

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: March 29, 2019

AT (OFFICE): NHPUC

FROM: Paul Kasper *PK*
Assistant Director – Safety Division

NHPUC 29MAR'19PM12:28

SUBJECT: Docket No. DE 18-178 Public Service New Hampshire d/b/a Eversource Energy
Request for a License to Construct and Maintain Electric Lines Over and Across the Lovell and Bearcamp Rivers in the Town of Ossipee, New Hampshire
Staff Recommendation

TO: Debra Howland, Executive Director
Thomas Frantz, Director, Electric Division
Leszek Stachow, Assistant Director, Electric Division
Mary Schwarzer, Staff Attorney, Legal Division

CC: Randy Knepper, Director – Safety Division

The Safety Division's review of the above request consisted of the following elements:

- Request contents and history;
- Applicable State Statute;
- Review of the existing crossing(s) already licensed by the PUC;
- Review of land ownership of existing pole structures;
- Review of NESC code requirements as described in Puc 300;
- Review of public need and public impact, including applicability of other State regulations; and
- Summary

1. Request for License

On October 20, 2017, Public Service New Hampshire d/b/a Eversource Energy (Eversource), filed a letter requesting a license to construct and maintain a three-phase 12.47 kV distribution line, designated as 3116X, over and across the public waters of the Lovell and Bearcamp Rivers in the Town of Ossipee, New Hampshire. These are temporary relocations of an existing line. Eversource's existing 3116X line is being relocated as a result of a New Hampshire Department of Transportation bridge rehabilitation project. See a detailed NHPUC Safety Division map/schematic in Attachment A and B of this recommendation.

Bearcamp River

The proposed crossing of the Bearcamp River is located approximately 110 feet east of the centerline of roadway NH Routes 16/25 and will span approximately 218 feet between two new wood structures. The structure on the southern side of the river, #3116/105, is a tangential structure, constructed with a single Class-1, 50 foot tall CCA pole. The structure on the northern side of the river, number #3116/104, is a tangential structure, constructed with a single Class-1, 50 foot tall CCA pole. Eversource provided a location map, a project plan schematic and construction details of the structures in its attachment to Eversource's request.

The required technical information provided by Eversource is said to be based on the 2012 National Electric Safety Code (NESC) C2-2012. Within its petition, Eversource notes that the proposed crossing has been designed and will be constructed, maintained and operated in accordance with NESC. The design criteria used for the conductors transmitting electrical power at 12.47 kV will be (3) 477 ACSR cable with 18/1 stranding. The neutral will be a single 4/0 ACSR cable with 6/1 stranding. The conductors will be sagged using 120 degree F conditions at a maximum tension of 2,000 pounds. The neutral will be sagged also using 120 degree F conditions at a maximum tension of 2,000 pounds. Eversource provided sufficient detail in its request to show how all required clearances from neutral wires to the surface of the water will be maintained (23.3 feet). Staff verified the computed sags with SAG 10 commercial software using inputs as stated by Eversource.

The water clearances are taken from the projected 100 year flood levels. This is more conservative than the 10 year flood levels allowed by the NESC (note 18 to Table 232-1). Eversource uses floodwater elevations for the Bearcamp River in Carrol County that are identified on FEMA flood map #33003C0665D. The 100-year flood elevation for the river in this location is approximately 418 feet, and is based on the North American Vertical Datum of 1929 (NAVD29). The Safety Division verified the 418 foot flood level from the FEMA flood map.

Lovell River

The proposed crossing of the Lovell River does not require a license as it does not meet the definition of "public waters" as defined in 371:17. Is not listed in the New Hampshire "Public Rivers and Streams" the Official List of Public Waters (OLPW).

<http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/olpw.pdf>

2. New Hampshire statute referenced in request

371:18 Exception. – The requirement for request to and hearing by the commission as provided in RSA 371:17 shall not be required when the license is requested by the public utility for the exclusive purpose of furnishing facilities to, or relocating facilities at the request of, the state, or any department or agency thereof. All such crossings shall comply with the National Electrical Safety Code.

Source. 1951, 203:48 par. 18, eff. Sept. 1, 1951. 2013, 82:3, eff. June 19, 2013.

See Attached Secretarial Letter:

Public Service Company of New Hampshire d/b/a Eversource Energy - NHDOT Ossipee Bridges Project, Lovell and Bearcamp River Line Crossings (11/14/18)

3. Review of existing license(s) and permissions previously granted by the PUC for this location of the Bearcamp River

This public waters crossing license request is part of the relocated 3116X circuit for Eversource and had not been previously licensed by the Commission.

