THIS PERMIT AND AGREE TO ABIDE BY ALL PERMIT CONDITIONS.

OWNER'S SIGNATURE (required)

CONTRACTOR'S SIGNATURE (required)

SHORELAND IMPACT PERMIT 2016-00969

Permittee: Public Service of New Hampshire
c/o Kurt Nelson
13 Legends Drive
Hooksett, NH 03106

Project Location: Main Street, Durham
Durham Tax Map/Lot No. 12 / 7-2

Waterbody: Oyster River

APPROVAL DATE: 05/12/2016

EXPIRATION DATE: 05/12/2021

Based upon review of the above referenced application, in accordance with RSA 483-B, a Shoreland Impact Permit was issued. This permit shall not be considered valid unless signed as specified below.

PERMIT DESCRIPTION: Impact 29,943 sq. ft. within the protected Shoreland in order to run 12.9 miles of overhead, underground, and underwater components within a right-of-way.

THIS APPROVAL IS SUBJECT TO THE FOLLOWING PROJECT SPECIFIC CONDITIONS:

1. All work shall be in accordance with plans by Normandeau Associates dated January 7, 2016 and received by the NH Department of Environmental Services (DES) on April 14, 2016.
2. This permit does not authorize the removal of trees or saplings within the waterfront buffer that would result in a tree and sapling point score below the minimum required per RSA 483-B:9, V, (a), (2), (D), (iv).
3. No more than .4% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.
4. All activities conducted in association with the completion of this project shall be conducted in a manner that complies with applicable criteria of Administrative Rules Chapter Env-Wq 1400 and RSA 483-B during and after construction.
5. Erosion and siltation control measures shall be installed prior to the start of work, be maintained throughout the project, and remain in place until all disturbed surfaces are stabilized.
6. Erosion and siltation controls shall be appropriate to the size and nature of the project and to the physical characteristics of the site, including slope, soil type, vegetative cover, and proximity to wetlands or surface waters.
7. No person undertaking any activity in the protected shoreland shall cause or contribute to, or allow the activity to cause or contribute to, any violations of the surface water quality standards established in Env-Ws 1700 or successor rules in Env-Wq 1700.
8. Any fill used shall be clean sand, gravel, rock, or other suitable material.

9. This permit shall not be interpreted as acceptance or approval of any impact that will occur within wetlands jurisdiction regulated under RSA 482-A including all wetlands, surface waters and their banks, the tidal-buffer zone, and sand dunes. The owner is responsible for maintaining compliance with RSA 482-A and Administrative Rules Env-Wt 100 - 900 and obtaining any Wetland Impact Permit that may be required prior to construction, excavation or fill that will occur within Wetlands jurisdiction.
10. This permit shall not preclude DES from taking any enforcement or revocation action if DES later determines that any of the structures depicted as "existing" on the plans submitted by the applicant were not previously permitted or grandfathered.

GENERAL CONDITIONS THAT APPLY TO ALL DES SHORELAND IMPACT PERMITS:

1. A copy of this permit shall be posted on site during construction in a prominent location visible to inspecting personnel;
2. This permit does not convey a property right, nor authorize any injury to property of others, nor invasion of rights of others;
3. The Wetlands Bureau shall be notified upon completion of work;
4. This permit does not relieve the applicant from the obligation to obtain other local, state or federal permits, and/or consult with other agencies as may be required (including US EPA, US Army Corps of Engineers, NH Department of Transportation, NH Division of Historical Resources (NH Department of Cultural Resources), NHDES-Alteration of Terrain, etc.);
5. Transfer of this permit to a new owner shall require notification to and approval by the Department;
6. This permit shall not be extended beyond the current expiration date.
7. This project has been screened for potential impacts to known occurrences of rare species and exemplary natural communities in the immediate area. Since many areas have never been surveyed, or have received only cursory inventories, unidentified sensitive species or communities may be present. This permit does not absolve the permittee from due diligence in regard to state, local or federal laws regarding such communities or species.

