

STATE OF NEW HAMPSHIRE

Intra-Department Communication

Date: May 26, 2023

At (Office): NH Dept. of Energy

From: Bryan J. Flynn BJF
Utility Analyst IV – Division of Enforcement

Subject: **CRE 2022-029** Eversource Energy
Application for License to Construct and Maintain Electric Lines over and
Across Public Waters in Plymouth and Holderness, 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 of Enforcement Division
Elizabeth Nixon, Director of Electric Regulatory Support Division
Andrew Harmon, Hearings Examiner, Enforcement Division

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

- Application contents, revised application contents, and history;
- Applicable State statutes;
- Review of the existing crossing(s) previously licensed by the PUC, if any;
- Review of land ownership and of existing pole structures;
- Review of NESC code requirements as described in PUC 300;
- Review of public need and public impact, including applicability of other State regulations; and
- Recommendations

1.) **Application Contents and History**

On December 2, 2022, Public Service New Hampshire d/b/a Eversource Energy (Eversource, ES or the Company) filed an application for a license pursuant to RSA 371:17 to construct and maintain the Eversource 343 Line. The application was initially rejected by the Department of Energy staff due to errors and was resubmitted by Eversource with the required corrections for review on May 19, 2023.

The ES 343 line is an existing 34.5 kV distribution line, constructed on a right-of-way, that has spans which cross over public water in Plymouth and Holderness, New Hampshire. The initial construction date of the 343 line was not included, however Eversource states that they have records relating to the 343 line that date back to 1963.

Eversource has determined, through asset inspection, that the existing wood structures at the public water crossing referenced in the application need prompt replacement to continue to function safely and reliably. The wooden three-pole structures numbered 9 and 10 at the Pemigewasset River crossing will be replaced with weathering steel equivalents that shall be located within 10 feet of the structures' current locations. The three existing phase conductors at the river crossing span shall remain unchanged in the course of performing the structure replacements. The specifications and configuration of the existing conductors and replacement structures are shown on the Cable Schedule and Structural Details on Exhibit 2.

The wire specifications and loading condition to establish maximum sag for the crossing span that is the subject of the application are as indicated on the Profile View and Cable Schedule of Exhibit 2 submitted by ES. The minimum clearance requirements pursuant to NESC table 232.1, ground level and the FEMA 10-year flood level 2008 have been met. The Enforcement Division verified the depicted sag clearances using Sag10 commercial software with the data inputs as stated in the application.

The location of the public water crossing that is the subject of this application is depicted on the Overview Map as Exhibit 1 submitted by ES, and the DOE Map attached to this recommendation. Exact locations of the structures are expressed with Latitude and Longitude on Exhibit 2 submitted by ES and a more detailed description is as follows:

The 343 Line crosses the public waters of the Pemigewasset River in the towns of Plymouth and Holderness between Structures 9 and 10, which span commences approximately 2,000 feet north from where the 343 Line crosses Route 175A, which is approximately 575 feet west from the intersection of Route 175A and the Interstate 93-southbound on-ramp at Exit 25. The waterbody crossing extends north approximately 255 feet to the northern bank of the Pemigewasset River, which point is approximately 1,370 feet southeast from where the 343 Line crosses NH Route 25 (aka Main Street) in Plymouth immediately north of the Route 25 bridge over the Baker River in Plymouth.

The current location of structures 9 and 10 creates a total conductor span of 552 feet with a water crossing span of 255 feet.

The following table provides a summary of pertinent details included in this application to include structure numbers, types, spans, minimum NESC clearance, ES design clearance, and compliance:

Eversource 343 line - Waterbody Crossing Details						
Structure	Type	Span (Pole to Pole)	Distance (feet)	Minimum NESC Table 232-1 Clearance (ft.)	ES Vertical Design Clearance (ft.)	Complies with NESC Table 232-1 (Y/N)
9	Type DA 3-Pole Dead-end Steel Structure	9-10	552	17.0	27.1	Y
10	Type DA 3-Pole Dead-end Steel Structure					

2.) New Hampshire statute referenced in application (modified by NH House Bill 1258, 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.

3.) Review of existing license(s) and permissions previously granted by the PUC for this location over and across public water in Plymouth and Holderness, New Hampshire

Although the original construction date is unknown, Eversource cites records that date back to 1963 for the maintenance of the 343 line; included in said records is the public water crossing at the Pemigewasset River included in the application which was previously licensed by the State in 1976 under DE 76-22, order no. 12,219.

The New Hampshire List of Public Waters defines the segment of the Pemigewasset River in Plymouth and Holderness as: *From the outlet of Profile Lake in Franconia Notch State Park to the southern boundary of Franconia State Park and from the northernmost Thornton town line to*

the confluence with the Merrimack River in Franklin. The entire list of “Public Rivers and Streams” can be accessed through the following link:

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

Eversource states that a New Hampshire Department of Environmental Services (NHDES) Statutory Permit by Notification (SPN) in the Town of Plymouth and a Shoreland Permit by Notification will be required for temporary impacts associated with the structure replacements and will be obtained prior to commencement of construction.

The U.S. Army Corps of Engineers (ACOE) does not regulate the Pemigewasset River as navigable waters. As a result, a crossing permit from the ACOE is not required.

4.) Review of land ownership of proposed pole structures

All structure replacement work will be done within existing right-of-way easements with the exception of parcel Map 101, Lot 111, owned by Plymouth Village Water and Sewer District for which there was no easement identified. Eversource has stated that the company is in discussions to secure such easement and it shall be obtained prior to commencement of any work on that parcel. Impacts to all other property owners will be mitigated by use of the right-of-way.

