

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

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

DOCKET No. DE 20-191

**PETITION OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A
EVERSOURCE ENERGY FOR LICENSE TO CONSTRUCT AND MAINTAIN
ELECTRIC LINES OVER AND ACROSS PUBLIC WATERS IN ANTRIM AND
HILLSBOROUGH AND STATE OWNED LAND IN 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 certain licenses and amended licenses (herein, collectively, the "Licenses") to construct and maintain electric lines over and across public waters in Antrim and Hillsborough and State owned land in Antrim, New Hampshire. In support of this petition Eversource states as follows:

1. 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 X104 Line and originally constructed in 1954, over and across certain public waters and State owned lands. There are six public water crossing spans and one State owned land crossing span, encompassing three abutting State owned parcels, which are the subject of this petition. Three crossings of the North Branch River in Antrim and Hillsborough, the one crossing of Steels Pond in Antrim, and one of the three State owned land parcels crossed in Antrim (Map 214, Lot 34) that are the subject of this petition were most recently licensed in Docket 19-149 pursuant to Order 26,355. One of two crossings of Franklin Pierce Lake in Antrim (between Structures 26 and 27) was most recently licensed in Docket 19-134 pursuant to Order 26,334. A second crossing of Franklin Pierce Lake in Antrim (between Structures 35 & 36) that is also the subject of this petition has not been previously licensed. The State owned land

span between Structures 38 and 41 in Antrim also encompasses two additional State owned land parcels (Map 214, Lot 103 & Map 214, Lot 41), administered by the Dept. of Environmental Services, which have not been previously licensed, in addition to the previously licensed crossing of Map 214, Lot 34.

2. The six public water crossing spans and one State owned land crossing span that comprise this petition are depicted on Exhibit 1 as a high-level perspective of the locations. Additional site location descriptions of the span locations are as follows.

Exhibit 2 - The first and second public water crossing spans are located in Hillsborough and encompass two crossings of the North Branch River. The river crossings occur nearest to where the X104 line crosses Saw Mill Road, which is approximately 550 feet west/southwest from the intersection of West Main Street and Saw Mill Road. The first North Branch River crossing occurs approximately 700 feet southwest along the X104 right of way from where the X104 line crosses Saw Mill Road. From the first river crossing, the North Branch River runs southwest, somewhat parallel to the line and meanders under the X104 line, which is where the second river crossing occurs. The second river crossing occurs approximately 1,400 feet southwest along the X104 right of way from where the line crosses Saw Mill Road.

Exhibit 3 - The third public water crossing is over the Franklin Pierce Lake located in Antrim. The X104 line follows the eastern shoreline of Franklin Pierce Lake where the line extends over the lake between Structure 26 and 27. Structure 26 is located within the developed shoreline approximately 4,200 feet southwest from where the X104 line crosses Mountain Side Drive, near the lake's eastern most edge. The span over the Franklin Pierce Lake between Structure 26 and Structure 27, is approximately 71.4 feet. Structure 27 is located approximately 2,050 feet from where the X104 line crosses Pierce Lake Road, which is approximately 0.35 miles west from the intersection of Pierce Lake Road and Knapton Circle.

Exhibit 4 - The fourth public water crossing span is also over the Franklin Pierce Lake in Antrim. The X104 line runs southwest along the eastern shore of the lake and crosses the lake at the southern end. From the point along Pierce Lake Rd. where it changes from pavement to dirt, the

line continues south and crosses Franklin Pierce Lake between Structures 35 and 36, approximately 1,450 feet from said point along Pierce Lake Road.

Exhibit 5 - The fifth public water crossing is over the North Branch River which enters Franklin Pierce Lake just below from where the X104 line crosses the river. From the aforementioned second Franklin Pierce Lake crossing between Structure 35 and 36, the X104 line runs southwest to where it crosses Winklemans Point, approximately 0.23 miles from the intersection of Franklin Pierce Highway (NH State Route 9) and Winklemans Point. The line continues southwest and crosses the North Branch River approximately 325 feet from Winklemans Point between Structure 38 and 39.