The Bearcamp River, from the outflow of a stream in Sandwich, New Hampshire, is listed under the category “Public Rivers and Streams” in the Official List of Public Waters (OLPW). The entire list of public waters can be accessed through the following web link:

<http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/olpw.pdf>

Eversource asserts that the proposed crossing will be exercised without substantially affecting the rights of the public in the public water of the Bearcamp River. Minimum safe line clearances above the river surface and affected shorelines will be maintained at all times. The use and enjoyment of the river by the public will not be diminished in any material respect as a result of the overhead line crossing.

4. Review of land ownership of proposed pole structures

Eversource specifies that the construction of this crossing will span the Bearcamp River, which is adjacent to the NH Route 16/25 bridge. Proposed pole #3116/105 will be located on the southerly side of the river within existing NH DOT right of way. Proposed structure #3116/104 will be located on the northerly side of the river within the NH DOT right of way.

5. Review of NESC code requirements as described in Puc 300

N.H. Code of Administrative Rules Puc 306 requires:

- (a) each utility shall construct, install, operate and maintain its plant, structures and equipment and lines, as follows:
 - (1) In accordance with good utility practice;
 - (2) After weighing all factors, including potential delay, cost and safety issues, in such a manner to best accommodate the public; and
 - (3) To prevent interference with other underground and above ground facilities, including facilities furnishing communications, gas, water, sewer or steam service.
- (b) For purposes of this section, “good utility practice” means in accordance with the standards established by:
 - (1) The National Electrical Safety Code C2-2012....

Eversource states that the proposed crossing has been designed and will be constructed, maintained and operated in accordance with 2012 National Electrical Safety Code C2-2012.

Safety Division Staff had a meeting with Eversource staff on March 6, 2019 in the Safety Division and reviewed the specifications related to the design and construction of this crossing project as provided in Eversource’s letter, the attachments, and all supplemental support documents, and found them to be in conformance with the applicable sections of NESC code C2-2012 and Puc 300.

6. Review of public need and public impact

In order to meet the reasonable requirements of electric service to the public, Eversource proposes to construct and maintain a three-phase 12.47 kV distribution line, designated as the 3116X circuit, in Ossipee, New Hampshire. The 3116X circuit is an integral part of Eversource’s electric distribution system in the area. Eversource’s existing 3116X circuit is being relocated as a result of two NH DOT projects to rebuild and widen existing bridges.

Eversource asserts that the proposed license for this crossing may be exercised without substantially affecting the rights of the public in the public waters of the Bearcamp River. Minimum safe line clearances above the river surface and affected

shorelines will be maintained at all times. The use and enjoyment of the river by the public will not be diminished in any material respect as a result of the overhead line crossing.

This project does require use and occupancy agreements be in place prior to construction of this crossing from the New Hampshire Department of Transportation.

Safety Division Staff concludes the impact to the public will be *de minimis* and not measurable. The proposed crossing does not appear to affect the rights of the public in the public water of the Bearcamp River because minimum safe line clearances above the water surface will be maintained at all times. Shorelines will not be affected by this project.

Staff Recommendation:

Based on the results of its review of Eversource's letter requesting a license, its attachments, and all other supporting documents filed to this docket, the Safety Division Staff recommends that the Commission:

- 1) Find that the license Eversource requests in this docket may be exercised without substantially affecting the public rights in the public water which is the subject of this request;
- 2) Grant Eversource a license to construct, operate and maintain electric lines, including neutral over and across the public water of the Bearcamp River in Ossipee, New Hampshire, as specified in Eversource's request for no longer than 4 years from the date of issue; and

