DATE: October 27, 2021
AT (OFFICE): NH Dept. of Energy

FROM: Kenneth Walsh KGW
Utility Analyst IV – Division of Enforcement

SUBJECT: CR2021-017 Public Service New Hampshire d/b/a Eversource Energy
Petition for License to Construct and Maintain Electric Lines Over and Across
State Owned Land in Lancaster, New Hampshire
Division of Enforcement, Safety Bureau Recommendation

TO: Jared Chicoine, Interim Commissioner, Department of Energy
Christopher Ellms, Jr., Deputy Commissioner, Department of Energy

CC: Thomas Frantz, Director of Regulatory Division
Richard Chagnon, Regulatory Division
Lynn Fabrizio, Division of Enforcement
Randall Knepper, Division of Enforcement
Paul Kasper, Division of Enforcement

The Division of Enforcement’s review of the above petition consisted of the following elements:

- Petition contents and history;
- Applicable State Statute;
- Review of the existing crossing(s) previously licensed by the PUC, if any;
- 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
- Conclusions and Recommendations.

1. Petition contents and history

On October 22, 2021, Public Service New Hampshire d/b/a Eversource Energy (ES), filed a
petition for a license pursuant to RSA 371:17 to construct, maintain and operate the Eversource
D142 Line, which is a 115kV transmission line, over State owned land in Lancaster.

The State owned land was not previously licensed, but was licensed with the predecessor in
title, Pan Am Railways. This full line rebuild was the subject of a petition recently licensed in
CR2021-009. This current petition therefore, is the result of oversight by Eversource Energy as
it should have been included in the CR2021-09 petition.
This proposed project is to replace (2) wood structures with weathered steel. Existing conductors will be replaced with new conductors and existing shield wires will be replaced with fiber optical ground wires (OPGW).

Common to the noted structures, existing conductors will be replaced with (3) new ACSS 1272 54/19 kcmil conductors. Two existing shield wires will be replaced with (2) 48 fiber optical ground wire (OPGW) with both being vertically attached above the conductors. The conductor cable clearance requirements were met using the National Electrical Safety Code (NESC) conditions at 392 deg F. for all crossings within this petition. This scenario was the governing condition, which yielded the greatest sag and lowest clearance. Only 28.1 feet clearance is required by the NESC Table 232-1 for track rails of railroads. The Safety Bureau verified the computed sags with SAG 10 commercial software using inputs as stated in the petition.

The scope of this project begins in Lancaster at Structure #95 (Type T, CL H1, 2 pole steel) approximately 2,400 feet south of where the D142 Line crosses North Road then heading south crossing State owned land to Structure #96 (Type P, CL H1, 3 pole steel).

The land crossing spans 346.3 feet between Structures #95 and #96 with 160.8 feet spanning State owned land. See Attached Map #1.

2. New Hampshire statute referenced in petition (as modified by N.H. House Bill 2 on June 3, 2021)


3. Review of existing license(s) and permissions previously granted by the PUC for these locations of the State owned land in Lancaster.

The State owned land crossing span in Lancaster was not previously licensed.

ES asserts environmental impacts from this project will require permits from the NH Department of Environmental Services and that ES will obtain these before commencing work.

Review of land ownership of proposed pole structures

In its petition, ES specifies that the replacement of the structures and full line rebuild is over state owned land in Lancaster, New Hampshire.

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

The Safety Bureau reviewed the specifications related to the design and re-construction of this crossing project as described in the petition, attachments, and all supplemental support documents and corrections filed by the Company, and found them to be in conformance with N.H. Admin. Rule Puc 306 and applicable sections of NESC C2-2012.
5. Review of public need and public impact

In order to meet the reasonable requirements of electric service to the public, ES proposes to replace existing wood structures with steel structures, replace existing conductors with new conductors, replace static wires with communications fiber optic cables, and maintain a 115 kV transmission line designated as the D142 Line over and across state owned land in Lancaster, New Hampshire. This transmission line is an integral part of ES’s electric transmission system in this area.

ES asserts in the petition that the existing crossing will be exercised without substantially affecting the rights of the public in the State owned land in Lancaster. Minimum safe line clearances above the land will be maintained at all times. The use and enjoyment of the State owned land by the public will not be diminished in any material respect as a result of the overhead line crossing.

The Safety Bureau concludes the impact to the public will be de minimis and not measurable. The crossings do not appear to affect the rights of the public in the State owned land because minimum safe line clearances above the land surfaces will be maintained at all times.

The Safety Bureau Recommendation:

Based on the results of its review of the petition, its attachments, and all other supporting documents filed to this docket, the Safety Bureau recommends that the Department:

1) Find that the license ES requests in this docket may be exercised without substantially affecting the public rights in State owned land, which is the subject of the petition;

2) Grant ES a license to construct, operate and maintain electric lines and communication cables over and across the State owned land in Lancaster, New Hampshire, as specified in the petition;

3) Issue a license and orders for its publication.

Attachment
State owned Land as shown above in Map #1 identified in the petition and engineering drawings as State of New Hampshire and located in Lancaster. The project will require the Department to grant a license related to this project. The license will be for the 115 kV D142 transmission line from Structure #95 south to Structure #96. This crossing spans 346.3 feet with 160.8 feet crossing State owned land.