STATE OF NEW HAMPSHIRE  
Intra-Department Communication

DATE: May 3, 2022  
AT (OFFICE): NH Dept. of Energy

FROM: Michael Soucy, MR5  
Utility Analyst IV – Division of Enforcement

SUBJECT: CRE 2022-001 Eversource Energy  
Petition for License to Construct and Maintain Electric Lines Over and Across Public Water in Atkinson, New Hampshire

Division of Enforcement, Safety Bureau Recommendation

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

CC: Thomas Frantz, Director of Regulatory Support Division  
Paul Kasper, Director, Enforcement Division  
Elizabeth Nixon, Director-Electric Regulatory Support Division

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

- Petition contents, replacement 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 April 28, 2022, Public Service New Hampshire d/b/a Eversource Energy (Eversource, or ES) filed a petition for a license pursuant to RSA 371:17 which was originally submitted January 27, 2022, to construct and maintain the Eversource 3818 Line, an existing 4.16kV distribution line over and across public water in Atkinson, New Hampshire.
In order to meet the requirements for reasonable service to the public, Eversource has previously constructed and currently operates and maintains an overhead 4.16 kV electrical line, designated as the Eversource 3818 Line.

As part of its ongoing maintenance of the electrical distribution system, Eversource has determined that existing wood structures on the 3818 Line including Structures 1/12, 1/13, 1/16, and 1/17 at the two subject crossing spans need to be replaced to continue to function safely and reliably. These structures will be replaced with single wooden pole structures similar in configuration to existing structures and as depicted on Exhibits 2 and 3 submitted by ES. The above-ground structure heights increase between 3’ to 8’ to maintain safe clearances. Replacement structures 1/12, 1/13, 1/16 and 1/17 will be located within 10’ of the original structure location. The 3818 Line’s existing conductor, whose specifications were identified in the Cable Schedule on Exhibit 2 and 3 submitted by ES, will be unchanged in the course replacing the existing noted structures.

Two public water crossings that are the subject of this petition are depicted on the Overview Map, attached hereto, and a more detailed location description is as follows:

Exhibit 2 submitted by ES shows that the 3818 Line crosses public water known as Island Pond, a/k/a Boulder Cove, in Atkinson, New Hampshire starting on the southeastern side of Chase Island from structure 1/12 and extending southeast to the northern tip of Sheep Island to structure 1/13.

Exhibit 3 submitted by ES shows that the 3818 Line crosses Island Pond, a/k/a Boulder Cove, from the southeastern edge of Sheep Island from structure 1/16 and extending southeasterly to the western shore of Houle Grove, at the approximate location of where Boulder Cove Road ends and splits into joint driveways to structure 1/17.

The location of structures 1/12 to 1/13 and 1/16 to 1/17 creates a total span of 611 feet, with a span of 428 feet over and across public water.

The following table provides the summary of this petition with all crossings to include structure numbers, types, spans, ES design criteria, and NESC compliance:
Department of Energy Safety Bureau Summary Table

<table>
<thead>
<tr>
<th>Structure</th>
<th>Type</th>
<th>Span (Pole to Pole)</th>
<th>Distance (feet)</th>
<th>Minimum NESC Table 232-1 Clearance (ft.)</th>
<th>ES Vertical Design Clearance (ft.)</th>
<th>Complies with NESC Table 232-1 (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/12</td>
<td>Wood Class I</td>
<td>1/12 to 1/13</td>
<td>330</td>
<td>32.5</td>
<td>35.3</td>
<td>Y</td>
</tr>
<tr>
<td>1/13</td>
<td>Wood Class I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/16</td>
<td>Wood Class I</td>
<td>1/16 to 1/17</td>
<td>281</td>
<td>32.5</td>
<td>35.1</td>
<td>Y</td>
</tr>
<tr>
<td>1/17</td>
<td>Wood Class I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. New Hampshire statute referenced in petition

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, it shall petition 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 petition the department of energy for a license in the same manner prescribed for a public utility.


3. Review of existing license(s) and permissions previously granted by the PUC for these locations over and across public water in Atkinson.

The original constructed date of the 3818 Line is unknown, but predated 1976 when one of the two public water crossing spans that is part of this petition was licensed pursuant to Order 12,219, a copy of the relevant portions of that bulk licensing Order are included herewith for convenience of reference (See, in pertinent part Exhibit 2A3 to the petition for license). The second public water crossing span that is the subject of this petition, over Island Pond, was not previously licensed likely owing to oversite.
A New Hampshire Department of Environmental Services Shoreland Permit By Notification (PBN) is required due to the structure replacement work being within the shoreland buffer. Also, a wetland Statutory Permit by Notification (SPN) is required to account for the temporary wetland impacts associated with building temporary access to Sheep Island to provide equipment access necessary to complete the structure replacements on the island. Both NHDES permits will be secured prior to commencement of construction.

