THE STATE OF NEW HAMPSHIRE BEFORE THE DEPARTMENT OF ENERGY

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE d/b/a EVERSOURCE ENERGY

DOCKET No. CR 2022-

PETITION OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY FOR LICENSE TO CONSTRUCT AND MAINTAIN ELECTRIC LINES OVER AND ACROSS STATE OWNED LAND AND PUBLIC WATERS IN BOW, CONCORD, AND PEMBROKE, NEW HAMPSHIRE

Pursuant to RSA 371:17, Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource" or "the Company"), a public utility engaged in the transmission, distribution and sale of electricity in the State of New Hampshire, hereby petitions the Department of Energy ("Department"), for a license to construct and maintain electric lines over and across State owned land and public waters in Bow, Concord and Pembroke, New Hampshire. In support of this petition Eversource states as follows:

1. In order to meet the requirements for reasonable service to the public, Eversource has previously constructed and currently operates and maintains an overhead 115 kV electrical transmission line, designated as the Eversource P145 Line, originally constructed in 196, over and across State owned land and public waters in Bow, Concord, and Pembroke, New Hampshire. The Merrimack River crossing between new Structure 38 and 39 (old Structures 40 and 41) was licensed in a batch petition in docket DE 76-22 pursuant to Order 12,219, and the public water crossing over Turtle Town Pond between new Structures 125 to 129 (old Structures 131 to 135) is licensed in a batch petition in docket DE 94-272 pursuant to Order 21,817 (the relevant portions of which are included with this petition). The remaining crossings that are the subject of this petition comprising State owned land in Pembroke and two spans across the Soucook River have not been previously licensed likely owing to oversite, however all of the State owned land and public waters along the P145 line will be fully licensed as a result of this petition.

2. The proposed project for the P145 encompasses structure replacement and reconductoring. All 8 structures at the State owned land crossing span will be replaced with weathering steel equivalents having the design and specifications depicted and noted in the Structure Details of Exhibits 4 through 6. The replacement structures will be renumbered as detailed under the Structure Table enclosed herewith as Exhibit 10. The project also includes replacement and renumbering of 11 structures supporting four public water crossing spans, as depicted in the Structure Details of Exhibit 2, 3, and 5 through 9 and whose renumbering is reflected in the Exhibit 10 Structure Table. The proposed project also encompasses reconductoring the three existing conductors with three new conductors having the specifications detailed under the Cable Schedule on Exhibits 2, 3, 6 and 9 hereto. Additionally, both existing pole top mounted shield wires will be replaced with two OPGW communication cables having the specifications noted in the said Cable Schedules.

3. New and renumbered Structures 38, 39, 48, 49, 65 to 71, 125, 126, and 128 will be installed within 10 feet of the existing locations: New and renumbered Structure 63 will be moved approximately 100 feet north, and new Structure 64 will be moved approximately 20 feet south to account for the permanent removal of existing Structures 65 and 67, both of which are currently located on State owned land. Additionally, new and renumbered Structure 72 is being moved 20 feet north to move away from steep slopes for ease and safe construction and future maintenance; new and renumbered Structure 127 is being moved 20 feet north to minimize impacts to adjacent wetlands during construction and future maintenance; new and renumbered Structure 29 is being moved 20 feet south to avoid potential impacts to nearby sensitive environmental resources during construction and future maintenance. Certain changes in structure heights are required to meet current safety and reliability clearance requirements for the replacement cables and new structure locations and also to address uplift considerations specific to the surrounding terrain. Those height changes are detailed under the enclosed Structure Table as Exhibit 10.

4. The four public water crossing and one State owned land crossing spans that are the subject of this petition are depicted on Exhibit 1 as a high-level perspective of the locations. Additional site location descriptions of the span location are as follows.

Exhibit 2– The P145 Line crosses the Merrimack River in the Towns of Bow and Concord between new Structures 38 and 39, which span commences near the end of Garvens Falls Road in the Town of Bow, approximately 265 feet south of where Garvins Falls Road crosses the existing Pan Am rail road and extending east approximately 579 feet to the east bank of the Merrimack River, to Structure 39. That end of the span is approximately 1,500 feet west from where the P145 Line crosses Garvins Falls Road, which is approximately 1.65 miles southeast from the intersection of Garvins Falls Road and Manchester Street (State Route 3).

Exhibit 3 – The P145 Line crosses the Suocook River in the Towns of Pembroke and Concord between new Structures 48 and 49, which span commences approximately 2,100 feet from where the P145 line crosses Garvins Falls Road in Pembroke, which is approximately 1.65 miles southeast from the intersection of Garvins Falls Road and Manchester Street (State Route 3). The crossing extends 53 feet east to the east and ends at the east bank of the Suocook River, which is approximately 3,100 feet southwest from the P145 Line crosses Pembroke Street (State Route 3), which is approximately 1,300 feet northwest from the intersection of Pembroke Street (State Route 3) and Sheep Davis Road (State Route 106).

Exhibit 4, 5 and 6 – The P145 Line crosses a State-owned land parcel associated with NH National Guard Facility in the Town Pembroke between new Structures 63 and 72, which span starts approximately 3,500 feet northeast from where the P145 Line crosses Pembroke Street (State Route 3), which is approximately 1,300 feet northwest from the intersection of Pembroke Street (State Route 3) and Sheep Davis Road (State Route 106). The State owned land span extends approximately 3,591 feet north to the State owned land boundary, which coincides with the southern bank of the Suocook River, which is approximately 2,100 feet south from where the P145 Line crosses Chenell Drive, which is approximately 750 feet west from the intersection of Chenell Drive and Sheep Davis Road (State Route 106).

