

STATE OF NEW HAMPSHIRE

Intra-Department Communication

DATE: August 24, 2023

AT (OFFICE): NH Dept. of Energy

FROM: Michael Soucy MRS

Administrator III – Division of Enforcement

SUBJECT: CRW 2023-017 Eversource Energy
Application for License to Construct and Maintain
Water Transmission Line under Little Bay from
Durham to Newington, New Hampshire.

Staff Recommendation

TO: Jared Chicoine, Commissioner, Department of Energy
Christopher Ellms, Jr., Deputy Commissioner, Department of Energy

CC: Thomas Frantz, Director of Regulatory Support Division
Paul Kasper, Director, Enforcement Division
Elizabeth Nixon, Director-Electric Regulatory Support Division
Andrew Harmon, Hearings Examiner, Enforcement Division

Review by the Division of Enforcement (DOE) of the above application consisted of the following elements:

- Application contents and history;
- Applicable State statutes;
- Review of the existing crossing(s) previously licensed by the PUC, if any;
- Review of land ownership of water facilities and appurtenances;
- Review of Env DW 407.01 requirements as described in Puc 600 rules;
- Review of public need and public impact, including applicability of other State regulations; and
- Conclusions and Recommendations.

1. Application contents and history.

On August 1, 2023, The City of Portsmouth Public Works Department, (PPWD) filed an application for a license pursuant to RSA 371:17 to construct and maintain the “Little Bay Subaqueous Water Transmission Main” under and across public waters (Little Bay), in Durham, and Newington, New Hampshire.

The City of Portsmouth owns and maintains a 7-mile cross country drinking transmission line that brings treated water from the Madbury Water Treatment Plant to the Newington Booster Pump Station.

PPWD's application was submitted with maps of the crossing location, property easement documentation and engineered permit drawings that included existing conditions, construction staging details, new pipeline details, connection details, and an area restoration plan.

The new proposed 24-inch water main will replace the two parallel existing water mains that cross Little Bay. The application indicates that the existing water mains are 20-inch cast iron pipes that were installed in the 1950s by the US Army Corps of Engineers (ACOE).

PPWD proposes to install approximately 3,200 feet of 24-inch diameter DR11 high-density polyethylene (HDPE) water main on the ocean bottom of Little Bay. The proposed water main will be constructed from the south shore of Wagon Hill Farm in Durham and continue southeast to the shore of Fox Point in Newington within the existing pipeline corridor and connect to the existing water main at either shore. At the inter tidal zone and within portions of the tidal buffer zone, the proposed pipeline will be buried to protect the pipe from freezing, anchor drag, and tidal currents.

The proposed installation method involves assembling the new pipeline on land and floating the pipeline into Little Bay. Since the HDPE pipe is buoyant, concrete collars are required to sink and anchor the pipeline along the bottom of the bay. The concrete anchors are designed to be installed while the pipeline is floating and full of air. Upon the evacuation of the air from the pipe, the pipe sinks to the bottom at the proposed location. The water main will transition to ductile iron Class 52 pipe where it enters underground and will be pressure tested to 150PSI for 2 hours.

The new main will be connected to the existing main by installing a tapping sleeve and valve on the prestressed concrete pressure pipe on both sides of the crossing.

2. New Hampshire statute referenced in application (as modified by N.H. House Bill 1258 on August 22, 2022).

371:17 Licenses for New Poles – Whenever it is necessary, in order to meet the reasonable requirements of service to the public, that any public utility should construct a pipeline, cable, or conduit, or a line of poles or towers and wires and fixtures thereon, over, under or across any of the public waters of this state, or over, under or across any of the land owned by this state, modify a previously licensed installation, or license a previously constructed installation, it shall apply to the department of energy for a license to construct and maintain the same. For the purposes of this section, “public waters” are defined to be all ponds of more than 10 acres, tidewater bodies, and such streams or portions thereof as the department of energy may prescribe. Every corporation and individual desiring to cross any public water or land for any purpose herein defined shall apply to the department of energy for a license in the same manner prescribed for a public utility. The department of energy may condition any license issued under

this paragraph in any manner necessary to assure that the license may be exercised without substantially affecting the public rights in public waters or State-owned lands. Using a non-adjudicative process, the department of energy may reject incomplete or improperly filed applications, and shall, also using non-adjudicative process, issue or deny the license within 90 days of receiving a complete application and all information subsequently requested of an applicant. 371:17 Licenses for New Poles (eff. Aug. 20, 2022).