APPROVED: _____

Craig W. Day
DES Wetlands Bureau

BY SIGNING BELOW I HEREBY CERTIFY THAT I HAVE FULLY READ THIS PERMIT AND AGREE TO ABIDE BY ALL PERMIT CONDITIONS.

OWNER'S SIGNATURE (required)

CONTRACTOR'S SIGNATURE (required)

SHORELAND IMPACT PERMIT 2016-00970

Permittee: Public Service of New Hampshire
c/o Kurt Nelson
13 Legends Dr.
Hooksett, NH 03106

Project Location: 295 Durham Point Road, Durham
Durham Tax Map/Lot No. 20 / 12-1

Waterbody: Little Bay

APPROVAL DATE: 05/12/2016

EXPIRATION DATE: 05/12/2021

Based upon review of the above referenced application, in accordance with RSA 483-B, a Shoreland Impact Permit was issued. This permit shall not be considered valid unless signed as specified below.

PERMIT DESCRIPTION: Impact 28,271 sq. ft. within the protected Shoreland in order to run 12.9 miles of overhead, underground, and underwater components within a right-of-way.

THIS APPROVAL IS SUBJECT TO THE FOLLOWING PROJECT SPECIFIC CONDITIONS:

1. All work shall be in accordance with plans by Normandeau Associates dated January 7, 2016 and received by the NH Department of Environmental Services (DES) on April 14, 2016.
2. This permit does not authorize the removal of trees or saplings within the waterfront buffer that would result in a tree and sapling point score below the minimum required per RSA 483-B:9, V, (a), (2), (D), (iv).
3. No more than 5% of the area of the lot within the protected shoreland shall be covered by impervious surfaces unless additional approval is obtained from DES.
4. All activities conducted in association with the completion of this project shall be conducted in a manner that complies with applicable criteria of Administrative Rules Chapter Env-Wq 1400 and RSA 483-B during and after construction.
5. Erosion and siltation control measures shall be installed prior to the start of work, be maintained throughout the project, and remain in place until all disturbed surfaces are stabilized.
6. Erosion and siltation controls shall be appropriate to the size and nature of the project and to the physical characteristics of the site, including slope, soil type, vegetative cover, and proximity to wetlands or surface waters.
7. No person undertaking any activity in the protected shoreland shall cause or contribute to, or allow the activity to cause or contribute to, any violations of the surface water quality standards established in Env-Ws 1700 or successor rules in Env-Wq 1700.

8. Any fill used shall be clean sand, gravel, rock, or other suitable material.
9. This permit shall not be interpreted as acceptance or approval of any impact that will occur within wetlands jurisdiction regulated under RSA 482-A including all wetlands, surface waters and their banks, the tidal-buffer zone, and sand dunes. The owner is responsible for maintaining compliance with RSA 482-A and Administrative Rules Env-Wt 100 - 900 and obtaining any Wetland Impact Permit that may be required prior to construction, excavation or fill that will occur within Wetlands jurisdiction.
10. This permit shall not preclude DES from taking any enforcement or revocation action if DES later determines that any of the structures depicted as "existing" on the plans submitted by the applicant were not previously permitted or grandfathered.

GENERAL CONDITIONS THAT APPLY TO ALL DES SHORELAND IMPACT PERMITS:

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3. The Wetlands Bureau shall be notified upon completion of work;
4. This permit does not relieve the applicant from the obligation to obtain other local, state or federal permits, and/or consult with other agencies as may be required (including US EPA, US Army Corps of Engineers, NH Department of Transportation, NH Division of Historical Resources (NH Department of Cultural Resources), NHDES-Alteration of Terrain, etc.);
5. Transfer of this permit to a new owner shall require notification to and approval by the Department;
6. This permit shall not be extended beyond the current expiration date.
7. This project has been screened for potential impacts to known occurrences of rare species and exemplary natural communities in the immediate area. Since many areas have never been surveyed, or have received only cursory inventories, unidentified sensitive species or communities may be present. This permit does not absolve the permittee from due diligence in regard to state, local or federal laws regarding such communities or species.

APPROVED: _____

Craig W. Day
DES Wetlands Bureau

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OWNER'S SIGNATURE (required)

CONTRACTOR'S SIGNATURE (required)