

**THE STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION**

**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
d/b/a EVERSOURCE ENERGY**

Docket No. DE 19-_____

**PETITION OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
D/B/A EVERSOURCE ENERGY
FOR LICENSE TO CONSTRUCT AND MAINTAIN ELECTRIC LINES
OVER AND ACROSS THE NORTH BRANCH RIVER AND STEELS POND
AND LAND OWNED BY THE STATE OF NEW HAMPSHIRE IN THE TOWNS OF
HILLSBOROUGH AND ANTRIM, NEW HAMPSHIRE.**

Pursuant to RSA 371:17, Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource" or "the Company"), a public utility engaged in the transmission, distribution and sale of electricity in the State of New Hampshire, hereby petitions the Public Utilities Commission ("Commission") for a license to construct and maintain electric lines over and across certain waters and land owned by the State of New Hampshire ("State") in the Towns of Hillsborough and Antrim, New Hampshire. In support of this petition Eversource states as follows:

1. In order to meet the reasonable requirements of service to the public, Eversource has previously constructed and currently operates and maintains an overhead 115 kV electrical transmission line, designated as the Eversource X104 Line, over and across the North Branch River in the Town of Hillsborough, and Steels Pond in the Town of Antrim, New Hampshire. The existing crossing over and across Steels Pond in Antrim was previously licensed by the Commission under Order No. 18,782, dated August 4, 1987. The existing crossings over and across the North Branch River in Antrim and Hillsborough were not previously licensed. The state land parcel in Antrim, designated as Tax Map 214, Lot 34, was not previously licensed, as the land was in private ownership when the X104 Line was originally constructed, and therefore no Commission license was required. The locations of these crossings which are the subject of this petition are shown on the USGS locational drawing attached hereto as Exhibit #1.

2. Eversource is commencing a project to modify or rebuild a number of the structures on its existing X104 Transmission Line, which will impact the crossings which are the subject of this petition. Certain of the X104 Line wood transmission structures are approximately 65 years old and have been subject to environmental damage and require replacement or modification for the Line to continue to function safely and reliably. This structure replacement and repair project is part of a reliability project for the X104 Line to continue to meet current as well as future projected electricity demands. No conductor, shield wire or neutral wire will be replaced as part of this project; instead, existing conductors and wires will be transferred to the new, replaced structures (Structure 3, 5, 38, 39 and 44), which will be a steel replacement of the wood structures.

3. Between 2016-2017, Eversource completed two (2) structure replacements (Str. 4, 45) along the existing X104 transmission line, impacting the North Branch River and Steels Pond crossings that are the subject of this petition. A petition was not submitted prior to this work being completed, and as such, will be licensed under this petition. No conductor, shield wire or neutral wire was replaced as part of the project; instead, existing conductors and wires were transferred to the new structures, which were a steel structure replacement of the wood structures.

4. The attached Exhibit #1, dated August 8, 2019, shows the general location of the X104 Line crossings of the North Branch River and Steels Pond to be rebuilt as part of Eversource's project. The design and proposed construction of the replacement crossings for the X104 Line over the North Branch River and Steels Pond will be in accordance with the National Electrical Safety Code (NESC), as shown on the Eversource Plan and Profile Drawing for the water crossing, attached as Exhibits #2, #3, and #4.

5. Wire and structure specifications for the North Branch River crossing are as follows:

- I. Wire:
 - i. Shield Wire: 3#6 Copperweld
 - ii. Transmission Wire: 336.4 kcmil ACSR 26/7
 - iii. OPGW Wire 0.643" diameter
- II. Structure Types and Pole Heights: From east to west
 - i. Str 3: A 3-Pole, 3-65' overall pole length (OAL) (56.5' aboveground pole height [AGH])
 - ii. Str 4: A 2-Pole, 2-70' OAL (61' AGH)
 - iii. Str 5: A 2-Pole, 2-60' OAL (51' AGH)
 - iv. Str 38: A 2-Pole, 2-70' OAL (61' AGH)
 - v. Str 39: A 3-Pole, 3-60' OAL (52' AGH)

