

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

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

DOCKET No. CR 2024 - 006

**APPLICATION OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A
EVERSOURCE ENERGY FOR A LICENSE TO CONSTRUCT AND MAINTAIN
ELECTRIC LINES OVER AND ACROSS STATE-OWNED LAND AND PUBLIC
WATERS IN CAMPTON, THORNTON, WOODSTOCK, LINCOLN, SUGAR HILL,
BETHLEHEM, AND DALTON, 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 submits an application to the Department of Energy (“Department”) for a license to construct and maintain electric lines over public waters and state-owned land in Campton, Thornton, Woodstock, Lincoln, Sugar Hill, Bethlehem, and Dalton, New Hampshire. In support of this application 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 X178 Line, which was originally built between Beebe River Substation in Campton and Whitefield Substation in Whitefield circa 1950, with sections reconstructed in 1969 and 1985. The licensing history is complex and inconsistent, but all state-owned land and public water crossings will be licensed as a result of this application. The most recent licensing documentation for the crossings which are the subject of this application are as follows:

- Order # 18,759 (DE 87-121, copy attached) - Pemigewasset River between original Structures 173 and 174;
- Order 12,219 (DE 76-22, copy attached) - Bog Pond between original Structures 247 and 248, and Miller Pond (aka Baker Brook Pond) between original Structures 455 and 456;

- Public water crossings for which no license identified either owing to oversight or the line being built prior to the waterbodies being regulated as public waters - Mad River between Structures 15 and 16 (structures are not being renumbered), Eastman Brook between original Structures 125 and 126, three crossings of the Pemigewasset River between original Structures 173 and 174, and Structures 174 and 175, Moosilauke Brook between original Structures 192 and 193, the Gale River between original Structures 396 and 397, Ammonoosuc River between original Structures 505 and 507, and the St. Johns River between original Structures 575 and 576;
- State-owned land for which no license identified either owing to oversight or because the line was constructed before the state took ownership – between original Structures 171 and 175 Map 111, Lot 4, in the Town of Woodstock administered by the New Hampshire Department of Business and Economic Affairs;
- State-owned land for which no license identified either owing to oversight or because the line was constructed before the state took ownership – between original Structures 171 and 172, Map 106, Lot 83, in the Town of Woodstock administered by the New Hampshire Dept. of Transportation;
- State-owned land for which a railroad license exists but no license under RSA 371:17 identified either owing to oversight or because the line was constructed before the state a ownership - between original Structures 505 and 507, Map 405, Lot 58 in the Town of Bethlehem, administered by New Hampshire Department of Transportation and previously owned by Boston and Maine Railroad;
- State-owned land for which a railroad license exists but no license under RSA 371:17 identified either owing to oversight or because the line was constructed before the state took ownership – between original Structures 576 and 577, Map 413, Lot 73 in Dalton, administered by New Hampshire Department of Transportation and previously owned by Maine Central Railroad Company

2. The proposed project for the Line X178 encompasses a structure replacement, reconductoring and shield wire replacement project. The replacement structures at the public water and state-owned land crossings, with the exception of Structures 15 and 16, will be renumbered as detailed in Exhibit 14. The existing wood structures at the state-owned land and

public water crossing spans will be replaced with a weathering steel equivalent having the design and specification depicted and noted in the Structure Details of Exhibits 2 through 13. Existing Structures 506 and 576, which are associated with the Ammonoosuc River and a state-owned land crossing in Exhibit 11 and the St. John's River crossing in Exhibit 12, respectively, will be permanently removed without replacement. 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 through 13. Additionally, the two existing pole top mounted wires, presently shield wires, will be replaced with OPGW communication cables at crossing spans between Structures 15 to 16, and renumbered Structures 129 to 130, 196 to 197, 251 to 252, 400 to 401, 459 to 460, 509 to 510, and 578 to 580, having the specifications noted in the Cable Schedule on Exhibits 2, 3, and 7 through 13. The existing pole top shield wires at renumbered Structures 175 through 179 will be unchanged. The replacement structures will be installed within 10 feet of the current locations, except at renumbered Structure 171, which will be installed approximately 20 feet to the west to provide additional workspace between the structure and the fence line of the Woodstock Substation located just east of that structure.

