

**THE STATE OF NEW HAMPSHIRE
BEFORE THE
DEPARTMENT OF ENERGY**

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

DOCKET No. CR 21-

**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 IN TROY,
MARLBOROUGH, KEENE, AND ACROSS PUBLIC WATERS IN TROY,
MARLBOROUGH, SWANZEY AND KEENE, 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 in Troy, Marlborough, and Keene and over and across public waters in Troy, Marlborough, Swanzey and Keene, 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 115kV electrical transmission line, designated as the Eversource T198 Line, over and across certain parcels of land owned by the State of New Hampshire and public waters, as shown in Exhibits 1 through 10. The T198 was originally constructed in 1962 and was previously licensed for structure replacements at Strs. 130 and 131 in DE 94-272 under Order 21,873. Also, in DE 08-112 under Order 24,904 several State owned land and water crossing spans¹ were licensed after-the-fact, which Order also licensed the installation of an ADSS communications wire underbuild. DE 08-112 omitted from

¹ Crossing spans between Strs. 121-122, 122-123 and 123-124 were incorrectly included in the DE 08-112 petition and are omitted from this petition as non-jurisdictional being that they are not recognized public waters; the span at Strs. 121-122 is an unnamed small stream tributary to the Ashuelot River that has not been classified as “public waters”; the span at Strs. 122-123 is over a wetland that has no surface water connection to the Ashuelot River; and the span at Strs. 123-124 is a relic oxbow of the Ashuelot River that contains shallow surface water but is cut off from the Ashuelot River and lacks a surface water connection.

the crossing spans that were licensed after-the-fact, two State owned land spans at Str 17-22 (See, Exhibit 2) and Str 27-29 (See, Exhibit 3) either because the land was not in State ownership at the time or due to oversight, but those spans will be licensed hereby.

2. The current maintenance project which is the subject of this petition will replace original wood structures 17-22, 27-30, 71-72, 97-98, 99-100, 110-111, 130-131, 146-147, 150-151-152 with weathering steel, having the configurations and specifications depicted and noted in the Exhibits. The project will also replace an existing pole top shield wire with OPGW communications cable having the specifications noted on the Exhibits' Cable Schedules. Lastly, a second OPGW communications cable will be added to the structures' opposite outer pole top having the same specifications. The structure replacements are being undertaken to address asset condition matters identified through Eversource's ongoing inspection program and to support the additional weight from the addition of a second OPGW communication wire to provide enhanced system reliability and emergency response functionality. The three existing conductors and one existing ADSS wire will be unchanged and transferred to the replacement structures.

3. Replacement structures will be located within 10 feet of their current location, except that Structure 111 is being moved 45' north to move away from the edge of the Ashuelot River and Structure 147 is being moved 40' northwest, to move the structure outside of a wetland.

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

Exhibit 2 – The T198 Line crosses State owned land in the Town of Troy between structures 17 and 22. The crossing is located approximately 3,400 feet northwest from where the T198 line crosses Bigelow Hill Road, which is approximately 1,700 feet southwest from the intersection of Bigelow Hill Road and Forest Road in Troy. The crossing extends approximately 1,374 feet northwest where it ends approximately at the town line between Troy and Marlboro.

Exhibit 3- The T198 Line crosses State owned lands, including state owned rail trail (aka Cheshire Rail Trail), and the Ashuelot River between structures 27 and 30. The State land crossing is located approximately 850 feet west from where the T198 line crosses Troy Road in the Town of Marlborough, which is approximately 0.85 miles north from the intersection of Old Keene Road and Marlborough Road. The State land extends approximately 358 feet west where it ends at the

property boundary with Map 20, Lot 13. The line crosses a second State owned land tract approximately 1,200 feet west from where the T198 line crosses Troy Road. The crossing extends approximately 310 feet west and ends at the eastern edge of NH State Route 12 where the line crosses NH State Route 12, which is approximately 1,040 feet north from the intersection of Old Keene Road and NH State Route 12.

The T198 line crosses the Ashuelot River between the two State owned lands described above and starts approximately 1,120 feet west of where the line crosses Troy Road. The public waterbody crossing extends approximately 50' west, where it ends approximately 950 feet east of where the line crosses NH State Route 12.

Exhibit 4 – The T198 line crosses the South Branch Ashuelot River between Structures 71 and 72 in the Town of Swanzey. The public water body crossing starts approximately 250 feet east of where the line crosses Flat Roof Mill Rd in Swanzey, which is approximately 680 feet southwest from the intersection of Flat Roof Mill Road and Woodland Heights. The crossing extends approximately 61 feet west, where it ends approximately 175 feet east from where the line crosses Flat Roof Mill Road.