The U.S. Army Corps of Engineers (ACOE) does not regulate Island Pond as navigable waters. As a result, a crossing permit from the AOE is not required.

4. Review of land ownership of proposed pole structures

Eversource specifies that the new poles and conductors to be licensed pursuant to this petition, will be located over and across public water in Atkinson, New Hampshire. 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.

5. 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 Eversource and found them to be in conformance with N.H. Admin. Rule Puc 306 and applicable sections of NESC C2-2012.

6. Review of public need and public impact

The 3818 Line is an integral part of Eversource’s existing electric distribution system in New Hampshire. The crossing location identified in the petition is in the town of Atkinson, New Hampshire. The Company asserts in its petition that the existing crossings will be exercised without substantially affecting public rights in the identified public water.

The Safety Bureau verified that minimum safe line clearances above public water will be maintained at all times and determined that public use and enjoyment of the public water will not be diminished in any material respect as a result of the proposed overhead line crossings. Spotters are routinely used to make sure the waterbody is clear of recreational users prior to transferring the wires from the original structures to the replacement structures.
7. Safety Bureau Recommendation:

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

1) Find that the license Eversource requests in this docket may be exercised without substantially affecting the public rights in public water; and

2) Grant Eversource a license to construct, install, operate, and maintain electric lines and communication cables pursuant to RSA 371:17 and Puc 306.01, over and across public water in the Town of Atkinson, New Hampshire as specified in the petition.

