

STATE OF NEW HAMPSHIRE

Intra-Department Communication

Date: March 25, 2024

At (Office): NH Dept. of Energy

From: Bryan J Flynn B J F
Utility Analyst IV – Enforcement Division

Subject: CRE 2024-002 Eversource Energy

Application for License to Construct and Maintain Electric Lines Over and Across Public Water in East Kingston, 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 existing crossing(s) previously licensed by the State of New Hampshire, 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 March 19, 2024, Public Service Company of New Hampshire D/B/A Eversource Energy (Eversource, ES) submitted an application pursuant to RSA 371:71 for a license to construct and maintain a portion of the 363 Line in East Kingston, NH. The ES 363 Line is a 345 kV transmission line that crosses public water at the Powwow River between Structure 59 and Structure 60. Eversource is requesting that the Department of Energy issue a license for the purpose of proposed structure replacement at the referenced span only.

Eversource has determined that in order to continue to meet the requirements for reasonable service to the public, and to function safely and reliably, existing wood Structure 59 at the Powwow River needs to be replaced. Structure 59 will be replaced with a weathering steel equivalent and will be located within 10 feet of the current structure location. Structure 60 is currently a steel structure and does not require replacement at this time. The existing six conductors, static wire, and OPGW will also remain unchanged as a result of this project.

The location of the public water crossing is depicted on the Overview Map submitted by ES as Exhibit 1 of the application, and a more detailed location description is as follows:

The 363 Line crosses the public waters of the Powwow River between Structures 59 and 60 in East Kingston, New Hampshire. Structure 60 is located approximately 1,200 feet East of the intersection of Bowley Road and Sullivan Drive in E. Kingston. The public water crossing begins approximately 260 feet east from Structure 60 and continues east 196.5 feet towards Structure 59.

- The proposed structure locations create a total span of 677.5 feet with 196.5 feet crossing public waters.

The following table illustrates the structure and span details provided in the application, as well as required NESC clearance and the designed clearance at each crossing span:

Eversource Energy – 363 Line CRE 2024-002 Public Water Crossing Design Details						
Structure Number	Structure Type	Measured Span	Distance (feet)	Minimum NESC Clearances (feet)	ES Design Clearances (feet)	Complies with NESC 232-1 (Y/N)
59	Custom Steel	59-60	677.5	23.2	42.9	Y
60	Type HF Steel					

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 State of New Hampshire, including additional permitting requirements, for the applicable public water crossing in East Kingston, New Hampshire

Eversource currently owns and operates the 363 Line, which was originally constructed in 1982. The portion relevant to this application was last licensed in 2013 under DE 13-015 (Order No. 25,493) for the purpose of removing one static wire and installing OPGW.

Eversource states that a New Hampshire Department of Environmental Services (NHDES) Wetland Statutory Permit by Notification (SPN) and Shoreland Permit Notification (PBN) will be required for temporary impacts as a result of this project and will be obtained prior to commencement of construction.

The Army Corps of Engineers (ACOE) does not regulate the subject portion of the Powwow River as navigable waters; thus, no permit is required.

The Powwow River is considered as protected public water, beginning at its outflow from Powwow Pond. The entire list of public waters can be found on the NHDES website by using the following link:

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

4. Review of land ownership at proposed pole structures

Eversource states that the structure replacement work will be accomplished within existing right-of-way easements, thereby mitigating impacts and concerns of property owners affected by the project scope. A list of abutters was provided by Eversource in addition to the application and exhibits.

5. Review of National Electric Safety Code (NESC) requirements as described in N.H. Admin. R., Puc 306.01 (b)

Eversource shall own, maintain, and operate the 363 Line with clearances at a height no less than what is required by the 2012 National Electrical Safety Code (Table 232-1), which is 23.2 feet for 345 kV wires over water areas not suitable for sail boating or where sail boating is prohibited.

Eversource proposes to install one custom Type C Steel structure, which has three steel poles, cross-bracing, and a steel cross-arm spanning two of the poles. The height of the two taller poles is designed to be 94 feet. Line supporting structures are required to conform to strength and loading specifications described in NESC 2012 rule 252, 260, and 261.

Enforcement Division staff reviewed the specifications of the proposed replacement work and found them to be in conformance with N.H. admin. R., Puc 306.01 and applicable 2012 NESC rules. The minimum clearance requirements with respect to a 10-year flood level and design conditions at 285° F have been met. Staff verified the depicted wire specifications and loading conditions provided by Eversource in application Exhibit 2.

6. Review of public need and impact

The ES 363 Line provides electrical energy transmission between Scobie Pond Station and Seabrook Power Station. Both Stations are of great importance to reliable energy delivery in New Hampshire.

RSA 371:17 requires the Department of Energy to review applications for licenses to construct, maintain, or modify installations that exist or are proposed to exist, over, under, or across public waters or State-owned land. This is to provide for safety of the public and the preservation of perpetual access and use of public waters and State-owned land in New Hampshire.

Eversource declares that the license, if granted, may be exercised without substantially affecting the use or enjoyment of public waters, that safe clearances will be maintained at all times, and precautions undertaken to ensure the safety of recreational users. The Enforcement Division's review of design specifications verified that minimum safe clearances above public water will be maintained during and after construction; and therefore, determines that public use and enjoyment of said waters will not be diminished in any 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 the application may be exercised without substantially affecting public rights to public waters; and
2. Grant Eversource a license to construct and maintain electric lines pursuant to RSA 371:17 and N.H. admin. R., Puc 306.01, over and across public waters in East Kingston, New Hampshire, as specified in the application.

Attachment:

Powwow River - CRE 2024-002 Eversource Crossing



East Kingston

This map illustrates the Powwow River crossing of the Eversource 363 Line in East Kingston, NH. The project requires that the Department of Energy issue a license for the portion of the 345 kV line which spans from Structure 60, 677.6 feet east to Structure 59. As detailed in the application and designed drawings, 196.5 feet of that span crosses public waters.

Structure #60
103' Steel 2-pole
Type HF ; CL Custom

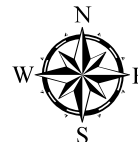
Structure #59
94' Steel 3-pole
Type C ; CL Custom

363 Line

Span = 677.6 ft

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

-  Utility Structure
-  345 kV Line
-  Swamp/Marsh



Prepared by:
NH Department of Energy
Enforcement Division