Exhibit 5 – The T198 line crosses the South Branch Ashuelot River between Structures 97 and 98, and Structures 99 and 100 in the Town of Swanzey. The public waterbody crossing between Structure 97 and 98 starts approximately 350 feet east of where the line crosses Old Homestead Highway (aka NH State Route 32) in Swanzey, which is approximately 1,350 feet west from the intersection of Old Homestead Highway and Sawyers Crossing Road. The crossing extends approximately 343 feet west, where it ends at approximately where the line crosses Old Homestead Highway. The public waterbody crossing between structures 99 and 100 starts approximately 315 feet north of where the line crossings Old Homestead Highway. The crossing extends approximately 61' where it ends approximately 366 feet north of where the line crossings Old Homestead Highway.

Exhibit 6 - The T198 line crosses the South Branch Ashuelot River between Structures 103 and 104, and Structures 105 and 106 in the Town of Swanzey. The public waterbody crossing between Structure 103 and 104 starts approximately 2,150 feet north of where the line crosses Old Homestead Highway (aka NH State Route 32) in Swanzey, which is approximately 1,350 feet west from the intersection of Old Homestead Highway and Sawyers Crossing Road. The crossing extends approximately 33 feet north to the opposite side. The public waterbody crossing between structures 104 and 105 starts approximately 2,800 feet north of where the line crossings Old Homestead Highway. The crossing extends approximately 185 feet north.

Exhibit 7 – The T198 line crosses the South Branch Ashuelot River between Structures 110 and 111 in the Town of Swanzey. The public waterbody crossing starts approximately 2,400 feet south of where the line crosses the end of Krif Road and the entrance to Keene State Owl Athletic

Complex in Swanzey, which is approximately 980 feet west from the intersection of Krif Road and Corwell Drive. The crossing extends approximately 66 feet north.

Exhibit 8 – The T198 line crosses the South Branch Ashuelot River between Structures 130 and 131 in the Town of Swanzey. The public waterbody crossing starts approximately 400 feet north of where the line crosses the end of Causeway Road in Swanzey, which is approximately 2,200 feet southwest from the intersection of Causeway Road and Sawyers Crossing Road. The crossing extends approximately 89 feet north.

Exhibit 9 – The T198 Line crosses the State owned land (encompassing the Ashuelot Rail Trail) between structures 146 and 147. The crossing is located approximately 300 feet southeast from the southeast end of the designated Ashuelot Rail Trail Parking Lot, which is the parking area just north of the Walmart located off Winchester Street in Keene.

Exhibit 10 – The T198 line crosses the Ashuelot River between Structures 150 and 151 and again between 151 and 152 in the City of Keene. The public waterbody crossing between Structure 150 and 151 is located immediately south of where the line crosses Winchester Street, which is located approximately 150 feet west from the intersection of Pearl Street and Winchester Street. The line crosses over the western edge of the river at this location. The T198 crosses the Ashuelot River again between Structure 151 and 152 is located approximately 175 feet immediately north of where the line crosses Winchester Street. That crossing extends approximately 94 feet north.

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 Profile View and Cable Schedule of Exhibits 2 through 10.

6. The location of structures and max sag conditions creates the following crossing spans:

(a) State Owned Land: Troy Map/Lot 10/4 (Exhibit 2)

i. Structures: Str. 17 to 22

ii. Structure Span (ft): 2,032.02

iii. State Owned Land Span (ft): 1,379.1

(b) State Owned Land: Marlborough Map/Lot 7/19, 7/18

Troy Map/Lot 21/15, 18/134 (Exhibit 3)

i. Structures: Str. 27 to 30

ii. Structure Span (ft): 1,943.1

iii. State Owned Land Span (ft): 692.9

(c) Public Water Body Crossing: Marlborough - Ashuelot River (Exhibit 3)