Attachments

Attachment A

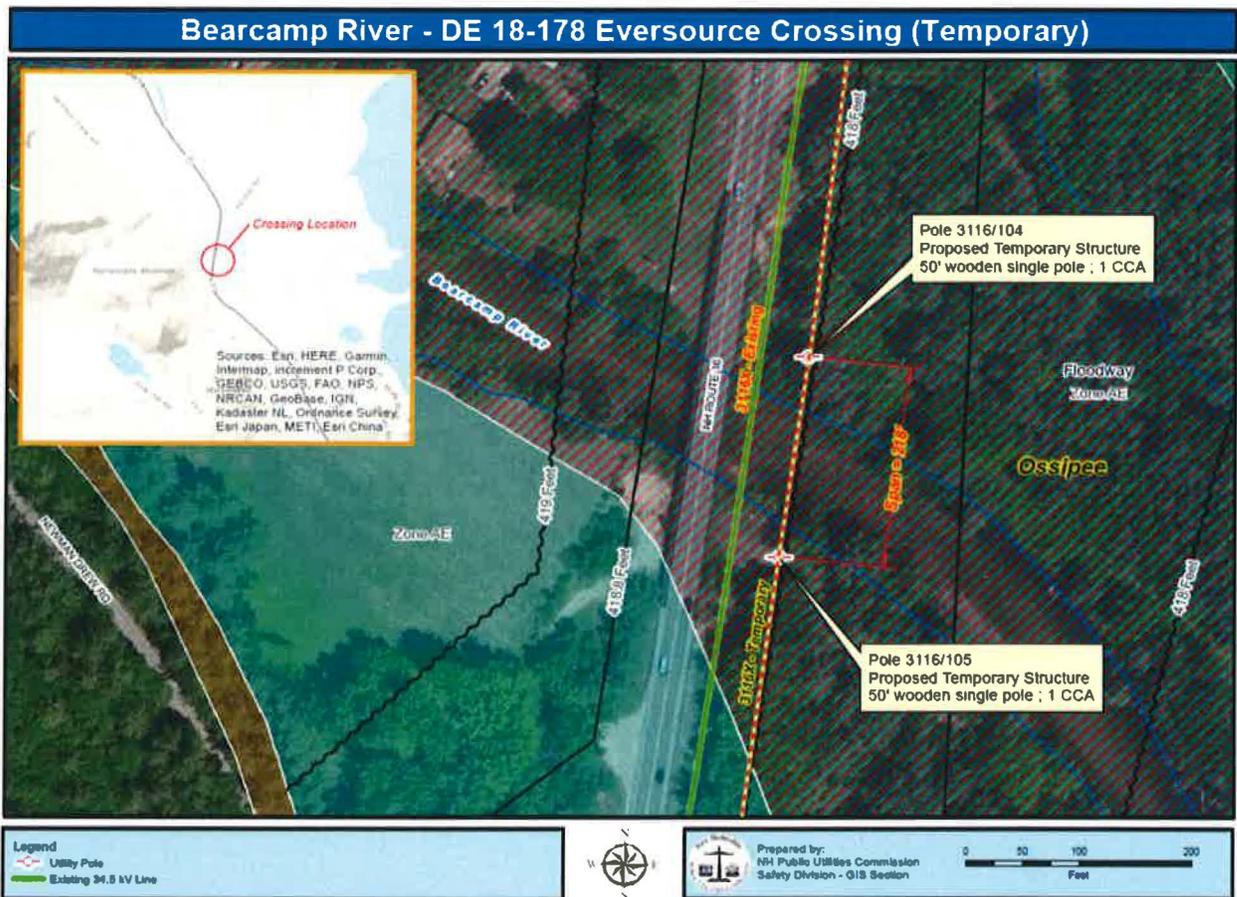


Figure 1: 12.47 kV, designated as the 3116X Line, a span of approximately 218 feet, across the Bearcamp River in Ossipee, NH. The structure on the southern side of the river is a tangential structure, designated #3116/105 and will be constructed with a single Class-1, 50 foot tall, CCA pole. The structure on the northern side of the river, designated #3116/104 shall be a similar tangential structure, constructed with a single Class-1, 50 foot tall, CCA pole. The span of the river is approximately 83 ft at the northern and southern banks.

