The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner

September 10, 2019

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

Re: Application of Seacoast Reliability Project
Notification of Minor Construction Related Changes
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 amendment request for Minor Construction Related Changes, submitted in accordance with condition 25 of the NHDES Wetlands Bureau October 28, 2018 Revised Final Decision, included in Appendix I of the Site Evaluation Committee's (SEC) January 31, 2019 Decision and Order Granting Application for Certificate of Site and Facility. Project modifications were included in an amendment request received August 26, 2019 and within project drawings entitled "Seacoast Reliability Project Revised Environmental Maps" dated August 16, 2019. In accordance with RSA 482-A:3 XIV (e), the proposal does not represent a significant amendment. NHDES recommends approval of the amendment with the conditions that are enclosed with this letter.

This concludes NHDES review of the amendment which we hope will assist the SEC in the determination whether Eversource will need to file with the SEC in order to amend the Certificate. If you have any questions, please contact me at 271-2951 or email at: Rene.Pelletier@des.nh.gov

Sincerely,

Rene Pelletier, Assistant Director
Water Division

ec: Michael Iacopino, Esq., Brennan, Lenehan
Robert Scott, Commissioner
Clark Freise, Assistant Commissioner
Tom O'Donovan, Director, Water Division
Sarah Yuhas-Kirn, Manager, Land Resources Management
Kurt Nelson, Eversource

SEACOAST RELIABILITY PROJECT, NHSEC DOCKET # 2015-04
WETLANDS BUREAU PERMIT AMENDMENT
SEPTEMBER 10, 2019 (ORIGINAL DECISION ISSUED OCT. 29, 2018)

RECOMMEND APPROVAL WITH THE FOLLOWING PERMIT CONDITIONS:

PROPOSED AMENDMENT:

Amend permit to impact an additional 8,637 square feet of temporary wetland impact in five locations and decrease 14,853 square feet of temporary impact in six locations. The work includes changes in location of access roads, timber mat placement and stockpile locations.

AMENDED PROJECT DESCRIPTION:

Dredge and fill a total of 601,561 square feet (13.8 acres) of wetlands, surface waters, and upland tidal buffer zone, including 592,091 square feet of temporary impacts for installation of timber access mats and stream crossings in freshwater wetlands (300,938 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 (269,987 square feet); 9,470 square feet of total permanent impacts for transmission structure installation in freshwater wetlands (778 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 115Kv 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 wetland impacts, including mitigation necessary to meet U.S. Army Corps of Engineers requirements, 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. AMENDED: All work shall be in accordance with plans dated July 25, 2018, submitted as part of the application to the New Hampshire Site Evaluation Committee on April 14, 2016 and supplemental information received by the NH Department of Environmental Services (NHDES) on April 14, 2016 and July 27, 2018 and revised plans entitled "Seacoast Reliability Project Revised Environmental Maps" dated August 16, 2019 as received by NHDES on August 26, 2019
2. Not more than 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 zones 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 logging equipment. Additionally, low growing native shrubs and other species common within riparian zones shall not be removed and shall remain as thermal barriers to streams.
11. Unless authorized by NHDES, 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 temporary earthen fill from the natural hydric soils. Filter fabric, silt socks and/or straw wattle material shall be used in conjunction with timber mats in areas where wetlands are crossed.
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. When equipment cannot practicably be moved away from a wetland or surface water, refueling can be allowed if secondary containment is provided in accordance with the guidance in

DES Fact Sheet WD-DWGW 22-6, dated 2010, and all other practices described in that Fact Sheet are complied with. This is particularly critical for refueling that may be done from barges or other waterborne vessels.

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 impacts to jurisdictional areas for the project beyond those identified in the application materials received September, 2017, will require further permitting in accordance with RSA 482-A.
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, Kernen, 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, NH Division of Historical Resources, and the NH Department of Natural and Cultural 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 Bureau in writing of the independent environmental monitor who will be responsible for monitoring the project. The Applicant shall re-notify the NHDES Wetlands Bureau 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 Bureau.

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, if directed by NHDES, 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 provided to NHDES in a geodatabase that NHDES can use to update its current eelgrass GIS coverage.

    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. Modifications to this condition may be allowed at the discretion of NHDES.
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. Unless otherwise authorized by NHDES, the mixing zone shall not include any portion of an aquaculture site that has aquaculture product (i.e., oysters, etc.) in the water during and up to 24 hours following jet plow and hand-jetting activities.
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. Unless otherwise authorized by NHDES, 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, Ipronidazole 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 digitially 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: The Applicant shall remove the existing cable in Little Bay in accordance with the Existing Cable Removal Plan submitted on June 30, 2017.
50. Training: Not more than thirty (30) days prior to the scheduled start of construction 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 modeling 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 depths defined in the design drawings submitted July 27, 2018, and in conjunction with 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. 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: Unless otherwise authorized by NHDES, 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 2 inches in diameter.

60b. Jet Plow Trial Run: If the SEC determines that jet plowing should be allowed for submarine cable installation in Little Bay (instead of other alternatives such as horizontal directional drilling), and that a jet plow trial run (without cable) should be conducted prior to installation of the submarine cable (as recommended by NHDES in a letter dated February 28, 2018 to the SEC if jet plowing is the selected alternative), the Applicant shall, unless otherwise authorized by NHDES, comply with the following:

- At least 90 days prior to the trial, the Applicant shall submit a Jet Plow Trial Plan (JPTP) to NHDES for approval and then implement the approved plan. The JPTP shall describe in detail how and when the trial and monitoring will be conducted and results reported.
- At least 14 days prior to the scheduled start of submarine cable installation in Little Bay the Applicant shall submit a jet plow trial run summary report to the SEC and NHDES that addresses 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 monitoring results 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.

Installation of submarine cable in Little Bay shall not proceed until authorized by NHDES and the SEC.

SALT MARSH AND SHORELINE RESTORATION (EXCLUDING THE PORTION ON WAGON HILL FARM)

61. The salt marsh vegetation shall be removed to the maximum depth allowable by the substrates, and under the direction of the Environmental Monitor. The blocks will be as large as practicable to be set aside, right side up and protected from desiccation to ensure successful replacement and to support existing functions by watering the vegetation blocks with freshwater while they are set aside.
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. Plans for the living shoreline and salt marsh restoration in areas impacted by the project shall be submitted and approved by NHDES and ACOE prior to construction.
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 success of restoration. If the restoration is not successful, the Applicant shall submit a plan for review and approval by NHDES to correct any deficiencies.
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. NHDES must approve the seed mix prior to application.

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 and prior to any construction.
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 for a living shoreline restoration at Wagon Hill Farm and $120,990.23 for a conservation easement in Newington. 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 dated March 29, 2017 (Amendment 1, Appendix 34a, and Appendix C).
72. The draft deed for the conservation parcel proposed in Newington shall be reviewed and approved by NHDES and the ACOE prior to construction. The applicant must prepare a forest management plan limited to wildlife habitat management only. The plan must be approved by NHDES prior to construction.

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 activities 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 12, 2016, NHDES received a wetlands application (file #2016-00965) that requested 607,777 square feet of wetlands, surface waters, and upland tidal buffer zone impact as part of the 12.9 mile project, of which 9,470 square feet is permanent impact, and 598,307 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 (778 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 (8,681 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 19, 2017, the Applicant is requesting 607,777 square feet of wetland impact as part of the project, of which 9,470 square feet is permanent wetland impact, and 598,307 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).

ADDITIONAL FINDING:

37. The applicant has identified areas where temporary impacts needed to be changed due to construction needs such as relocation of access roads, placement of timber mats, and locations of stockpiles.