

**STATE OF NEW HAMPSHIRE**  
**Intra-Department Communication**

**Date:** December 23, 2024

**At (Office):** NH Dept. of Energy

**From:** Kenneth G. Walsh *KGW*  
Utility Analyst IV – Enforcement Division

**Subject:** **CRE 2024-012      New England Power Company**  
Application for License to Construct and Maintain Electric Lines Over and Across  
Public Waters in Hinsdale, New Hampshire

**Staff Recommendation**

**To:** Jared Chicoine, Commissioner, Department of Energy  
Christopher Ellms, Jr., Deputy Commissioner, Department of Energy

**CC:** Amanda Noonan, Director of Regulatory Support Division  
Michael Soucy, Director of Enforcement Division  
Elizabeth Nixon, Director of Electric Regulatory Support Division

Review by the Enforcement Division of the above application consisted of the following elements:

- Application contents and history.
- Applicable State statutes.
- Review of existing crossing(s) previously licensed by the State of New Hampshire, if any.
- Review of land ownership and of existing pole structures.
- Review of NESC code requirements as described in En 300.
- Review of public need and public impact, including applicability of other State regulations; and
- Conclusions and Recommendations.

**1.      Application Contents and History**

On October 24, 2024, New England Power Company (NEP) applied pursuant to RSA 371:17 for a license to construct and maintain the A1/B2 Line, which is an existing 69 kV line that crosses public waters in Hinsdale.

On December 10, 2024, NEP resubmitted this application due to errors and clarifications as identified and as required by Department of Energy (DOE) Enforcement staff.

On December 20, 2024, NEP resubmitted this application due to errors and clarifications as identified and as required by Department of Energy (DOE) Enforcement staff.

NEP is requesting that the DOE issue a license for the purpose of replacing the existing structures, installing new conductors, and installing new fiber optic ground wires.

This proposed project is to replace (4) existing wood structures with weathered steel structures, replace the existing (6) end-of-life conductors with ACSS 795 MCM 26/7 conductors, and replace the existing (1) shield wire with (2) ½-inch OPGW. The OPGW will be vertically attached above the dual-circuit conductors with the conductors being the lowest cable for clearance design. Although the existing A1/B2 Line is currently operated and maintained at 69 kV, this project has been designed to operate at 115 kV for future needs.

The scope of this project begins in Hinsdale, NH. at renumbered Structure #7 where the A1/B2 Line traverses southeasterly crossing the Connecticut River to renumbered Structure #8 in Vernon, VT. The A1/B2 Line then continues southeast again crossing the Connecticut River in Vernon, VT., from Structure #41 then northeast to Structure #42 in Hinsdale, NH.

In Vernon, Vt., from the intersection of Fort Bridgman Road (Route 142), head approximately 1264 feet northeast to where the A1/B2 Line crosses Stebbins Road and then approximately 580 feet northwest to Structure #8. The A1/B2 Line then spans 821 feet northwest crossing the Connecticut River into Hinsdale to Structure #7.

In Hinsdale, NH., from the intersection of South Parrish Road and Northfield Road (Route 63), head approximately 2761 feet northwest to where the A1/B2 Line crosses Northfield Road and then approximately 1249 feet southwest to Structure #42. The A1/B2 Line spans 757 feet crossing the Connecticut River to Structure #41 in Vernon, VT.

The first public water crossing between Structures #7 and #8 spans 821.0 feet with 460.0 feet over the Connecticut River. See Enforcement Map #1.

The second public water crossing between Structures #41 and #42 spans 757.0 feet with 475.0 feet over the Connecticut River. See Enforcement Map #2.

**2. New Hampshire statute referenced in application (modified by NH House Bill 1258, August 22, 2022)**

**RSA 371:17 Licenses for New Poles.** – Whenever it is necessary, in order to meet the reasonable requirements of service to the public, that any public utility should construct a pipeline, cable, or conduit, or a line of poles or towers and wires and fixtures thereon, over, under or across any of the public waters of this state, or over, under or across any of the land owned by this state, modify a previously licensed

installation, or license a previously constructed installation, it shall apply to the department of energy for a license to construct and maintain the same. For the purposes of this section, " public waters " are defined to be all ponds of more than 10 acres, tidewater bodies, and such streams or portions thereof as the department of energy may prescribe. Every corporation and individual desiring to cross any public water or land for any purpose herein defined shall apply to the department of energy for a license in the same manner prescribed for a public utility. The department of energy may condition any license issued under this paragraph in any manner necessary to assure that the license may be exercised without substantially affecting the public rights in public waters or State-owned lands. Using a non-adjudicative process, the department of energy may reject incomplete or improperly filed applications, and shall, also using non-adjudicative process, issue or deny the license within 90 days of receiving a complete application and all information subsequently requested of an applicant.