- vi. Str 44: A 2-Pole, 2-80' OAL (70' AGH)
- vii. Str 45: A 3-Pole, 1-85', 1-90', 1-95 OAL (81' AGH)

6. The location of the structures creates the following crossing spans:

- a. North Branch River: 554.6 feet (Structure 3 to 4)
- b. North Branch River: 555.1 feet (Structure 4 to 5)
- c. North Branch River: 715.9 feet (Structure 38 to 39)
- d. Steels Pond: 688.2 feet (Structure 44 to 45)
- e. NH Water Resources Board Land Crossing: Map 214, Lot 34, Antrim (Exhibit 3):
 - i. Structures 38-39:
 - ii. Structure Span (ft): 715.9
 - iii. Public Land Span (ft): 39.8

7. All conductors and wires have been drawn in Exhibit #2, Exhibit #3 and Exhibit #4 to show the maximum sag conditions in reference to the water, and to the State land, respectively.

8. Eversource will maintain and operate the clearances of the wire crossings over the North Branch River and Steels Pond at a height no less than what is required by the 2017 National Electrical Safety Code (NESC, Table 232-1). The water crossings require 18.6 feet for 115kV open supply conductors over water areas not suitable for sail boating. The minimum heights over the North Branch River and Steels Pond are depicted on the attached Exhibit #2, Exhibit #3 and Exhibit #4.

9. For the Steels Pond crossing, the 100-year flood level was established based upon FEMA flood zone maps for that area (Zone AE, 852.1 feet, effective date: September 25, 2009). The North Branch River crossing in Antrim can be found in Zone A with a 100-year flood level elevation of 772.2 feet. The North Branch River crossings in Hillsborough can be found in Zone AE with a 100-year flood level elevation of 620.0 feet. The crossings of the North Branch River are based upon the FEMA flood zone maps dated September 25, 2009. These elevations are based on the North American Vertical Datum of 1988 (NAVD 88). For the purposes of calculating clearance, the 100-year flood elevations were used, as it was readily available. This is higher than the 10-year flood elevation required by NESC and provides a conservative clearance requirement.

10. A New Hampshire Department of Environmental Services (NHDES) Utility Maintenance Notification is required for construction access and work activities which involve the temporary

alteration of nontidal wetlands, nontidal surface waters, and banks adjacent to nontidal surface waters under one (1) acre and is applicable to the State water crossing in Hillsborough. A permit application was submitted in early June, 2019 and accepted by NHDES (See NHDES File #2019-00300).

11. A New Hampshire Department of Environmental Services (NHDES) Shoreland Permit by Notification application is required for construction activities near the North Branch River and Steels Pond in Antrim. A permit application will be submitted for the Town of Antrim.

12. The U.S. Army Corps of Engineers (ACOE) does not regulate the subject portions of Steels Pond or North Branch River as navigable waters. As a result, a crossing permit from the ACOE is not required.

13. It is not anticipated that abutters on either side of the Steels Pond crossing or North Branch River crossings will be affected by this petition, as the X104 Line is an existing line, and the crossing structures are being replaced and rebuilt within Eversource's existing utility easements.

14. Eversource submits that the license petitioned for herein may be exercised without substantially affecting the rights of the public in the public waters of the North Branch River or Steels Pond. Minimum safe clearances above the water surfaces will be maintained at all times. The use and enjoyment by the public of the North Branch River will not be diminished in any material respect as a result of the replacement of the overhead line crossing.

WHEREFORE, Eversource respectfully requests that the Commission:

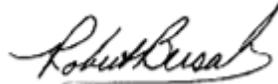
1. Find that the license petitioned for herein may be exercised without substantially affecting the public rights in the public waters which are the subject of this petition;
2. Grant Eversource a license to construct and maintain electric lines over and across the State's land parcel as identified and described in this petition; and
3. Issue an Order *Nisi* and orders for its publication.

Dated at Manchester, New Hampshire, this 12th day of September 2019.

Respectfully submitted,

**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
D/B/A EVERSOURCE ENERGY**

By its Attorney

A handwritten signature in cursive script, appearing to read "Robert Bersak".

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