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 SUGAR RIVER IN THE CITY OF CLAREMONT, 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 Sugar River in the City of Claremont, 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 currently operates and maintains an overhead electric line which crosses the Sugar River south of Washington Street (NH Route 11 & 103) in Claremont, New Hampshire. It is necessary for Eversource to modify this Eversource 15,000-volt circuit, known as the 75W2 Line¹ where it crosses the Sugar River, to create a loop feed between the Eversource 60W1 and 75W2 circuits, and the Eversource 74W1 circuit. To accomplish this, part of the 60W1 circuit and part of the 75W2 circuit, including the Sugar River crossing, must be reconductored to a 477-primary spacer cable. The existing Eversource crossing pole on the west side of the River (No. 3/8) will be unchanged and used in its present location, while the crossing pole on the east side of the River (No. 46-3-1A) will be changed out to a new, taller pole.
- The modification of the 75W2 Line over the Sugar River in Claremont, 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. 75W2 Line:
 - i. Wire: 3 Phase 477 AAC Hendrix Spacer Cable with 4/0 messenger

¹ This circuit was acquired by Eversource in connection with the 2004 purchase of the pole plant assets of The Connecticut Valley Electric Company. No prior crossing license has been found, and it is believed that due to oversight or the application of different public water or navigability criteria at the time of original construction, the existing 75W2 Line crossing was not previously licensed by the Commission. The modification of this crossing will be licensed by Eversource under this petition.

- ii. Structure Type: DTR 10.519 on the west and DTR 10.518 on the east, per Exhibit 2
- iii. Poles Structures: 45 foot, single wood pole on the west (No. 3/8) and 55 foot, single wood pole on the east (No. 46-3-1A).
- 4. The location of the pole structures creates the following crossing span:
 - a. 75W2 Line: 401 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: May 23, 2016). 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 Eversource has easement rights. One of the two crossing poles is remaining unchanged (No. 3/8), and the other pole (No. 46-3-1A) will be changed out but will remain in a location covered by the existing easement on the easterly 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 Sugar 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:

- 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 24m day of Oc 70 BER, 2017.

Respectfully submitted,

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

ENERGY

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