

STATE OF NEW HAMPSHIRE DEPARTMENT OF ENERGY

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

LICENSE NO. CRE 2024-006

July 24, 2024

**Application for License to Construct and Maintain Electric Lines
Over and Across Public Waters and State Owned Land
in Campton, Thornton, Woodstock, Lincoln, Sugar Hill, Bethlehem, and Dalton**

This license is granted to Public Service Company of New Hampshire d/b/a Eversource Energy (Eversource) to construct and maintain its X178 Line, an existing three phase 115kV electric transmission line, to the extent that it extends over and across public waters and land owned by the State of New Hampshire in Campton, Thornton, Woodstock, Lincoln, Sugar Hill, Bethlehem, and Dalton, all as described in its application and depicted in its filings, and as specified in the Enforcement Division's recommendation. The portion of the X178 Line crossing the Pemigewasset River in Woodstock, between Structures #173 and #174, was licensed under NH PUC Order 18,757 (DE 87-121). The portions of the X178 Line crossing Bog Pond in Lincoln, between original Structures #247 and #248, and Miller Pond (aka Baker Brook Pond) in Bethlehem between original structures #454 and #455, were licensed under NH PUC Order 12,219 (DE 76-22). The licensing history for the X178 Line is complex with apparent inconsistencies. However, all State-owned land and public water crossings will be licensed as a result of this application.

I. BACKGROUND

On June 28, 2024,¹ Eversource filed an application with the N.H. Department of Energy (Department), pursuant to RSA 371:17, requesting a license to construct and maintain its X178 Line, an existing three phase 115kV electric transmission line, to the extent that it extends over and across public waters in Campton, Thornton, Woodstock, Lincoln, Sugar Hill, Bethlehem, and Dalton, and State-owned land in Woodstock, Bethlehem, and Dalton, all as described in its application and depicted in its filings. On July 18, 2024, the Department's Enforcement Division Staff filed a recommendation that the application be approved, and a license granted, based on the application filings, applicable statutes, rules, NESC requirements, and land ownership, as well as public need, safety, and impact. The application and subsequent docket filings are posted to the Department's website (energy.nh.gov) at [Utility Crossings Over State Lands and Public Waters | NH Department of Energy](#).

II. SUMMARY OF LICENSE

A. Crossing Locations and Construction

This license pertains to Eversource's X178 Line, which is a three phase 115kV overhead electric transmission line that extends over and across public waters of the Mad River in Campton, Eastman Brook in Thornton, Pemigewasset River and Moosilauke Brook in Woodstock, Bog Pond in Lincoln, Gale River in Sugar Hill, Ammonoosuc River and Miller Pond in Bethlehem, and John's River in Dalton, and land owned by the State of New Hampshire and administered by the Department of Transportation (NHDOT) in Woodstock, Bethlehem, and Dalton. The state land crossings in Woodstock also are administered by the New Hampshire Department of Business and Economic Affairs. The Eversource X178 line

¹ The Company filed an amended application on July 11, 2024.

was originally built between Beebe River Substation in Campton and Whitefield Substation in Whitefield circa 1950. Sections of the line were reconstructed in 1969 and 1985.

The proposed project for the X178 Line encompasses replacing the 22 existing wood structures with weathered steel structures. The 3 existing transmission conductors will be replaced with 3 new ACSS 1272 kcmil, 54/19 conductors. The existing 2 pole-top shield wires will be replaced with OPGW, 48F wires; however, the 2 existing pole-top shield wires between renumbered Structures #175 through #179 will be transferred to the new steel structures. Existing Structures #506 and #576, which are associated with the Ammonoosuc River and a State-owned land crossing in Exhibit 11 and the John's River crossing in Exhibit 12, respectively, will be removed permanently without replacement. With exception of Structures #15 and #16, all other replacement structures will be renumbered.

The scope of this project begins at Structure #15 with the X178 115 kV Line traversing northward crossing the Mad River to Structure #16 in Campton and then crossing Eastman Brook between Structures #129 and #130 in Thornton. The X178 Line then continues northwest crossing State-owned land between Structures #175 past #177 and then crossing the Pemigewasset River in Woodstock between Structures #177 and #179. The X178 Line then continues northwest crossing Moosilauke Brook between Structures #196 and #197 in Woodstock, then northwest crossing Bog Pond between Structures #251 and #252 in Lincoln and then northwest into Sugar Hill at which juncture the X178 line then traverses northeast crossing the Gale River between Structures #400 and #401 in Sugar Hill. Continuing northeast in Bethlehem, the X178 Line crosses Miller Pond between Structures #459 and #460 and then the Ammonoosuc River and State-owned land between Structures #509 and #510 in Bethlehem. Continuing northeast into Dalton, the X178 Line then crosses the John's River between

Structures # 578 and #579, and then crosses State-owned land between Structures 579 and 580 in Dalton.

The water crossing in Campton spans 665.1 feet between Structures #15 and #16 with 121.4 feet crossing the Mad River.

The water crossing in Thornton spans 822.2 feet between Structures #129 and #130 with 54.9 feet crossing Eastman Brook.

The land crossing in Woodstock spans 1,642.8 feet between Structures #175 and #178 with 1,001.9 feet crossing State-owned land.

The water crossing in Woodstock spans 787.2 feet between Structures #177 and #178 with 275.6 feet crossing the Pemigewasset River.