**3. Review of existing license(s) and permissions previously granted by the State of New Hampshire, including additional permitting requirements, for the applicable public water crossings in Hinsdale, New Hampshire.**

The A1/B2 Line was originally built in 1909 – 1910. The A1/B2 Line begins at NEP’s existing Vernon No. 13 switchyard in Vernon, VT., then crosses the Connecticut River into Hinsdale, NH. This line then crosses the Connecticut River into Vernon, VT, then running approximately 2.5 miles in Vermont to the Connecticut River, where it crosses the Connecticut River back into New Hampshire, ultimately terminating in Massachusetts.

The public water crossing at the Connecticut River, which is the subject of this application, was originally licensed by the New Hampshire Public Utilities Commission in 1953 in Order #6217. A copy of the Order is attached as Exhibit 5 to this application (the Order identifies the A1/B2 Lines as V-W 1908.).

NEP states that the U.S. Army Corps of Engineers (“ACOE”) regulates the Connecticut River as navigable waters. The scope of the work discussed in this application at the subject crossing locations was reviewed by the ACOE, which issued a license under the ACOE New Hampshire Programmatic General Permit #6.

NEP states that New Hampshire Department of Environmental Services (“NHDES”) issued an Alteration of Terrain permit for the scope of the work discussed in the application on January 24, 2024. In addition, NHDES issued a Standard Dredge and Fill permit for this scope of work on January 12, 2024. NEP also obtained coverage under a Shoreland Permit by Notification filed with NHDES on March 16, 2023, for the scope of the work discussed in this application.

**4. Review of land ownership at proposed pole structures**

NEP attests that the structure replacement work will be accomplished within existing right-of-way easements thereby mitigating impacts and concerns of property owners affected by the project scope. NEP provided a list of abutters, attached as Exhibit 4.

**5. Review of National Electrical Safety Code (NESC) requirements as described in N.H. Admin. R., En 306.01 (b)**

The Enforcement Division reviewed the specifications related to the design and reconstruction of this crossing project as described in the application, attachments, and all supplemental support documents filed by NEP and found them to be in conformance with N.H. Admin. Rule En 306 and applicable sections of the National Electrical Safety Code (NESC) C2-2023.

The conductor cable clearance requirements were met using the NESC based on the design conditions at 392° F for all crossings within this application. This scenario was the governing condition, which yielded the greatest sag and lowest clearance. Staff verified the computed sags with SAG 10 commercial software using inputs stated in the application.

NEP will maintain and operate the clearance of the crossing at a height no less than what is required by the 2023 National Electrical Safety Code (NESC, Table 232-1), which is 36.1 feet for 115 kV conductors over water areas suitable for all boating including lakes, ponds, reservoirs, tidal waters, rivers, streams and canals with an unobstructed surface area of over 200-to-2000 acres with respect to the Connecticut River crossing. The actual minimum heights over the Connecticut River exceeds the minimum NESC requirements, as depicted on Exhibit 2 and Exhibit 3.

**6. Review of public need and impact**

The A1/B2 line is an integral part of NEP’s existing electric transmission system. The crossing locations identified in the petition are in Hinsdale, New Hampshire.

RSA 371:17 requires the Department of Energy to review applications for licenses to construct, maintain, or modify installations that exist or are proposed to exist, over, under, or across public waters or State-owned land. This review is to provide for safety of the public and the preservation of perpetual access and use of public waters and State-owned land in New Hampshire.

NEP declares that the license, if granted, may be exercised without substantially affecting the use or enjoyment of public waters, that safe clearances will always be maintained, and precautions undertaken to ensure the safety of recreational users. The Enforcement Division’s review of design specifications verified that minimum safe clearances above public waters will be maintained during and after construction; and therefore, determines that public use and enjoyment of said public waters will not be diminished in any respect because of the proposed project.