i. Structures: Str. 29 to 30

ii. Structure Span (ft): 949.9

- iii. Water Body Crossing Span (ft): 50.0
- (d) Public Water Body Crossing: Swanzey – South Branch Ashuelot River (Exhibit 4)
 - i. Structures: Str. 71 to 72
 - ii. Structure Span (ft): 429.4
 - iii. Water Body Crossing Span (ft): 61.3
- (e) Public Water Body Crossing: Swanzey – South Branch Ashuelot River (Exhibit 5)
 - i. Structures: Str. 97 to 98
 - ii. Structure Span (ft): 572.3
 - iii. Water Body Crossing Span (ft): 343.2
- (f) Public Water Body Crossing: Swanzey – South Branch Ashuelot River (Exhibit 5)
 - i. Structures: Str. 99 to 100
 - ii. Structure Span (ft): 389.0
 - iii. Water Body Crossing Span (ft): 61.5
- (g) Public Water Body Crossing: Swanzey – South Branch Ashuelot River (Exhibit 6)
 - i. Structures: Str. 103 to 104
 - ii. Structure Span (ft): 357.5
 - iii. Water Body Crossing Span (ft): 33.5
- (h) Public Water Body Crossing: Swanzey – South Branch Ashuelot River (Exhibit 6)
 - i. Structures: Str. 105 to 106
 - ii. Structure Span (ft): 407.2
 - iii. Water Body Crossing Span (ft): 130.5
- (i) Public Water Body Crossing: Swanzey – South Branch Ashuelot River (Exhibit 7)
 - i. Structures: Str. 110 to 111
 - ii. Structure Span (ft): 466.6
 - iii. Water Body Crossing Span (ft): 66.9
- (j) Public Water Body Crossing: Swanzey – Ashuelot River (Exhibit 8)
 - i. Structures: Str. 130 to 131
 - ii. Structure Span (ft): 368.7
 - iii. Water Body Crossing Span (ft): 89.1
- (k) State Owned Land: Keene Map/Lot 583/33 (Exhibit 9)
 - i. Structures: Str. 146 to 147
 - ii. Structure Span (ft): 329.03

iii. State Owned Land Span (ft): 150.3

(l) Public Water Body Crossing: Keene –Ashuelot River (Exhibit 10)

- i. Structures: Str. 150 to 151
- ii. Structure Span (ft): 400.4
- iii. Water Body Crossing Span (ft): 82.5

(m) Public Water Body Crossing: Swanzey –Ashuelot River (Exhibit 10)

- i. Structures: Str. 151 to 151
- ii. Structure Span (ft): 340.4
- iii. Water Body Crossing Span (ft): 94.3

7. Wires have been drawn on Exhibits 2 through 10 to show the minimum clearance at maximum sag conditions in reference to the State owned land and Public Waters crossing spans. In the case of the public water span on Exhibits 3 and as noted in Note 3 thereon, the 100-year flood elevation was established through contour interpolation. In the case of public water spans on Exhibit 4 through 8 and Exhibit 10 and noted in Note 3 therein, the 10-year flood elevation is provided by FEMA Flood Insurance Study. That represents a departure from the site specific analysis that was performed in conjunction with the petition in DE 08-112 on which Order 24,904 was based, but conforms to more widely accepted standards for establishing water elevations based on FEMA flood elevations.

8. Eversource will maintain and operate the clearances of the crossings 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 115kV conductor over water areas not suitable for sailboating or where sailboating is prohibited; 28.1' for 115kV conductor over top of railroad track; and 20.1' for 115kV conductor over other areas traversed by vehicles such as cultivated, grazing, forest, and orchard lands, industrial areas, commercial areas, etc. For those locations depicted where the ADSS represents the lowest wire under maximum sag conditions, the clearance required is 14' for ADSS over water areas not suitable for sailboating or where sailboating is prohibited; 23.5' for ADSS over top of railroad track; and 15.5' for ADSS over other areas traversed by vehicles such as cultivated, grazing, forest, and orchard lands, industrial areas, commercial areas, etc. The actual minimum height over the State owned lands and Public Waters is depicted on the attached Exhibits 2 through 10 and exceeds the respective minimum requirements.

9. A New Hampshire Department of Environmental Services (NHDES) Shoreland Permit By Notification (PBN) and a NHDES Statutory Permit by Notification will be obtained for the planned works that is the subject of this petition in relation to temporary impacts to wetlands and the shoreland buffer of the Ashuelot River and South Branch of the Ashuelot in the towns of Marborough, Troy, Swanzey and Keene and will be secured prior to the commencement of construction.

10. The within described maintenance scope on the T198 will be accomplished within existing right-of-way easements thereby mitigating impacts and concerns of property owners affected by the project scope. Spotters are routinely used to make sure rail trails and rivers are clear of recreational users prior to transferring the wires from the original structures to the replacement structures.

11. Eversource submits that the license petitioned for herein may be exercised without substantially affecting the use and enjoyment of the public in the State owned land and Public Waters because safe clearances to ground will be maintained at all times.

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 State owned land and 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 owned lands and across Public Waters as described in this petition;

Dated at Manchester, New Hampshire this 24th day of November, 2021.

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



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