

STATE OF NEW HAMPSHIRE

Intra-Department Communication

DATE: April 18, 2022

AT (OFFICE): NH Dept. of Energy

FROM: Michael Soucy *MRS*
Utility Analyst IV – Division of Enforcement

SUBJECT: CRE 2022-011 Eversource Energy
Petition for License to Construct and Maintain Electric Lines Over and
Across Public Waters in Merrimack and Litchfield, New Hampshire.

Division of Enforcement, **Safety Bureau 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

The Division of Enforcement's review of the above petition consisted of the following elements:

- Petition contents, replacement petition contents, and history.
- Applicable State statute.
- Review of the existing crossing(s) previously licensed by the PUC, if any.
- Review of land ownership 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
- Conclusions and Recommendations.

1. Petition contents and history

On April 12, 2022, Public Service New Hampshire d/b/a Eversource Energy (Eversource, or ES) filed a petition for a license pursuant to RSA 371:17 to construct and maintain the Eversource K165 Line, which is an existing 115kV transmission line that crosses public waters in Merrimack and Litchfield, New Hampshire.

In order to meet the requirements for reasonable service to the public, Eversource has previously constructed and currently operates and maintains an overhead 115 kV electrical transmission line, designated as the Eversource K165 Line, originally constructed in 1966. The public water crossing at the Merrimack River that is included in this petition was previously licensed in 1969 under DE-5747 (Order No. 9829).

As part of its ongoing asset condition inspection program, Eversource determined that the single remaining existing wood structure at the Merrimack River crossing, Structure 184, needs to be replaced promptly to continue to function safely and reliably. This structure will be replaced with a weathering steel equivalent that will be located within 10' of the original structure location. Structure 183, being the other structure at the subject crossing span on the East side of the Merrimack River, was replaced from wood to a galvanized steel structure in 2012 and was not licensed as an inadvertent oversight. This license seeks to license both Structures 183 and 184 as steel structures.

The K165's existing three phase conductors, a single OPGW wire, and a single static wire between Structures 183 and 184, whose specifications were identified on Exhibit 2 submitted by ES, will remain unchanged in the course of relocation to the replacement steel structures.

The location of the public water crossings which are the subject of this petition were depicted on the Overview Map as Exhibit 1 submitted by ES and a more detailed location description is as follows:

Exhibit 2 submitted by ES shows that the K165 Line crosses the Merrimack River in the Towns of Merrimack and Litchfield between Structures 183 and 184, which span commences approximately 2,500 feet east from where Eversource transmission line (3195 Line) crosses US Route 3 (Daniel Webster Highway) in Merrimack, which is between BEST Energy Services located at 237 Daniel Webster Highway, Merrimack to the south, and the entrance to Spraying Systems Co. located at 243 Daniel Webster Highway, Merrimack, to the north. The crossing continues east approximately 866 feet to the east bank of the Merrimack River, approximately 1,900 feet west from where the K165 Line crosses Charles Bancroft Highway in Litchfield, which is approximately 275 feet north from the intersection of Charles Bancroft Highway and Cummings Drive in Litchfield.

The location of structures 183 to 184 creates a total span of 866. feet, with a span of 558.9 feet over and across public water.

The following table provides the summary of this petition with all crossings to include structure numbers, types, spans, ES design criteria, and NESC compliance:

Department of Energy Safety Bureau Summary Table

Eversource K165 Line - State Public Water 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)
183	Engineered Steel,	183-184	866.2	30.1	40.9	Y
184	Type T, Weathering Steel, Class-H3					

2. New Hampshire statute referenced in petition

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, it shall petition 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 petition the department of energy for a license in the same manner prescribed for a public utility.

371:17 Licenses for New Poles (2021, 91:260, eff. July 1, 2021)

3. Review of existing license(s) and permissions previously granted by the PUC for these locations of the public water in Merrimack and Litchfield.

The public water crossing at the Merrimack River that is included in this petition was previously licensed in 1969 under DE 5747 (Order No. 9829). Structure 183 is also included in this petition was not previously licensed due to inadvertent oversight when replaced in 2012.

The Merrimack River in Merrimack and Litchfield New Hampshire is listed under the category “Public Rivers and Streams” 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>

Eversource asserts that A New Hampshire Department of Environmental Services (NHDES) wetland Statutory Permit by Notification (SPN) and Shoreland Permit by Notification (PBN) will

be required for temporary impacts associated with the structure replacement of the K165 Line and will be obtained prior to commencement of construction.

The U.S. Army Corps of Engineers (ACOE) does regulate the subject portion of the Merrimack River as navigable waters and the scope of work discussed in this petition at the subject crossing location will be licensed via Self-Verification under the ACOE New Hampshire Programmatic General Permit #4 and which licensing will be accomplished prior to commencement of the maintenance project.

4. Review of land ownership of proposed pole structures

In its petition, Eversource specifies that the licensed and unlicensed structures to be replaced and existing conductors pursuant to this petition, over and across public waters in Merrimack and Litchfield, New Hampshire. 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.