5.) Review of NESC code requirements as described in PUC 300

The Enforcement Division reviewed the specifications related to the structure replacement work of this crossing project as described in the application, attachments, and all supplemental support documents filed by the Company and found them to be in conformance with N.H. Admin. Rule Puc 306 and applicable sections of NESC C2-2012.

6.) Review of public need and public impact

The 343 Line is an integral part of Eversource’s existing electric distribution system in New Hampshire. The crossing location identified in the application is in the Towns of Plymouth and Holderness, New Hampshire. The Company asserts in its application that the existing crossing will be exercised without substantially affecting public rights in the identified public water in New Hampshire.

The Enforcement Division verified that minimum safe line clearances above the public water will be maintained and guarded at all times and therefore determines that public use and enjoyment of the public water will not be diminished in any material respect as a result of the proposed project.

7.) **Enforcement Division Recommendations**

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

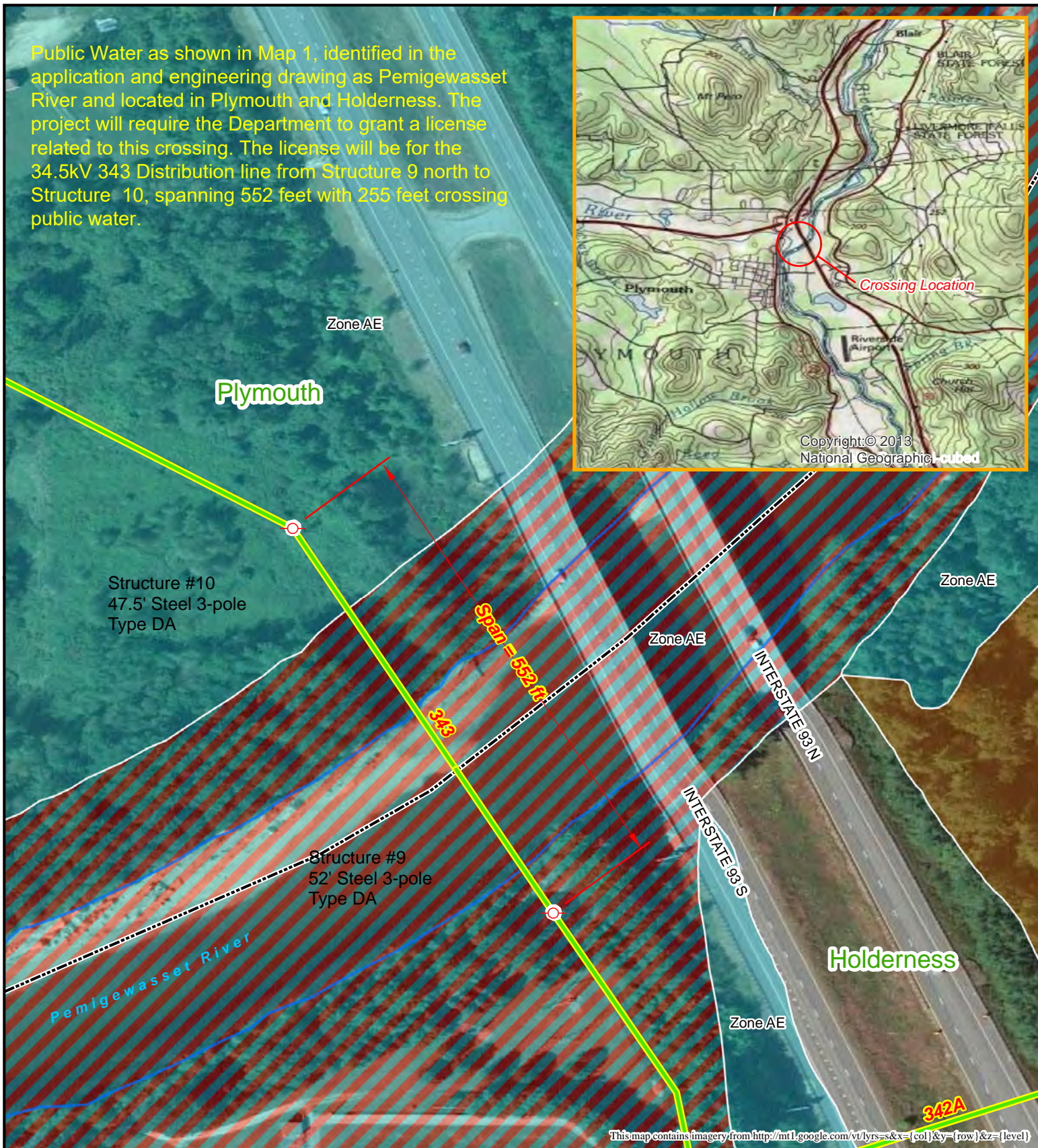
- 1) Find that the license Eversource requests in this application may be exercised without substantially affecting the public rights in public water; and
- 2) Grant Eversource a license to construct and maintain electric lines pursuant to RSA 371:17 and PUC 306.01, over and across public waters in the Towns of Plymouth and Holderness, New Hampshire as specified in the application.

Attachments:

Public Water as shown in Map 1, identified in the application and engineering drawing as Pemigewasset River and located in Plymouth and Holderness. The project will require the Department to grant a license related to this crossing. The license will be for the 34.5kV 343 Distribution line from Structure 9 north to Structure 10, spanning 552 feet with 255 feet crossing public water.

Pemigewasset River - CRE 2022-029 Eversource Crossing

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This map contains imagery from <http://mt1.google.com/vt/lyrs=s&x={col}&y={row}&z={level}>

	Utility Structure	Flood Hazard Zones
	34.5 kV Line	Regulatory Floodway
		1% Annual Chance Flood Hazard
		0.2% Annual Chance Flood Hazard



	Prepared by: NH Department of Energy Enforcement Division