3. The locations of the public water and state-owned land crossings which are the subject of this application are depicted on the Overview Map attached hereto as Exhibit 1 and a more detailed location description is as follows:

Exhibit 2 – The X178 Line crosses the Mad River between Structures 15 and 16 in Town of Campton, which span commences approximately 288 feet northwest from where the line crosses NH Route 175, which is approximately 1,775 feet south from the intersection of Boot Jack Road and NH Route 175 in the Town of Campton. The span extends approximately 121 feet northwest to the west bank of the Mad River, which point is approximately 500 feet southeast from where the line crosses Riverside Road, which point is approximately 1,900 feet south from the intersection of NH Route 49 and Riverside Road.

Exhibit 3 – The X178 Line crosses the Eastman Brook between original Structures 125 and 126 (renumbered Structures 129 and 130) in the Town of Thornton, which span commences approximately 315 feet northeast from where the line crosses Julie Drive in the Town of Thornton, which point is approximately 1,200 feet southeast from the intersection of Julie Drive and NH Route 175 (aka Eastside Road) in the Town of Woodstock. The span extends approximately 55 feet northeast to the north bank of

Eastman Brook, which point is approximately 225 feet southwest from where the line crosses Thornton Gore Road, which is approximately 580 feet east from the intersection of Sellingham Hill Road and Thornton Gore Road in the Town of Woodstock.

Exhibit 4 through 5 – The X178 Line crosses two state-owned lands being a property operated by the NH Department of Business and Economic Affairs and a former railroad property both in the Town of Woodstock located between original Structures 171 and 175 (renumbered Structures 175 and 179), which span commences approximately 242.5 feet northwest from where the X178 Line crosses NH Route 175 (aka Eastside Road), which point is approximately 2,850 feet north from the intersection of Old Fairfield Road and NH Route 175 (aka Eastside Road) in the Town of Woodstock. The span extends approximately 1,002 feet, across the two state-owned parcels, Map 111, Lot 4 and Map 106, Lot 83, and ends where the line crosses the east bank of the main channel of the Pemigewasset River, which point is approximately 1,100 feet southeast from where the line crosses US Route 3 (aka Daniel Webster Highway), which point is approximately 1,190 feet southwest from the intersection of Parker Lodge Road and US Route 3 (aka Daniel Webster Highway).

Exhibit 5 - The X178 Line crosses the Pemigewasset River at two locations between original Structures 173 and 174 (renumbered Structures 177 and 178) in the Town of Woodstock, which first span commences approximately 1,124 feet northwest from where the line crosses NH Route 175 (Eastside Road) in the Town of Woodstock, which point is approximately 2,850 feet north from the intersection of Old Fairfield Road and NH Route 175 (aka Eastside Road) in the Town of Woodstock . The first span is a side channel of the Pemigewasset River and extends approximately 17 feet northwest to the opposite bank of the side channel of the Pemigewasset River. The second span, being the main channel, commences approximately 1,230 feet northwest from where the line crosses NH Route 175 (Eastside Road) in the Town of Woodstock, which point is described above. This span extends approximately 258 feet northwest to the west bank of the Pemigewasset River, which point is approximately 770 feet southeast from where the line crosses US Route 3 (aka Daniel Webster Highway), which point is approximately 1,190 feet southwest from the intersection of Parker Lodge Road and US Route 3 (aka Daniel Webster Highway)

Exhibit 6 - The X178 Line crosses a side channel to the Pemigewasset River between original Structures 174 and 175 (renumbered Structures 178 and 179) in the Town of Woodstock, which first span commences approximately 2,036 feet northwest from where the line crosses NH Route 175 (Eastside Road) in the Town of Woodstock, which point is approximately 2,850 feet north from the intersection of Old Fairfield Road and NH Route 175 (aka Eastside Road) in the Town of Woodstock. The span extends approximately 61 feet northwest to the opposite bank of the side channel of the Pemigewasset River, which point is approximately 250 feet southeast from where the line crosses US Route 3 (aka Daniel

Webster Highway), which point is approximately 1,190 feet southwest from the intersection of Parker Lodge Road and US Route 3 (aka Daniel Webster Highway).

