THE STATE OF NEW HAMPSHIRE BEFORE THE PUBLIC UTILITIES COMMISSION

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

Docket No. DE 19-148

PETITION OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE
D/B/A EVERSOURCE ENERGY
FOR LICENSE TO CONSTRUCT AND MAINTIN ELECTRIC LINES
OVER AND ACROSS THE MERRIMACK RIVER
IN THE TOWN OF BEDFORD AND CITY OF MANCHESTER,
AND OVER AND ACROSS LAND OWNED BY THE STATE OF NEW HAMPSHIRE
IN THE TOWN OF BEDFORD, NEW HAMPSHIRE

Pursuant to RSA 371:17, 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") for a license to construct and maintain electric lines over and across the Merrimack River in Bedford and Manchester, and across land owned by the State of New Hampshire ("State") in Bedford, New Hampshire. In support of this petition Eversource 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 34.5 kV electrical distribution line, designated as the Eversource 324 Line, over and across the Merrimack River in the Town of Bedford, and in the City of Manchester, and over and across a parcel of land owned by the State of New Hampshire in Bedford, New Hampshire. This existing crossing has been previously licensed by the Commission under Order No. 12,219, dated April 21, 1976, issued in Docket DE 76-22. The location of the crossing which is the subject of this petition is shown on the USGS locational drawing attached hereto as Exhibit 1. The State's land parcel is east of an old railroad bed situated east of Iron Horse Drive in Bedford, and is designated as Tax Map 35, Lot 15, on the Town of Bedford's tax records. The 324 Line crossing of the State's land parcels have

not been previously licensed, as this parcel was in private ownership when the 324 Line was originally constructed, and no commission license was required.¹

2. Eversource is commencing a project to replace one (1) wooden structure (Str. 39) on its existing 324 Distribution Line, which will impact the crossing and State land location which is the subject of this petition. This structure replacement and repair project is part of Eversource's ongoing maintenance projects to meet current as well as future projected electricity demands. No conductor, shield wire or neutral wire will be replaced as part of this project; instead, existing conductors and wires will be transferred to the new, replaced structure, which will be a steel structure replacement of the wood structure.

3. In 2017, Eversource replaced one (1) wooden structure (Str. 40) along the existing 324 distribution line, which impacted the waterbody and state land crossing which is the subject of this petition. A petition was not submitted prior to this work being completed, and as such, this portion of the petition is after-the-fact. No conductor, shield wire or neutral wire was replaced as part of the project; instead, existing conductors and wires were transferred to the new, replaced structure.

4. The attached Exhibit 1, dated April 11, 2019, revised through August 19, 2019, shows the general location of the 324 Line crossing of the Merrimack River and State land parcel to be rebuilt as part of Eversource's project. The design and proposed construction of the replacement crossing for the 324 line over the Merrimack River and over the State's land parcel will be in accordance with the National Electrical Safety Code (NESC), as shown on the Eversource Plan and Profile Drawing for the crossing of Merrimack River and State land (see attached Exhibit 2).

5. Wire and structure specifications for the Merrimack River and State land crossing are as follows:

I. Wire:

i. Neutral Wire: 266 ACSR 6/7

ii. Conductor Wire: 266 ACSR 6/7

¹ The State of New Hampshire, acquired the subject parcel designated as Tax Map 35, Lot 15 by deed from Town of Bedford in 1996 (Hillsborough County Registry of Deeds Book 5743/1581), and the acquisition was subject to the existing Eversource right of way on the property. The structure replacements of the 324 line crossing of the State's lands will be newly licensed under this petition.

- II. Structure Types and Pole Heights: From north to south
 - i. Str 39: Type 10.638, 3-Pole, 3-85' OAL (74.5' AGH)
- I. Wire:
 - i. Neutral Wire: 266 ACSR 6/7
 - ii. Conductor Wire: 266 ACSR 6/7
- II. Structure Types and Pole Heights: From north to south
 - i. Str 40: Type 10.615, 3-Pole, 3-70' OAL (61' AGH)
- 6. The location of the structures creates the following crossing span:
 - i. Merrimack River: 748.66 feet (structure to structure)
 - ii. State of New Hampshire Land Crossing: Tax Map 35, Block 15 Structure Span (ft): 748.66
 - iii. State Land Span (ft): 124.58
- 7. All conductors and wires have been drawn in Exhibit 2 to show the maximum sag conditions in reference to the waters of the Merrimack River, and to the State land, respectively.
- 8. Eversource will maintain and operate the clearances of the crossings over the Merrimack River and the State land location at a height no less than what is required by the 2017 National Electrical Safety Code (NESC, Table 232-1), which is 15.5 feet to ground for 34.5 kV open supply conductors over any vehicle/horse accessible areas and 28 feet over waters not suitable for sail boating. The minimum height over the Merrimack River is depicted on the attached Exhibit 2.
- 9. For the Merrimack River crossing, the 100-year flood level was established based upon a combination of field survey and FEMA flood zone maps for that area (Zone X and Zone AE, effective date: May 23, 2006). This elevation is based on the North American Vertical Datum of 1988 (NAVD 88). 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.
- 10. A New Hampshire Division of Environmental Services (NHDES) Shoreland Permit by Notification application is required for construction activities in the vicinity of the Merrimack River. The permit by notification will be submitted prior to construction.

- 11. The US Army Corps of Engineers (USACE) regulates this portion of the Merrimack River as a federally-designated navigable water. Eversource previously consulted with the USACE and was advised that, when wire and cable clearances will increase over those presently in place, no Army Corps permit modifications are required. The replacement of structure 39 and past replacement of structure 40 will entail raising the 324 line within the existing corridor, so a permit modification by the ACOE will not be required.
- 12. It is not anticipated that abutters on either side of the Merrimack River crossing, and on either side of the State land crossing will be affected by this petition, as the 324 Line is an existing line, and the crossing structures are being replaced and rebuilt within Eversource's existing utility easements, and fee owned property. As explained in footnote 1 herein, the State's land parcel was acquired by the State subject to the Eversource right of way easement, and no new or additional real property rights are required to replace the structures within the State's parcel.
- 13. 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 Merrimack River, or in the State's land parcel. Minimum safe clearances above the water and land surfaces will be maintained at all times. The use and enjoyment by the public of the Merrimack River and the State's land parcel will not be diminished in any material respect as a result of the replacement 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 the public rights in the public waters which are the subject of this petition;
- 2. Grant Eversource a license to construct and maintain electric lines over and across the State's land parcel as identified and described in this petition; and
- 3. Issue an Order Nisi and orders for its publication.

Dated at Manchester, New Hampshire, this 11th day of September, 2019.

Respectfully submitted,

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

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