Exhibit 5 and 6 – The P145 Line crosses the Suocook River in the Town of Pembroke between new Structures 71 and 72, which span commences approximately 7,200 feet northwest from the intersection of Pembroke Street (State Route 3) and Sheep Davis Road (State Route 106). The public water crossing extends approximately 111 feet to the northern bank of the Suocook River, which is approximately 2,075 feet south from where the P145 Line crosses Chenell

Drive, which is approximately 750 feet west from the intersection of Chenell Drive and Sheep Davis Road (State Route 106).

Exhibit 7 through 9 – The P145 Line crosses Turtle Town Pond in the City of Concord between new Structures 125 and 129, which span begins approximately 1,700 feet northwest from where the P145 Line crosses Appleton Street, which is approximately 3,100 feet east from the intersection of Appleton Street and Shawmut Street. The public water crossing extends northwest approximately 1,816 feet and ends approximately 100 feet northwest of where the P145 Line crosses Oak Hill Road, which is approximately 850 feet northeast from the intersection of Oak Hill Road and Irving Drive.

5. Wire specifications and loading condition to establish maximum sag for the crossing span that is the subject of this petition are as indicated on the Structure Detail and Profile View of Exhibit 2 through 6, 7 and 8.

- 6. The location of structures and max sag conditions creates the following crossing span:
 - I. Merrimack River: Bow and Concord (Exhibit 2)
 - i. Renumbered Structures: Str. 38 & 39
 - ii. Structure Span (ft): 897'
 - iii. Public Water Span (ft): 579'
 - II. Suocook River: Concord and Pembroke (Exhibit 3)
 - i. Renumbered Structures: Str. 48 to 49
 - ii. Structure Span (ft): 464'
 - iii. Public Water Span (ft): 53'
 - III. State Owned Land: Pembroke Map/Lot 632/18 (Exhibit 4 through 6)
 - i. Renumbered Structures: Str. 63 to 72
 - ii. Structure Span (ft): 4,236'
 - iii. State Owned Land Span (ft): 3,522'
 - IV. Suocook River: Pembroke (Exhibit 5 and 6)

- i. Renumbered Structures: Str. 71 to 72
- ii. Structure Span (ft): 754'
- iii. Public Water Span (ft): 111'
- V. Turtle Town Pond: Concord (Exhibit 7 through 9)
 - i. Renumbered Structures: Str. 125 to 129
 - ii. Structure Span (ft): 2,251'
 - iii. Public Water Span (ft): 1,816'

7. All conductors and wires have been drawn on Exhibit 2 through 5, 7 and 8 to show the minimum clearance at maximum sag conditions in reference to the public waters and State owned land crossings. Flood elevations from which clearances over public waters were calculated are based on elevations and datum noted in Notes 2 and 3 of Exhibits 2, 3, 6 and 9.

8. Eversource will maintain and operate the clearances of the crossing at a height no less than what is required by the 2012 National Electrical Safety Code (NESC, Table 232-1), which is: 18.6' for 115 kV wires over water areas not-suitable for sail boating or where sail boating is prohibited; 20.1' for 115 kV wires over other areas traversed by vehicles such as cultivated, grazing, forest, and orchard lands, industrial sites, commercial sites, etc.; and 36.1' for 115 kV wires over water areas suitable for sail boating, 200-2000 acres. The actual minimum height over public waters and State owned lands are depicted on the attached Exhibit 2 through 5, 7 and 8 and summarized in the Table encompassing Exhibit 10 and exceeds the minimum requirement.

9. This maintenance project on the P145 will require a New Hampshire Department of Environmental Services (NHDES) Statutory Permit Notification (SPN) permit for temporary impacts to wetlands associated with the construction and installation of new structures, including those that are the subject of this petition in the Towns of Bow, Concord and Pembroke. Also, a Shoreland Permit by Notification (PBN) is needed for temporary impacts within the shoreland buffer of the Merrimack River, the Suocook River, and Turtle Town Pond. Those permits will be obtained prior to commencement of construction of the P145 project.

10. The U.S. Army Corps of Engineers (ACOE) does regulate the subject portion of the Merrimack River as navigable waters and the scope of work discussed in this petition at that crossing location is covered through Self-Verification process under the ACOE New Hampshire Programmatic General Permit #4, provided that there will be no decrease in existing clearances, which is the case for the scope petitioned herein. The other public water crossings that are the subject of this petition are not regulated by ACOE as navigable waters.

11. It was not anticipated that abutters on either side of the public waters or State owned lands or public water spans that are the subject of this petition would be affected by the proposed scope of this project as the P145 is an existing line and the project will be accomplished within existing ROW easements.

12. Eversource submits that the license petitioned for herein may be exercised without substantially affecting the rights of the public in the State owned lands and public waters that are the subject of this petition. Minimum safe clearances above the State owned land and public waters will be maintained at all times. Spotters are routinely used to make sure river crossing spans are clear of recreational users prior to performing wire replacement work. As such, the use and enjoyment by the public of the public waters and State owned land will not be diminished in any material respect as a result of the proposed structure replacements and wire installation.

WHEREFORE, Eversource respectfully requests that the Department:

1. Find that the license petitioned for herein may be exercised without substantially affecting the public rights in the public waters and State owned lands which are the subject of this petition;

2. Grant Eversource a license to construct and maintain electric lines over and across the public water and State owned lands as identified and described in this petition;

Dated at Manchester, New Hampshire this 15th day of February 2022.

Respectfully submitted, PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY By Its Attorney

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