Exhibit 6 - The X104 also crosses State owned land on both sides of the North Branch River at the public water crossing span described in the previous paragraph. The State owned land span begins approximately 280 feet southwest from where the line crosses Winklemans Point, between Structure 38 and the North Branch River. The X104 line again crosses State owned land on the south side of the North Branch River for an additional 863.8' where the State owned land span ends at the northeast edge of Algonquin Rd., just beyond Structure 40.

Exhibit 7 - The sixth public water crossing is over Steels Pond in Antrim between Structures 44 and 45. From where the X104 line crosses State owned land as described in the previous paragraph, it continues southwest to where it crosses Elm Ave and then Steels Pond, approximately 1,475 feet southwest from where the line crosses Elm Ave, which is approximately 0.19 miles from the intersection of Elm Ave and Keene Road (NH State Route 9).

3. This petition supports Eversource's plan to replace a total of three existing wood structures with steel structures: Structure 5 at a crossing of the North Branch River in Hillsborough, *See*, Ex. 2 (the complimentary Structure 4 at said span was replaced with a steel structure in 2016 pursuant to Order 26, 355 in Docket 19-149); and Structures 35 and 36 at a crossing of the Franklin Pierce Lake in Antrim, *See*, Ex. 6A. The configuration of the three steel replacement structures is depicted in the Structure Details of Exhibits 2 and 4 hereto. The three replacement structures will be relocated within 10' of their current location. With these three steel replacement structures, all

structures supporting the seven spans that are the subject of this petition will have been upgraded from wood to steel. Please note that Structure 5 was previously licensed as a wood to steel replacement under Order 26,355 in Docket DE 19-140, but there was a discrepancy in that Docket wherein the supporting Exhibit depicted a wood structure and that structure replacement has not been performed. For avoidance of confusion, the Structure 5 replacement from wood to steel is included in this petition seeking an amended license for said span and will be constructed in accordance with the descriptions under this replacement petition and the specification noted and depicted on Exhibit 2 hereto.

4. At the two crossing spans where the structure replacements discussed in the previous paragraph are located, the existing conductor, having the specifications noted in the Cable Schedule on the attached Exhibits, will be transferred from the existing poles to the steel structures.

5. The X104 Line project also encompasses replacement of the two existing pole top mounted shield wires at all seven crossing spans that are the subject of this petition with OPGW communications wires having the specifications noted in the Cable Schedule on Exhibits 2, 3, 4, 5, 6, and 7. Across all of the spans that are the subject of this petition, a communication fiber cable (ADSS 72F) exists in an under-built condition below the conductors. In conjunction with the installation of two OPGW communications wires as described under this petition, that under-built ADSS 72F wire will be removed.

6. The design of the three replacement structures for the X104 Line over the North Branch River and Franklin Pierce Lake are in accordance with the 2012 National Electrical Safety Code (NESC) and are depicted on the Eversource Plan and Profile Drawings, attached as Exhibits 2 and 4.

7. Wire specifications and loading condition to establish maximum sag for the seven crossing spans that are the subject of this petition are as indicated on the Structure Detail and Profile Views of Exhibits 2, 3, 4, 5, 6, and 7.

8. The location of structures and max sag conditions creates the following crossing spans¹:

- I. North Branch River: Hillsborough (Exhibit 2)
 - i. Structures: 3 to 4
 - ii. Structure Span (ft): 537'
 - iii. Public Waters Span (ft): 84.2'
- II. North Branch River: Hillsborough (Exhibit 2)
 - i. Structures: 4 to 5
 - ii. Structure Span (ft): 565'
 - iii. Public Waters Span (ft): 150'
- III. Franklin Pierce Lake: Antrim (Exhibit 3)
 - i. Structures: 26 to 27
 - ii. Structure Span (ft): 510'
 - iii. Public Waters Span (ft): 71.4'
- IV. Franklin Pierce Lake: Antrim (Exhibit 4)
 - i. Structures: 35 to 36
 - ii. Structure Span (ft): 995'
 - iii. Public Waters Span (ft): 485.2'
- V. North Branch River: Antrim (Exhibit 5)
 - i. Structures: 38 to 39
 - ii. Structure Span (ft): 723'
 - iii. Public Waters Span (ft): 44.3'
- VI. State Owned Land, Map 214, Lots 34, 103 & 41: Antrim (Exhibit 5 & 6)
 - i. Structures: 38 to 41

¹ The measurements under this Section 8 deviate slightly from the same spans documented under the petition in DE 19-149 and DE 19-134 owing to as-built information that has been incorporated into the Exhibit drawings and measurements supporting this petition.

