

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 AMMONOOSUC RIVER IN THE TOWN OF BETHLEHEM, 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 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 Ammonoosuc River in the Town of Bethlehem, 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 distribution electric line across the Ammonoosuc River, situated downstream of the Main Street (NH Route 302) bridge, in the Town of Bethlehem, New Hampshire (and which is also situated upstream, or northerly, of the abandoned and no longer used Old NH Route 302 bridge). This is a single phase 7,200 volt (7.2 kV) circuit, designated by Eversource as part of the 348X3 Line¹. In order to accommodate the three phase power needs of a new customer project, Eversource has designed a proposed three phase line extension and is required to modify the 348X3 Line in this area to upgrade the electric system to three-phase 34,500 volt (34.5 kV) power. This will require rebuilding the existing crossing, and to reset the crossing Pole No. 352/68 and Pole No. 352/70, to allow for the system upgrade.
2. The attached Exhibit 1 -USGS Locus Map, dated December 3, 2018, shows the general location of the proposed rebuild of the line crossing over the Ammonoosuc River. The design and proposed construction of the 348X3 Line over the Ammonoosuc River is shown in the attached Exhibit 2 Plan and Profile Drawing, dated August 17, 2018, revised to December 3, 2018, and has been designed and will be constructed in accordance with the applicable requirements of the National Electrical Safety Code (NESC).
3. Wire and structure specifications:
 - a. 348X3 Line:
 - i. Wire: 3 Phase 1/0 Spacer Cable with 1/0 ACSR neutral

¹ Due to oversight or the application of different public water or navigability criteria at the time of original construction, the existing 348X3 Line crossing was not previously licensed by the Commission; however, the relocated crossing will be licensed under this Petition.

- ii. Structure Type: DTR 10.349 on the east and west, per Exhibit 3.
 - iii. Poles Structures: 50-foot, class 1, single wood pole on the east (No. 352/70), 50-foot, class 1, single wooden pole on the west (No. 352/68)
- 4. The location of the pole structures creates the following crossing span:
 - a. 348X3 Line: 256 feet
- 5. All conductors are drawn in Exhibit 2 to show the maximum 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 2.
- 7. The 100-year flood level was established based upon FEMA flood zone maps for the crossing area (Zone A, effective date: February 20, 2008). 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 is readily available. This is higher than the 10-year flood elevation required by NESC and provides a conservative clearance requirement.
- 8. The poles for this crossing are jointly owned with Consolidated Communications, and are located in the Consolidated Communications maintenance area. The poles are located within the State of New Hampshire right of way for Old NH Route 302, and will be licensed through the State. Consolidated Communications will be resetting the poles and will apply, or has already applied, for new pole licenses.
- 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 Ammonoosuc 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 across the public waters as identified and described in this petition; and

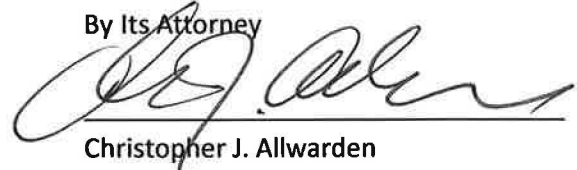
3. Issue an Order Nisi and orders for its publication.

Dated at Manchester, New Hampshire this 14th day of DECEMBER, 2018.

Respectfully submitted,

PUBLIC SERVICE COMPANY OF NEW
HAMPSHIRE D/B/A EVERSROUCE
ENERGY

By Its Attorney

A handwritten signature in black ink, appearing to read "C. J. Allwarden", written over a horizontal line.

Christopher J. Allwarden
Senior Counsel, Legal Department
Eversource Energy Service Company
780 North Commercial Street
Manchester, NH 03101
(603 634-2459)