## 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 ANDROSCOGGIN RIVER IN THE CITY OF BERLIN, 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 Androscoggin River in the City of Berlin, 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 as previously constructed and currently operates and maintains an overhead electric line across the Androscoggin River, from the intersection of Main Street (NH Route 16) and Pleasant Street to the existing Bio-power Berlin Station east of Community Street in Berlin, New Hampshire. It is necessary for Eversource to relocate the 4,160-volt circuit, known as the 2H1 and 2H2 Line<sup>1</sup>, approximately 300 feet west, to the intersection of Main Street (NH Route 16) and High Street to the northern end of Community Street, to accommodate a City of Berlin roadway project. The roadway improvements are intended to replace aging infrastructure, and the line relocation will allow Eversource to update antiquated equipment along the 2H1 and 2H2 Line.
- The relocation of the 2H1 and 2H2 Line over the Androscoggin River in Berlin 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 proposed new crossing.
- 3. Wire and structure specifications:
  - a. 2H1 and 2H2 Line:
    - i. Wire: Spaced cable with (3) 477, 19 strand TW and (1) 052 AWA Messenger
    - ii. Structure Type: DTR 10.437 on northwest and southeast, per Exhibit 2.
    - iii. Poles Structures: 50 feet, class 1, single wood pole on northwest (No. 225/Y) and 50 feet, class 1, single wood pole on the southeast (No. 410A/1).
- 4. The location of the pole structures creates the following crossing span:
  - a. 2H1 AND 2H2 Line: 268 feet

<sup>&</sup>lt;sup>1</sup> Due to either oversight or the application of navigability or other crossing license criteria at the time of original construction, the existing 2H1 and 2H2 line crossing over the Androscoggin has not been previously licensed by the Commission. The relocation of this crossing will be licensed under this petition.

- 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: February 20, 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 the poles for this crossing are to be located on property on which Eversource already has existing easement rights from the City of Berlin (Structure 225/Y), and on property which is owned by Eversource (Structure 410A/1). The poles for this crossing, Structures 225/Y and 410A/1, are change-outs and resets of existing poles in their current locations on each side of the River.
- 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 Androscoggin 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 <u>Nisi</u> and orders for its publication.

Dated at Manchester, New Hampshire this 17th day of October, 2017.

Respectfully submitted,

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

**ENERGY** 

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