Exhibit 7 – The X178 Line crosses the Moosilauke Brook between original Structures 192 and 193 (renumbered Structures 196 and 197) in the Town of Woodstock, which span commences approximately 85 feet southwest from where the line crosses NH Route 112 (aka Lost River Road), which point is approximately 325 feet northwest from the intersection of Lost Valley Road and NH Route 112 (aka Lost River Road). The span extends approximately 47 feet north to the north bank of Moosilauke Brook, which point is just south of where the line crosses NH Route 112 (aka Lost River Road), which point is described above.

Exhibit 8 – The X178 Line crosses Bog Pond between original Structures 247 and 248 (renumbered Structures 251 and 252) in the Town of Lincoln, which span commences approximately 4.75 miles from where the line crosses NH Route 112 (aka Lost River Road), which is approximately 315 feet west from the intersection of Lost Valley Road and NH Route 112 (aka Lost River Road). The span extends approximately 132 feet to the northwest bank of Bog Pond, which point is approximately 4.15 miles southeast from where the line crosses NH Route 116 in the Town of Easton, which point is approximately 420 feet southwest from the intersection of Ginger Bread Road and NH Route 116.

Exhibit 9 – The X178 Line crosses the Gale River between original Structures 396 and 397 (renumbered Structures 400 and 401) in the Town of Sugar Hill, which span commences approximately 1,475 feet northeast from where the line crosses Crane Hill Road, which point is approximately 2,800 feet northeast from the intersection of Blake Road and Crane Hill Road in the Town of Sugar Hill. The span extends approximately 107 feet northeast to the northern bank of the Gale River, which point is approximately 2,350 feet southwest from where the line crosses Streeter Pond Road, which point is approximately 1,290 feet east from the intersection of Valley Vista Road and Streeter Pond Road.

Exhibit 10 – The X178 Line crosses Miller Pond (aka Baker Brook Pond) between original Structures 455 and 456 (renumbered Structures 459 and 460) in the Town of Bethlehem, which span commences approximately 620 feet southwest from where the line crosses US Route 302 (aka Main Street), which point is approximately 115 feet southeast from the intersection of US Route 302 (aka Main Street) and Brook Road. The span extends approximately 521 feet northeast to the northeastern bank of the Miller Pond, which is approximately 100 feet southwest from the line crosses US Route 302 (aka Main Street), which point is described above.

Exhibit 11 – The X178 Line crosses the Ammonoosuc River between original Structures 505 and 506 (renumbered Structures 509 and 510) in the Town of Bethlehem, which span commences approximately 320 feet southwest from where the line crosses NH Route 116 (aka Whitefield Road), which point is approximately 1,650 feet northwest from the intersection of

Wing Road and NH Route 116 (aka Whitefield Road). The span extends approximately 108 feet northeast to the northeastern bank of the Ammonoosuc River, which point is approximately 210 feet southwest from where the line crosses NH Route 116 (aka Whitefield Road), which point is described above.

Exhibit 11 - The X178 Line crosses state-owned land, being an active portion of the NH Central Railroad, located between original Structures 505 and 506 (renumbered Structures 509 and 510) in the Town of Bethlehem, which span commences approximately 160 feet southwest from where the line crosses NH Route 116 (aka Whitefield Road), which point is approximately 1,650 feet northwest from the intersection of Wing Road and NH Route 116 (aka Whitefield Road). The span extends approximately 98 feet northeast to where it abuts the Department of Transportation right-of-way boundary associated with NH Route 116, which point is approximately 25 feet southwest from where the line crosses NH Route 116 (aka Whitefield Road), which point is described above.