The water crossing in Woodstock spans 440.3 feet between Structures #178 and #179 with 60.7 feet crossing the Pemigewasset River.

The water crossing in Woodstock spans 550.4 feet between Structures #196 and #197 with 46.6 feet spanning Moosilauke Brook.

The water crossing in Lincoln spans 465.4 feet between Structures #251 and #252 with 132.4 feet spanning Bog Pond.

The water crossing in Sugar Hill spans 921.8 feet between Structures #400 and #401 with 106.7 feet spanning the Gale River.

The water crossing in Bethlehem spans 642.4 feet between Structures #459 and #460 with 521.2 feet spanning Miller Pond.

The water crossing in Bethlehem spans 713.8 feet between Structures #509 and #510 with 107.9 feet spanning the Ammonoosuc River.

The land crossing in Bethlehem spans 713.8 feet between Structures #509 and #510 with 97.8 feet crossing State-owned land.

The water crossing in Dalton spans 965.2 feet between Structures #578 and #579 with 66.5 feet spanning the John's River.

The land crossing in Dalton spans 208.2 feet between Structures #579 and #580 with 101.4 feet crossing State-owned land.

B. Regulatory Requirements

Eversource is responsible for obtaining any and all other federal, state, or local permits required by authorities having jurisdiction for the construction and installation of the proposed crossing. According to the application, a New Hampshire Department of Environmental Services (NHDES) Standard Dredge and Fill Permit and a Shoreland Statutory Permit by Notification (PBN) will be obtained for the work planned under this application in relation to temporary impacts associated with the structure replacements prior to the commencement of construction.

The U.S. Army Corps of Engineers (ACOE) does not regulate the subject portions of the Mad River, Eastman Brook, Pemigewasset River, Moosilauke Brooke, Bog Pond, Gale River, Miller Pond, Ammonoosuc River, or John's River as navigable waters. As a result, crossing permits from ACOE are not required.

A. Property Rights

According to Eversource, abutters to the Mad River in Campton, Eastman Brook in Thornton, Pemigewasset River and Moosilauke Brook in Woodstock, Bog Pond in Lincoln, Gale River in Sugar Hill, Ammonoosuc River and Miller Pond in Bethlehem, and John's River in Dalton, and land owned by the State of New Hampshire and administered by the Department of Transportation (NHDOT) in Woodstock, Bethlehem, and Dalton (the state land crossings in Woodstock are also administered by the New Hampshire Department of Business and

Economic Affairs) will not be affected by the proposed project because the crossing structures are being replaced and rebuilt within existing right-of-way easements.

B. Service to the Public and the Effect on Public Rights

According to the application, the existing crossings were constructed, operated, and maintained to meet the reasonable requirements of service to the public. Eversource affirmed that the proposed modifications will continue to meet that public need and will not substantially affect the public's use and enjoyment of the public waters of either the Mad River, Eastman Brook, Pemigewasset River, Moosilauke Brooke, Bog Pond, Gale River, Miller Pond, Ammonoosuc River, or John's River or the State land parcels in Woodstock, Bethlehem, or Dalton.

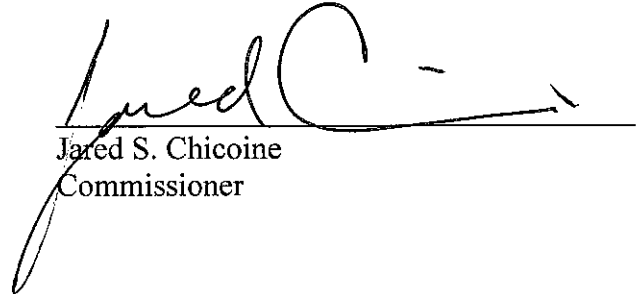
The line modifications are designed and will be constructed and maintained in conformance with N.H. Admin. Rule Puc 306 and applicable sections of the National Electrical Safety Code (NESC) C2-2012. The conductor cable clearance requirements were met using the NESC based on the design conditions at 3,920 F. for all crossings within this petition. This scenario was the governing condition, which yielded the greatest sag and lowest clearance.

II. DEPARTMENT DECISION

Eversource is authorized pursuant to RSA 371:17, *et seq.*, to construct, install, operate, and maintain electric lines over and across the public waters of the Mad River, Eastman Brook, Pemigewasset River, Moosilauke Brooke, Bog Pond, Gale River, Miller Pond, Ammonoosuc River, or John's River or the State land parcels in Woodstock, Bethlehem, or Dalton, as described in its application and depicted in its filings, and as specified in the Enforcement Division's recommendation. Based on the factual representations set forth in the application and the recommendation, the Department finds that the requested crossing amendments are necessary to meet the reasonable requirements of reliable service to the public, as required by

RSA 371:17, and that the requested license may be exercised without substantially affecting public rights in the public waters and subject land at the crossing locations in Campton, Thornton, Woodstock, Lincoln, Sugar Hill, Bethlehem, and Dalton, as required for approval under RSA 371:20. Therefore, the application is approved.

By order of the Department of Energy of New Hampshire this 24th day of July 2024.



Jared S. Chicoine
Commissioner

Pursuant to RSA 371:20, applicants and other persons directly affected by the issuance or denial of a license may appeal to the Public Utilities Commission within 30 days of the department's decision.