

THE STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION

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 BEARCAMP RIVER IN THE TOWN OF TAMWORTH, NEW HAMPSHIRE.

TO THE PUBLIC UTILITIES COMMISSION:

Public Service Company of New Hampshire d/b/a Eversource Energy (Eversource), a public utility engaged in the generation, transmission, distribution and sale of electricity in the State of New Hampshire, hereby petitions the Public Utilities Commission ("Commission"), pursuant to RSA 371:17, for a license to construct and maintain electric lines over and across the public waters of the Bearcamp River in the Town of Tamworth, New Hampshire, and in support of this petition 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 electric line across the Bearcamp River west of the Tamworth Road (NH Route 113) bridge in Tamworth, New Hampshire. At the direction of the New Hampshire Department of Transportation (NHDOT), Eversource is being required to modify this 12,470-volt circuit, known as the 3116X1 Line<sup>1</sup>, to allow the NHDOT to complete a bridge rehabilitation project. This modification will necessitate a relocation and change-out (to a taller pole) of the Eversource pole plant on the northerly side of the River (Pole No. 8/246) and a change-out (to a taller pole) of the Eversource pole plant on the southerly side of the River, in its current position (Pole No. 8/247), to accommodate NHDOT's project.
2. The modification of the 3116X1 Line over the Bearcamp River in Tamworth, NH is shown in the attached Exhibit 1 Plan and Profile Drawing, and has been designed and will be constructed in accordance with the 2012 National Electrical Safety Code (NESC). Exhibit 4 shows the USGS location of the modified crossing.
3. Wire and structure specifications:
  - a. 3116X1 Line:
    - i. Wire: 3 Phase #2 HD Copper 7 strand conductor with #2 6/1 ACSR Bare neutral
    - ii. Structure Type: DTR 10.421.1D on the north and south, per Exhibit 2.
    - iii. Poles Structures: 50 foot, class 2, single wood pole on north (Pole No. 8/247) and 50 foot, class 2, single wood pole on the south (Pole No. 8/246).

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<sup>1</sup> Due to oversight or the application of different public water or navigability criteria at the time of original construction, the existing 3116x1 Line crossing was not previously licensed by the Commission; however, the relocated crossing will be licensed under this Petition.

4. The location of the pole structures creates the following crossing span:
  - a. 3116X1 Line: 211 feet
5. All conductors have been drawn in Exhibit 1 to show the maximum and minimum sag conditions in reference to the water.
6. Eversource will construct, maintain and operate the clearance of the wire crossing over the River at a height no less than is required by the 2012 National Electrical Safety Code (NESC, Table 232-1) which is 17 feet for open supply conductors (750 V to 22 kV to ground) and 14 feet for the neutral conductor to water areas not suitable for sail boating. The minimum height over the River is depicted on the attached Exhibit 1.
7. The 100-year flood level was established based upon FEMA flood zone maps for the crossing area (Zone AE, effective date: March 19, 2013). This elevation is based on the national Geodetic Vertical Datum of 1929 (NAVD 1929). For the purposes of calculating clearance, the 100-year flood elevation was used, as it was readily available. This is higher than the 10-year flood elevation required by NESC and provides a conservative clearance requirement, see Exhibit 3.
8. It is not anticipated that abutters on either side of the River will be affected, as this is a modification of an existing crossing for which the pole structures have been previously licensed in the public right-of-way of Tamworth Road (NH Route 113). Pole No. 8/247 will be reset in its current position, and pole No. 8/246 will be relocated northerly, but still within the public right-of-way. Pole No. 8/246 and line spans between poles have been or will be re-licensed with the applicable highway authority.
9. 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 Bearcamp River. Minimum safe line clearances above the River surfaces and affected shorelines will be maintained at all times. The use and enjoyment by the public of the River will not be diminished in any material respect as a result 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 public rights in the public waters which are the subject of this Petition;
2. Grant the Company a license to maintain electric lines over and access the public waters as identified and described in this Petition; and
3. Issue an order Nisi and orders for its publication.

Dated at Manchester, New Hampshire this 20<sup>TH</sup> day of OCTOBER, 2017.

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 "C. Allwarden", written over a horizontal line.

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