Exhibit 12 – The X178 Line crosses the St. John’s River between original Structures 575 and 576 (renumbered Structures 578 and 579) in the Town of Dalton, which span commences approximately 360 feet northeast from where the line crosses Faraway Road, which point is approximately 75 feet southeast from the intersection of Page Road and Faraway Road. The span extends approximately 67 feet northeast to the northeastern bank of the St. John’s River, which point is approximately 1,600 feet from where the line crosses NH Route 142 (aka Whitefield Road), which point is approximately 150 feet northwest from the intersection of Mirror Lake Road and NH Route 142 (aka Elm Street) in the Town of Dalton.

Exhibit 13 - The X178 Line crosses a state-owned land being an active railroad located between original Structures 577 and 578 (renumbered Structures 579 and 580) in the Town of Dalton, which span commences approximately 1,050 feet northeast from where the line crosses Faraway Road, which point is approximately 75 feet southeast from the intersection of Page Road and Faraway Road. The span extends approximately 101 feet northeast to the property boundary with Map 413, Lot 75, which point is approximately 840 feet southwest from where the line crosses NH Route 142 (aka Whitefield Road), which point is approximately 150 feet northwest from the intersection of Mirror Lake Road and NH Route 142 (aka Elm Street) in the Town of Dalton.

4. Wire specifications and loading condition to establish maximum sag for the crossing spans that are the subject of this application are as indicated on the Profile View and Cable Schedule of Exhibits 2 through 13.

5. The location of structures and max sag conditions creates the following crossing spans:
 - (a) Public water: Mad River (Exhibit 2)

- i. Structures: 15 to 16
 - ii. Structure Span (ft): 665.1
 - iii. Mad River (ft): 121.4

- (b) Public water: Eastman Brook (Exhibit 3)
 - i. Structures (renumbered): 129 to 130
 - ii. Structure Span (ft): 822.2
 - iii. Eastman Brook (ft): 54.9

- (c) State-Owned Land Map/Block/Lot: Woodstock Map/Lot 111/4, 106/83 (Exhibit 4)
 - i. Structures (renumbered): 175 to 178
 - ii. Structure Span (ft): 1,642.8
 - iii. State Land Span (ft): 1001.9¹

- (d) Public water: Pemigewasset River (Exhibit 5)
 - i. Structures (renumbered): 177 to 178
 - ii. Structure Span (ft): 787.2
 - iii. Pemigewasset River (ft): 275.6²

- (e) Public water: Pemigewasset River (Exhibit 6)
 - i. Structures (renumbered): 178 to 179
 - ii. Structure Span (ft): 440.3
 - iii. Pemigewasset River (ft): 60.7

- (f) Public water: Moosilauke Brook (Exhibit 7)
 - i. Structures (renumbered): 196 to 197
 - ii. Structure Span (ft): 550.4
 - iii. Moosilauke Brook (ft): 46.6

- (g) Public water: Bog Pond (Exhibit 8)
 - i. Structures (renumbered): 251 to 252
 - ii. Structure Span (ft): 465.4
 - iii. Bog Pond (ft): 132.4

- (h) Public water: Gale River (Exhibit 9)
 - iv. Structures (renumbered): 400 to 401
 - v. Structure Span (ft): 921.8
 - vi. Gale River (ft): 106.7

- (i) Public water: Miller Pond (Exhibit 10)
 - i. Structures (renumbered): 459 to 460

¹ The state-owned land span between renumbered Structures 175 and 178 comprises two contiguous separate state-owned land parcels: Map 111, Lot 4 and Map 106, Lot 83.

² The Pemigewasset River span between new Structures 177 and 178 comprises two separate water crossings, 17.0' and 258.6', totaling 275.6'.