Attachments:
Public Waters as shown above identified in the petition and engineering drawings as State of New Hampshire and located in Atkinson. The Project will require the Department to grant a license related to this project. The license will be for the 4.16kV 3818 distribution line from structure 1/12 to Structure 1/13 and structure 1/16 to structure 1/17. These crossings span 611 feet with 428 feet crossing Island Pond.
# Town/City | Exhibit(s) Location(s)
--- | ---
1 | Antrim-Deering 2.4 kv
2 | Atkinson Island Pond 2.4kv
3 | Bedford Bedford-Manchester 34.5kv
4 | Belmont Belmont-Tilton (Winnisquam Lake, Silver Lake) 2.4; 7.2; 34.5
5 | Berlin Androscoggin River 115kv; 4.16kv, 12.47,Guys
6 | Bethlehem Baker Brook Pond 34.5kv; 115kv
7 | Bow Bow-Concord - Merrimack River 34.5 (x2) 115kv (x3)
8 | Bridgewater Pemigewasett River 115kv
9 | Campton Pemigewasett River 34.5 kv
10 | Concord Contoocook River 34.5kv, Merrimack River 34.5kv, Bow-Concord Merrimack River (x5)
11 | Conway Pequawket Pond Outlet 4.16kv (x2); Saco River 4.16kv; Saco River12.47kv (x2)
12 | Dalton Connecticut River 115kv; Mirror Lake 115kv
13 | Deering See Antrim
14 | Derry Island Pond 2.4kv
15 | Dover Cocheo River 115kv (x2); 34.5kv x1; 13.2kv
16 | Durham Durham-Newmarket - Lamprey River 34.5kv (Appendix 15 Revision in the front of GCA-218)
17 | Errol Androscoggin River 1.2kv
18 | Franklin Pemigewasset River 34.5kv; Franklin-Boscawen-Merrimack River 115kv (x2)
19 | Gilford Lake Winnipesaukee 2.4kv
20 | Goffstown Pisataquog River – 34.5kv (x3); 12.47kv; 2.4kv (2)
21 | Gorham Androscoggin River – 34.5kv
22 | Greenville Souhegan River – 4.16kv (x2)
23 | Greenlaw Contoocook River – 34.5kv
24 | Hinsdale Connecticut River – 69kv
25 | Holderness Pemigewasset River – 34.5kv (x2)
26 | Hooksett Pinacale Pond 34.5kv (x2)
27 | Hudson Merrimack River 115kv (x2); 34.5kv (x3)
28 | Jaffrey Mountain Brook 12.47kv
29 | Lee Wheelwright Pond 7.2kv
30 | Lincoln Bog Pond 115kv
31 | Litchfield Merrimack River 115kv (x3); 12.47kv
32 | Lyman Dodge Pond 1.2kv
33 | Manchester Merrimack River 34.5kv (x 2) and see Bedford #3
34 | Merrimack Souhegan River 34.5kv; 115kv; Merrimack River see Litchfield #31
<table>
<thead>
<tr>
<th></th>
<th>Location</th>
<th>Noted Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>Milan</td>
<td>Androscoggin River 7.2kV (x2)</td>
</tr>
<tr>
<td>36</td>
<td>Milton</td>
<td>Salmon Falls River 7.2kV</td>
</tr>
<tr>
<td>37</td>
<td>Nashua</td>
<td>Nashua River 34.5kV (x4); 4.16kV Merrimack River see Hudson #27</td>
</tr>
<tr>
<td>38</td>
<td>New Hampton</td>
<td>Penigewasset River 34.5kV; see Hill #23 and Bridgewater #8</td>
</tr>
<tr>
<td>39</td>
<td>Newmarket</td>
<td>Lamprey River 34.5kV; and see Durham #15</td>
</tr>
<tr>
<td>40</td>
<td>Northumberland</td>
<td>Ammonoosuc River 4.16kV; 7.2kV; Connecticut River 2.4kV</td>
</tr>
<tr>
<td>25</td>
<td>Plymouth</td>
<td>Penigewasset River see Holderness #25</td>
</tr>
<tr>
<td>41</td>
<td>Portsmouth</td>
<td>Piscataqua River 4.16kV; 2.4kV; Sagamore Creek 2.4kV</td>
</tr>
<tr>
<td>42</td>
<td>Rindge</td>
<td>Island Pond 2.4kV</td>
</tr>
<tr>
<td>43</td>
<td>Sanbornton</td>
<td>Cawley Pond 7.2kV</td>
</tr>
<tr>
<td>44</td>
<td>Stark</td>
<td>South Pond 1.2kV</td>
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<tr>
<td>45</td>
<td>Strafford</td>
<td>Wild Goose Pond 7.2kV</td>
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<td>46</td>
<td>Stratford</td>
<td>Connecticut River 7.2kV</td>
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<td>47</td>
<td>Swanzey</td>
<td>Ashuelot River 115kV</td>
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<td>4</td>
<td>Tilton</td>
<td>Winnisquam Lake; Silver Lake see Belmont #4</td>
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<td>48</td>
<td>Wakefield</td>
<td>Lovell Lake 7.2kV; Great East Lake 7.2kV (x2); 1.2kV; Pine River Pond 7.2kV (x2); Balch Pond 7.2kV</td>
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<tr>
<td>49</td>
<td>Washington</td>
<td>Island Pond 7.2kV</td>
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<tr>
<td>50</td>
<td>Weare</td>
<td>Horace Lake Water Reservoir 7.2kV; 2.4kV</td>
</tr>
<tr>
<td>51</td>
<td>Webster</td>
<td>Blackwater River 7.2kV</td>
</tr>
<tr>
<td>52</td>
<td>Whitefield</td>
<td>Mirror Lake 7.2kV; Hazen Pond 34.5kV</td>
</tr>
</tbody>
</table>

Supplemental Order #12,444
DE 76-22

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

Petition by Public Service Company of New Hampshire for licenses to maintain electric lines over and across public waters in the State of New Hampshire.

...00...

ORDER NO. 12,219

WHEREAS, by petition filed March 12, 1976, Public Service Company of New Hampshire seeks licenses pursuant to RSA 371:17-21 as amended by c. 21, Laws of 1967, for licenses to maintain electric lines over and across public waters in the State of New Hampshire; the location, construction and design of which are shown on the fifty-two (52) appendices attached to the petition; and

WHEREAS, the petition represents that it is necessary for the petitioner to maintain electric transmission and distribution lines of wires and cables over and across certain lakes, ponds and streams in the State of New Hampshire which lines are part of its electric system throughout the state; and

WHEREAS, due to the increased recreational use of certain waters of the State, the petitioner has reviewed its construction and design of electric lines crossing lakes, ponds and streams within the State of New Hampshire and determined that certain crossings for which applications were not filed in the initial general licensing proceedings of the Commission in 1955 or thereafter may require licenses as crossings of "public waters" pursuant to RSA 371:17-21; and
WHEREAS, following due notice no objections were raised by any of the interested parties to the petitioners request and upon investigation of all the facts before the Commission, it is found that the licenses hereby requested may be exercised without substantially affecting the public rights in said waters; it is

ORDERED, that licenses, be and hereby are, granted to Public Service Company of New Hampshire for those crossings described in the fifty-two (52) appendices of the petition which is on file at the office of this Commission.