Attachment B

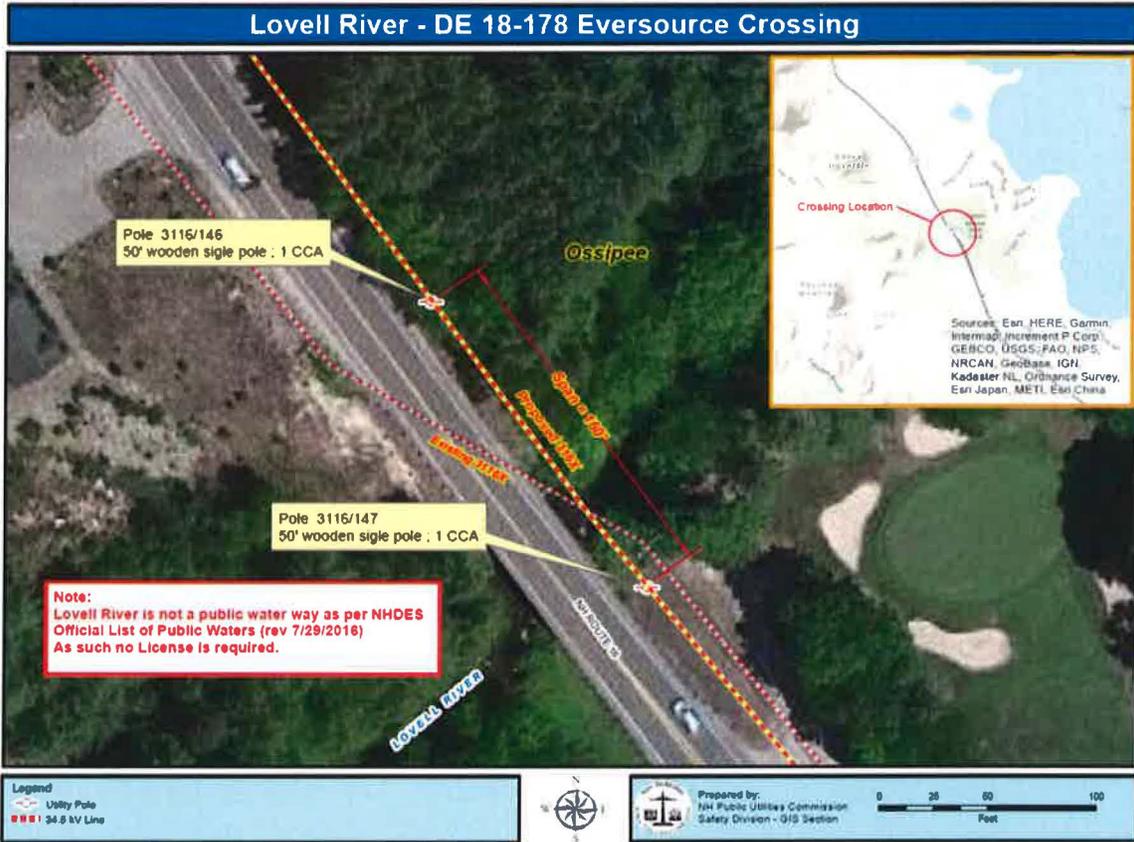


Figure 1: 12.47 kV, designated as the 3116X Line, a span of approximately 160 feet, across the Lovell River in Ossipee, NH. The structure on the southern side of the river is a tangential structure, designated #3116/147 and will be constructed with a single Class-1, 50 foot tall, CCA pole. The structure on the northern side of the river, designated #3116/146 shall be a similar tangential structure, constructed with a single Class-1, 50 foot tall, CCA pole. The span of the river is approximately 27 ft at the northern and southern banks.

THE STATE OF NEW HAMPSHIRE

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November 14, 2018

Christopher J. Allwarden
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Eversource Energy
780 N. Commercial Street
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**Re: Public Service Company of New Hampshire d/b/a Eversource Energy
NHDOT Ossipee Bridges Project, Lovell and Bearcamp River Line Crossings**

Dear Mr. Allwarden:

On November 5, 2018, the Commission received a notification letter from Public Service Company of New Hampshire d/b/a Eversource Energy (Eversource) regarding the relocation of existing overhead wire crossings of the Lovell River and the Bearcamp River in Ossipee New Hampshire at the location of the N.H. Routes 16/25 bridges over those rivers. The relocations were requested by the New Hampshire Department of Transportation (NHDOT) to accommodate a NHDOT project to replace those bridges (OSS�PEE 14749 X-A000(490)). Eversource asserted that, under RSA 371:18, a petition and hearing for a crossing license "are not required where, as here, the crossing is for the exclusive purpose of relocation of public utility facilities at the request of the state."

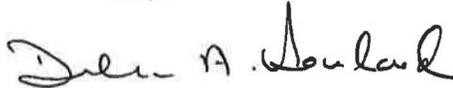
RSA 371:18 provides as follows (emphasis added):

The requirement for petition to and hearing by the commission as provided in RSA 371:17 shall not be required *when the license is requested by the public utility* for the exclusive purpose of furnishing facilities to, or relocating facilities at the request of, the state, or any department or agency thereof. All such crossings shall comply with the National Electrical Safety Code.

The Commission has determined that the exception contained in RSA 371:18 requires a public utility to request that a crossing license be issued by the Commission under the circumstances described therein, but relieves the requesting utility from the requirement to file a petition and the Commission from holding a hearing regarding the requested license.

Accordingly, Eversource is directed to submit a written request for the issuance of a license to cross the Lovell and Bearcamp Rivers in connection with the relocation of overhead wires related to the referenced NHDOT project. That request must include a detailed description of the river crossings and a demonstration that the crossings comply with the National Electrical Safety Code. Upon receipt of the written request, a new docket will be opened and the request will be processed by the Commission.

Sincerely,

A handwritten signature in black ink, appearing to read "Debra A. Howland". The signature is fluid and cursive, with a large initial "D" and a long, sweeping underline.

Debra A. Howland
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