**7. Enforcement Division Recommendations**

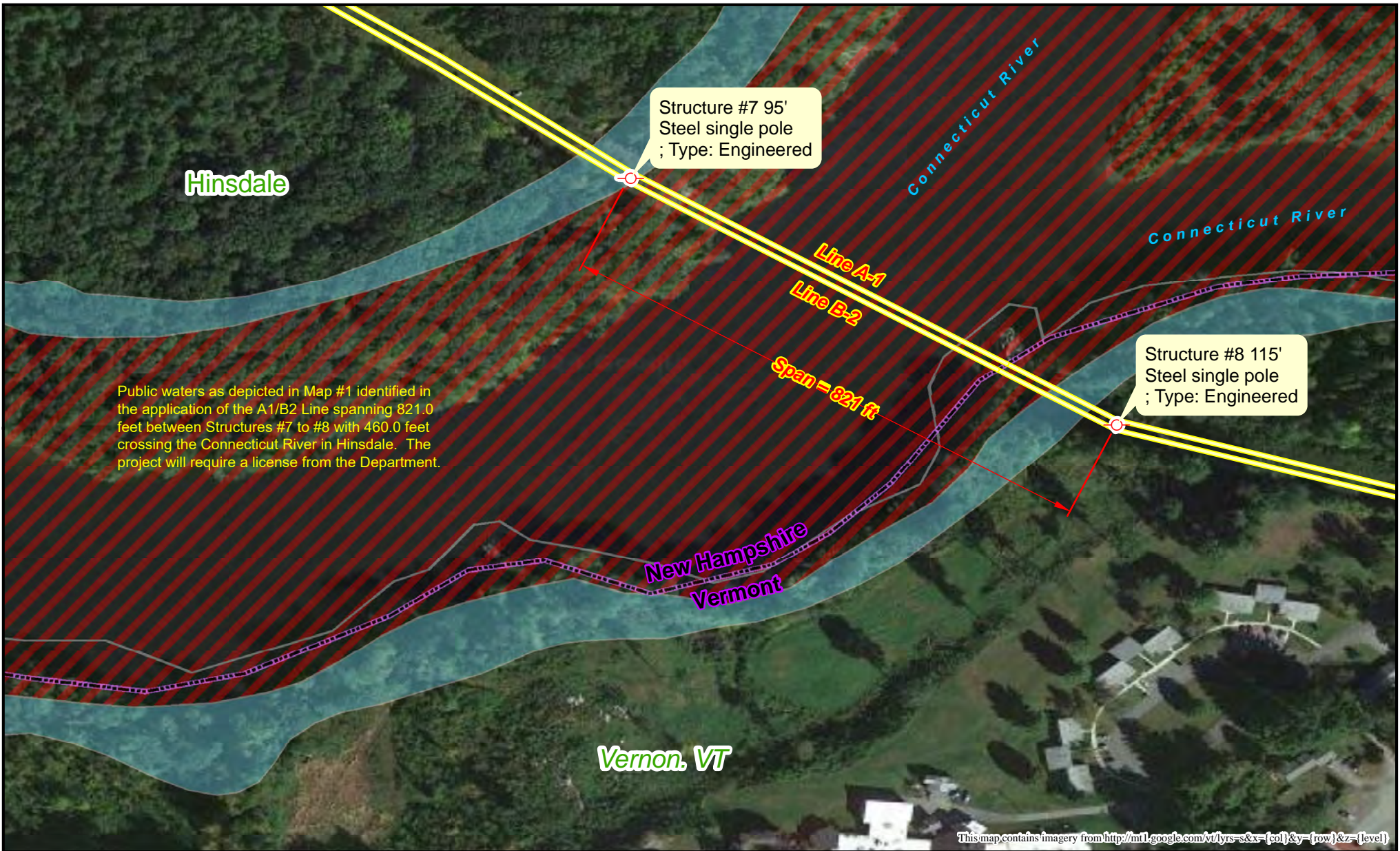
Based on the results of its review of the application, attachments, and all other supporting documents, the Enforcement Division recommends that the Department:


- 1 Find that the license New England Power requests in the application may be exercised without substantially affecting public rights on public waters; and

2. Grant New England Power a license to construct and maintain electric lines pursuant to RSA 371:17 and N.H. Admin. R., En 306.01, over and across public waters in Hinsdale, New Hampshire as specified in the application.