5. Review of NESC code requirements as described in Puc 300

The Safety Bureau reviewed the specifications related to the design and re-construction of this crossing project as described in the petition, attachments, and all supplemental support documents and corrections filed by Eversource 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 K165 Line is an integral part of Eversource's existing electric transmission system in New Hampshire. The crossing location identified in the petition is in the Towns of Merrimack and Litchfield, New Hampshire. The Company asserts in its petition that the existing crossings will be exercised without substantially affecting public rights in the identified public waters in New Hampshire.

The Safety Bureau verified that minimum safe line clearances above the public waters will be maintained at all times and determined that public use and enjoyment of the State-owned land and public water will not be diminished in any material respect as a result of the proposed overhead line crossings.

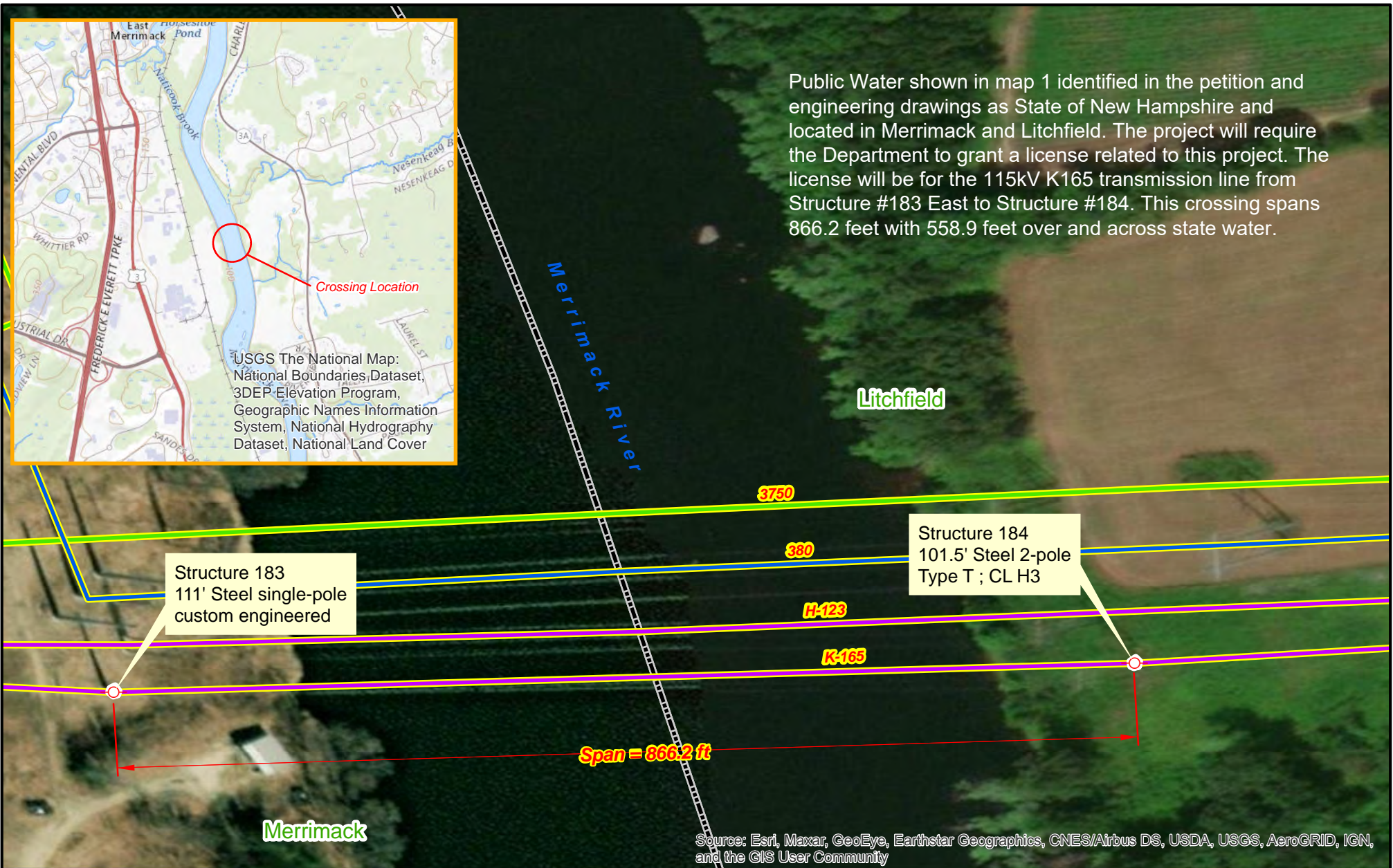
7. Safety Bureau Recommendation:

Based on the results of its review of the petition, attachments, and all other supporting documents, the Safety Bureau recommends that the Department:

- 1) Find that the license Eversource requests in this docket may be exercised without substantially affecting the public rights in State-owned public waters; and
- 2) Grant Eversource a license to construct, install, operate, and maintain electric lines and communication cables pursuant to RSA 371:17 and Puc 306.01, over and across State-owned public water in the Towns of Merrimack and Litchfield, New Hampshire as specified in the petition.

Attachments

Merrimack River - CRE 2022-011 Eversource Crossing



	345 kV Lines		Utility Structure
	115 kV Lines		
	34.5 kV Lines		



	Prepared by:	
	NH Department of Energy Enforcement Division Safety Bureau	