3. Review of existing license(s) and permissions previously granted by the PUC for this location under and across public water Durham and Newington, New Hampshire.

The existing water transmission mains were installed in the 1950s by the ACOE. The City of Portsmouth acquired the easement and water infrastructure from the ACOE and the infrastructure is not currently licensed.

Little Bay is listed under the category “Part 3, Tidal Waters” in the Official List of Public Waters (OLPW). The entire list of public waters can be accessed through the following web link:

<https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/olpw.pdf>

New Hampshire Department of Environmental Services (NHDES) Wetlands Permit in the towns of Durham and Newington, NH has been submitted to account for the wetland impacts associated with the project described in this application. A permit approval for file number 2020-02959 has been issued. A Shoreland Permit by Notification will be required for temporary impacts associated with the project and will be obtained prior to any construction.

The US Army Corps of Engineers (ACOE) regulates Little Bay as navigable waters. A permit application has been submitted to conduct work in these waters. Permit file number: NAE-2019-01078.

4. Review of land ownership of water tie in structures.

In its application, PPWD specifies that the majority of the proposed project area is located within the water line easement boundaries established for the water main when installed by ACOE in the 1950s. The pipeline crosses property owned by a private landowner on the Durham side in which The City of Portsmouth has acquired a temporary easement for construction and permanent easement to construct and operate their facilities. The Town of Newington owns the property on the Newington side of the crossing. The City of Portsmouth is coordinating with the Town of Newington to secure permission for temporary impacts associated with construction, construction laydown area, and construction access.

5. Review of requirements as described in Puc 600.

N.H. Code of Administrative Rules Puc 606 EQUIPMENT AND FACILITIES Puc 606.01 Standard Practice is the applicable standard used for reviewing the petition. It states:

(a) Each utility shall construct, install, operate, and maintain its plant, structures, equipment, and mains:

(1) In accordance with applicable American Water Works Association Standards copyrighted by the American Water Works Association, pursuant to the applicable standards described in N.H Code Admin. Rule Env-Ws 307.01, Standards of the American Water Works Association; and

(2) In such manner, insofar as practical:

a. To best accommodate the public; and

b. To prevent interference with service furnished by other underground facilities, including gas, electric, telephone, steam, sewer and other underground and above ground facilities. This rule was last readopted September 10, 2013, but subsequently the DES updated the rules on June 1, 2014. The applicable rule is now Part 407 Env-Dw 407.01 Standards of the American Water Works Association. This in turn references AWWA Standard C906 1999 Polyethylene (PE) Pressure Pipe and Fittings, 4 in. through 63 in., for Water Distribution.

6. Review of public need and public impact.

PPWD owns and maintains a 7-mile cross-country drinking water transmission main that brings treated drinking water from the Madbury Water Treatment plant to Portsmouth and surrounding towns. A dive inspection in 2016 found that the two existing cast iron pipes have experienced significant corrosion. PPWD states that the Little Bay Subaqueous Water Transmission Main is vital in order to reasonably service the public.

PPWD states the completed project will not impede the public's use and enjoyment of Little Bay.

PPWD provided sufficient detail to verify that no potential safety hazards will result from the water crossing.

7. Enforcement Division Recommendation:

Based on the results of its review of the application, attachments, and all other supporting documents, the Enforcement Division recommends that the Department:

- 1) Find that the license Portsmouth Public Works Department requests in this application may be exercised without substantially affecting the public rights in public waters; and
- 2) Grant Portsmouth Public Works Department a license to construct and maintain a water transmission main pursuant to RSA 371:17 and Puc 606.01, under and across public waters in Durham and Newington, New Hampshire as specified in the application.