- ii. Structure Span (ft): 642.4
- iii. Miller Pond (ft): 521.2

(j) Public water: Ammonoosuc River (Exhibit 11)

- iv. Structures (renumbered): 509 to 510
- v. Structure Span (ft): 713.8
- vi. Ammonoosuc River (ft): 107.9

(k) State-Owned Land Map/Block/Lot: Bethlehem Map/Lot 405/58 (Exhibit 11)

- i. Structures (renumbered): 509 to 510
- ii. Structure Span (ft): 713.8
- iii. State Land Span (ft): 97.8

(l) Public water: St. John's River (Exhibit 12)

- i. Structures (renumbered): 578 to 579
- ii. Structure Span (ft): 965.2
- iii. St. John's River (ft): 66.5

(m) State-Owned Land Map/Block/Lot: Dalton Map/Lot 413/73 (Exhibit 13)

- i. Structures (renumbered): 579 to 580
- ii. Structure Span (ft): 208.2
- iii. State Land Span (ft): 101.4

6. All conductors and wires have been drawn on Exhibits 2 through 13 to show the minimum clearance at maximum sag conditions in reference to the public water and state-owned land crossings.

7. 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 feet for 115 kV wires over water areas not suitable for sailboating or where sailboating is prohibited in respect to the public water crossings depicted in Exhibits 2, 3, 5 through 9, 11 and 12; 22.1 feet for 115 kV wires over water areas suitable for sailboating including lakes, ponds, reservoirs, tidal waters, rivers, stream, and canals with an unobstructed surface areas of less than 20 acres depicted in Exhibit 10, and 28.1 feet for 115 kV wires over top of track of railroads in respect to state-owned land crossings depicted in Exhibits 4, 11 and 13; and 20.1 feet for 115 kV wires over other areas traversed by vehicles such as cultivated, grazing, forest, and orchard lands, industrial sites, commercial sites, etc. in respect to the state-owned land crossings depicted on Exhibits 4 and 5. The actual minimum height over the public water and state-owned land crossings are depicted on the attached Exhibits 2 through 13 and exceeds the minimum requirement.

8. A New Hampshire Department of Environmental Services (NHDES) Standard Dredge and Fill Permit (SDF) will be required for temporary and permanent impacts associated with the structure replacements described in this application. NHDES SDF and Shoreland PBN applications have been submitted (NHDES SDF Application # 2024-00475, 2024-00468, 2024-00297 and Shoreland PBN Application # 2024-01406, 2024-01405, 2024-01125, 2024-01121, 2024-00633, 2024-00631) and will be obtained prior to commencement of construction within jurisdictional areas.

9. The U.S. Army Corps of Engineers (ACOE) does not regulate the subject portion of the Mad River, Eastman Brook, Pemigewasset River, Moosilauke Brook, Bog Pond, Gale River, Miller Pond, Ammonoosuc River, and St. John's River as navigable waters. As a result, a crossing permit from ACOE is not required.

10. The structure replacements, conductor replacements and OPGW installation work will be accomplished within existing right-of-way easements, thereby mitigating impacts and concerns of property owners affected by the project scope. When wires are being transferred, Eversource will ensure the waterbodies and state-owned lands are clear of any recreational users before work commences. Additionally, a guard structure will be utilized when wires are being transferred from the old structure to the new, to limit the possibilities of the wire falling into the state-owned land or public water, to further protect the general public.

11. Eversource submits that the license application herein is necessary in order to meet the reasonable requirements of service to the public owing to the degraded condition of the existing wood structures to be replaced and Eversource's tariff obligations and North American Electric Reliability Corporation (NERC) reliability standards to ensure safe and reliable electric transmission. This important transmission system maintenance project may be exercised without substantially affecting the use and enjoyment of the public water because safe clearances will be maintained at all times and appropriate precautions to ensure the safety of recreational users will be undertaken while the maintenance work is performed.

WHEREFORE, Eversource respectfully requests that the Department:

1. Find that the license application herein may be exercised without substantially affecting the public rights in the public water and state-owned land crossings, which is the subject of this application;
2. Grant Eversource a license to construct and maintain electric lines over and across public waters and state-owned land described in this application;

Dated at Manchester, New Hampshire this 11th day of July, 2024.

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



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