By order of the Public Utilities Commission of New Hampshire this twenty first day of April, 1976.

[Signature]
Secretary
The following P.U.C. Order was superseded by previously added Order. A correction of the date 1973 to 1955 on the 24th line was made.
PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

Petition by Public Service Company of New Hampshire for licenses to maintain electric lines over and across public waters in the State of New Hampshire.

O R D E R N O. 12-219

WHEREAS, by petition filed March 12, 1976, Public Service Company of New Hampshire seeks licenses pursuant to RSA 371:17-21 as amended by c. 21, Laws of 1967, for licenses to maintain electric lines over and across public waters in the State of New Hampshire; the location, construction and design of which are shown on the fifty-two (52) appendices attached to the petition; and

WHEREAS, the petition represents that it is necessary for the petitioner to maintain electric transmission and distribution lines of wires and cables over and across certain lakes, ponds and streams in the State of New Hampshire which lines are part of its electric system throughout the state; and

WHEREAS, due to the increased recreational use of certain waters of the State, the petitioner has reviewed its construction and design of electric lines crossing lakes, ponds and streams within the State of New Hampshire and determined that certain crossings for which applications were not filed in the initial general licensing proceedings of the Commission in 1973 or thereafter now may require licenses as crossings of "public waters" pursuant to RSA 371:17-21; and
THE STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

Petition by Public Service Company of New Hampshire under RSA 371:17-20 as amended by c. 21, Laws of 1967, for licenses to maintain electric lines over and across public waters in the State of New Hampshire.

TO THE PUBLIC UTILITIES COMMISSION:

Public Service Company of New Hampshire, a corporation duly organized and existing under the laws of the State of New Hampshire and engaged in the generation, transmission and sale of electric energy in said State (hereinafter called the Petitioner), respectfully represents as follows:

1. That in order to meet the reasonable requirements of service to the public, it is necessary for the Petitioner to maintain electric transmission and distribution lines of wires and cables over and across certain lakes, ponds and streams in the State of New Hampshire which lines are part of its electric system throughout said State.

2. That as a result of increased recreational use of certain waters of the State and concerns expressed by the Public Utilities Commission and the Department of Safety Services for the need to reassess height requirements and other safety standards concerning the Petitioner's electric lines crossing said waters, the Petitioner has, after discussions with the Public Utilities Commission reviewed its construction and design of electric lines crossing lakes, ponds and streams within the State of New Hampshire.

3. That as a result of said review, the Petitioner has determined that certain crossings for which applications were not filed in the initial general licensing proceedings of the Commission in 1955 (Commission Order No. 6668 relating to the Petitioner and Order No. 6667 relating to
its subsidiary New Hampshire Electric Company) or thereafter now may require licenses as crossings of "public waters" pursuant to RSA 371:17-21 and in accordance with Commission orders relative to the definition or classification of water bodies.

4. That the location, construction and design of the crossings are shown on the attached appendices.

5. That the lines and supporting structures on each side of each crossing are erected and maintained by the Petitioner either (a) in the case of transmission lines, pursuant to easements, or (b) in the case of distribution lines on land of the customer or pursuant to easements or agreements with the landowners.

6. That the Petitioner believes and therefore avers that the licenses hereby petitioned for may be exercised without substantially affecting the public rights in said waters.

WHEREFORE, the Petitioner prays:

a. That the Commission find the licenses petitioned for may be exercised without substantially affecting the public rights in those public waters; and

b. That the Commission render judgment granting the Petitioner the licenses to maintain said crossings.

Dated at Manchester this 12th day of March, 1976.

Respectfully submitted,

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

By _____________________________
/s/ Russell A. Winslow
Its Attorney
TOWN OF ATKINSON

Three water crossings over Island Pond in the Town of Atkinson as follows:

A. From McCartney's Island to Locke Island.

B. From Sheep Island to Houle Groves (Prior License Public Utilities Commission Order No. 6667#4).

C. From Chase Island to Parker's Island (Prior License Public Utilities Commission Order No. 6667#2).


Respective Minimum Water Clearances: 37 feet; 35 feet and 36 feet.
EXHIBIT 2A4

240 VOLTS WATER CROSSING

ISLAND POND

ATKINSON, N.H.

PUBLIC SERVICE CO. OF NEW HAMPSHIRE
ENGINEERING DEPARTMENT

SCALE NO. SCALE DATE 2/24/76

D-7649-145