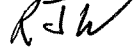


# STATE OF NEW HAMPSHIRE

## Inter-Department Communication

DATE: April 22, 2015

AT (OFFICE): NHPUC

**FROM:** Robert Wyatt, Assistant Director – Safety Division 

**SUBJECT:** Docket No. DE 15-002 NHEC Squam Lake Crossing  
Petition for a License to Construct and Maintain Cable beneath State  
Waters and Lands  
**Staff Recommendation**

**TO:** Debra Howland, Executive Director  
Tom Frantz, Director, Electric Division  
Randy Knepper, Director – Safety Division  
Michael Sheehan, Staff Attorney  
Service List

Commission Safety Division Staff's review of the above petition consisted of the following elements:

- Petition contents, testimony, project overview and history
- Regulatory Requirements
- Private Property, Property Rights
- Public Interest
- Conclusions
- Recommendations

### A. Petition Contents, Project Overview and History

On January 2, 2015, New Hampshire Electric Coop (NHEC) filed a petition, pursuant to RSA 371:17 and RSA 371:20, to construct and maintain electric cable and conduits crossing under the public waters of Squam Lake in Holderness, New Hampshire. According to the petition, the new electrical cable and conduits are necessary to serve a private residence located on Long Island. The property, including the residence, is owned by Mr. Peter Coolidge, whose primary residence is in New York, New York.

In its petition NHEC asserts the electric power lines currently serving this portion of Long Island are not sufficient to meet the electrical needs of the property owner and right of way cannot be obtained for a cross country route from existing overhead electric lines.

The new facilities will consist of a 7,200 Volt submarine cable, aluminum conductor, size 1/0, Triplex insulation with an insulation thickness of 1.720 inches. The new underground electric line will tie into existing NHEC Pole #3508.1/8.1 located on

Long Island in Holderness, approximately 30 feet to the shore line (see Project Area A in Exhibit A). Specifically, the project plans are as follows:

- NHEC Pole #3508.1/8.1 is located on land owned by Utopia/Long Island Land Company, LLC (re. Tax Map 232 Lot 15).
- NHEC will utilize the right of way from an existing easement (Exhibit C).
- The installation process will utilize trenching and direct burial of the cable and conduit to an underwater depth of 6 feet at mean high water, per NHEC construction standard IUSUB.
- The plan calls for the cable and conduit to extend into the lake, passing through 55 feet of Schedule 80 PVC conduit, to a minimum depth of 4 feet.
- The cable will exit the conduit and continue on the lake floor to a similar conduit leading the cable to the shore line of the Peter Coolidge property, also on Long Island (re. Tax Map 232 Lot 17).
- The cable will continue underground for approximately 16 feet to a new concrete vault #3508.1/8.9, where the line will be connected to a 200 amp service line to the meter and the residence.
- Total distance from NHEC Pole #3508.1/8.1 to concrete vault #3508.1/8.9 will be 400 feet. The underwater portion of this cable will span a distance of 324 feet (400 feet total - 30 feet (pole to shore on Lot 15) - 16 feet (shore to concrete vault on Lot 17) = 354 feet).
- The electric meter will be a short distance from the concrete vault.

When the project is completed, NHEC will take ownership of the lines and will be responsible for their maintenance.

## **B. Regulatory Requirements**

As defined in RSA 371:17, a license is required to place utility service facilities under or across Squam Lake, as is the case with any other New Hampshire public waters of more than 10 acres. Squam Lake is listed on the Department of Environmental Services Water Division's official list of Public Waters.

In its petition NHEC stated that Mr. Coolidge obtained the two Wetlands and Non-Site Specific Permits from the NH Department of Environmental Services (DES). The DES permits authorize the temporary impacts on shore and beneath the lake bed to facilitate construction. Copies of the DES permits were filed with the petition as Exhibits D and E.

## **C. Private Property, Property Rights**

It was necessary for NHEC to acquire one new Right of Easement (Exhibit B) from Peter J. Coolidge (re. Tax Map 232 Lot 17). NHEC also utilized its existing Right of Easement (Exhibit C) from Harold J. Coolidge and Helen I. Coolidge (re. Tax Map 232 Lot 15). These easements were necessary in order for NHEC to be able to excavate, install and

maintain the electric line and conduit within the agreed upon easement areas. NHEC, and its contractors, will be required to comply with all the terms of the Right of Easements.

#### **D. Public Interest**

NHEC states that the existing electric lines serving this portion of Long Island are not sufficient to meet the electrical needs of the property owner and right of way cannot be obtained for a cross country route from existing overhead lines to increase capacity

When the project is finished, NHEC states that the electric line and conduit will be buried underground as they travel from the shore of Long Island to a depth of 6-feet where the heavily shielded submarine cable will travel along the lake bed to a similarly constructed conduit emerging from the Peter Coolidge property.

#### **E. Conclusions**

The proposed facilities are required to meet the reasonable requirements of NHEC to provide the necessary electric service to the Peter Coolidge residence.

The proposed electric cable and conduit facilities, as proposed, should be in conformance with the National Electric Safety Code C2-2012 Part 3 sections 30 through 37. Staff notes that in its petition, NHEC does not make such a definitive statement. NHEC notes that it has successfully used this type of installation, with the submarine, aluminum conductor, size 1/0, Triplex insulated cable and conduits in over 50 similar installations .

#### **1. Recommendations**

Staff recommends approval of NHEC's petition for a license to construct and maintain cable and conduit beneath public waters (Long Island, on Squam Lake) in the Town of Holderness, New Hampshire, with the following conditions:

- a. The Commission should require that the proposed electric line complies with applicable sections of the National Electric Safety Code C2-2012 (Part 3 sections 30 -37).
- b. The Commission should require that any future alterations to the proposed electric facilities meet the applicable sections of the National Electric Safety Code in effect at the time of the alteration, and that requests for such alterations be submitted to the Commission for its consideration at least 60 days prior to the start of construction.

- c. That conformance to the conditions imposed by the DES Wetlands and Non-Site Specific Permits included in the petition as Attachment C and D is required.

**SERVICE LIST - EMAIL ADDRESSES - DOCKET RELATED**

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**Pursuant to N.H. Admin Rule Puc 203.11 (a) (1): Serve an electronic copy on each person identified on the service list.**

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**FILING INSTRUCTIONS:**

- a) Pursuant to N.H. Admin Rule Puc 203.02 (a), with the exception of Discovery, file 7 copies, as well as an electronic copy, of all documents including cover letter with:**

DEBRA A HOWLAND  
EXECUTIVE DIRECTOR  
NHPUC  
21 S. FRUIT ST, SUITE 10  
CONCORD NH 03301-2429

- b) Serve an electronic copy with each person identified on the Commission's service list and with the Office of Consumer Advocate.**
- c) Serve a written copy on each person on the service list not able to receive electronic mail.**