- ii. Structure Span (ft): 1589.2'
- iii. State Owned Land Span (ft): 902.7'

VII. Steels Pond: Antrim (Exhibit 7)

- i. Structures: 44 to 45
- ii. Structure Span (ft): 628'
- iii. Public Waters Span (ft): 458.3'

9. All conductors and cables have been drawn on Exhibits 2, 3, 4, 5, 6, and 7 to show the minimum clearance at maximum sag conditions in reference to the depicted public water and State owned land crossings.

10. Eversource will maintain and operate the clearances of the crossings at a height no less than what is required by the 2012 National Electrical Safety Code (NESC, Table 232-1), which is: (i) 18.6' for water areas not suitable for sail boating in regards to the two public waters crossings of the North Branch River and crossing of Steels Pond depicted on Exhibits 2, 5 and 7; (ii) 30.1' for water areas suitable for sail boating with a surface area over 20 acres and under 200 acres in regards to the two crossings of Franklin Pierce Lake depicted on Exhibits 3 and 4; and (iii) 20.1' for roads, streets and other areas subject to truck traffic in regards to the State owned land crossing depicted on Exhibits 5 and 6. The actual minimum height over the public waters and State owned lands are depicted on the attached Exhibits and exceeds the minimum requirement.

11. A 100-year flood elevation level for the six public water crossing spans was established based upon confirmation of 100 year flood elevation from the FEMA Flood Map Service Center, National Flood Hazard Layer FIRMette dated 1/16/2020.

12. A New Hampshire Department of Environmental Services (NHDES) Statutory Permit by Notification (SPN) for temporary impacts to wetlands in Antrim and Hillsborough will be required to accomplish the project scope, as well as a Shoreland Permit by Notification (PBN) for temporary impacts within the shoreland buffer to the North Branch River in Hillsborough and Antrim, Franklin Pierce Lake in Antrim and Steels Pond in Antrim. Said SPN's and PBN's will be obtained prior to commencement of construction. No other environmental permitting is required.

13. The U.S. Army Corps of Engineers (ACOE) does not regulate the subject portions of North Branch River in Hillsborough and Antrim, Franklin Pierce Lake in Antrim and Steels Pond in Antrim, as navigable waters. As a result, a crossing permit from the ACOE is not required.

14. It was not anticipated that abutters on either side of the public water crossing spans and State owned land span that are the subject of this petition would be affected by the scope of this project as the X104 Line is an existing line and the structure replacement and OPGW installation work at the seven crossing spans that are the subject of this petition will be performed fully within Eversource's existing utility easements.

15. Eversource submits that the Licenses petitioned for herein may be exercised without substantially affecting the rights of the public in the public waters of the North Branch River in Hillsborough and Antrim, Franklin Pierce Lake in Antrim and Steels Pond in Antrim, or the State Owned Land in Antrim. Minimum safe clearances above the water and land surface will be maintained at all times. As such, the use and enjoyment by the public of the public waters and State owned land will not be diminished in any material respect as a result of the proposed scope of work.

WHEREFORE, Eversource respectfully requests that the Commission:

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

Dated at Manchester, New Hampshire this 2nd day of February, 2021.

Respectfully submitted,
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
D/B/A EVERSOURCE ENERGY
By Its Attorney

A handwritten signature in black ink, appearing to read "Erik R. Newman", is written over a horizontal line.

Erik R. Newman, Senior Counsel, Legal
780 North Commercial Street
Manchester, NH 03101
(603) 634-2459