**Attachments:**

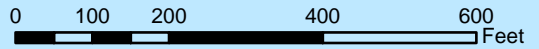
# Connecticut River - CRE 2024-012 NEPC Crossing - Map 1



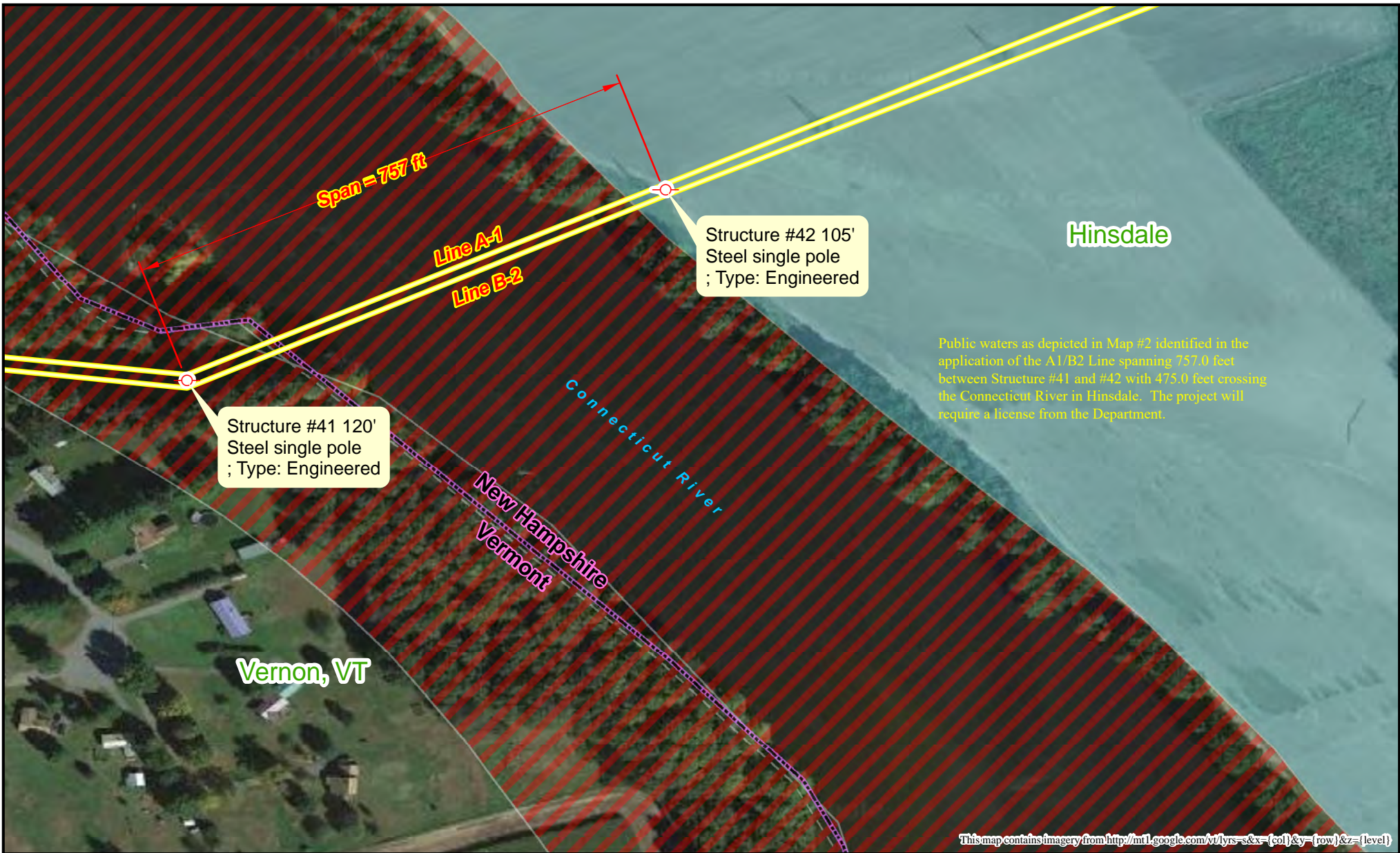
 Utility Structure	<b>Flood Hazard Zones</b>
 69 kV Line	 Regulatory Floodway
	 1% Annual Chance Flood Hazard
	 0.2% Annual Chance Flood Hazard



Prepared by:  
NH Department of Energy  
Enforcement Division



# Connecticut River - CRE 2024-012 NEPC Crossing - Map 2



 Utility Structure	<b>Flood Hazard Zones</b>
 69 kV Line	 Regulatory Floodway
	 1% Annual Chance Flood Hazard
	 0.2% Annual Chance Flood Hazard



Prepared by:  
NH Department of Energy  
Enforcement Division

