

**THE STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

PETITION OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE FOR  
LICENSE TO CONSTRUCT AND MAINTAIN ELECTRIC LINES UNDER AND  
ACROSS BOW LAKE IN THE TOWN OF STRAFFORD, NEW HAMPSHIRE

TO THE PUBLIC UTILITIES COMMISSION:

Public Service Company of New Hampshire (“PSNH”), a public utility engaged in the generation, transmission, distribution and sale of electricity in the State of New Hampshire, hereby petitions the Public Utilities Commission (“Commission”), pursuant to RSA 371:17, for a license to construct and maintain electric lines under and across the public waters of Bow Lake in the Town of Strafford, New Hampshire, and in support of its petition states as follows:

1. In order to meet the reasonable requirements of service to the public, PSNH has previously constructed and currently operates and maintains an underwater cable to provide secondary electric service (120/240V) to a small island in Bow Lake, in Strafford, New Hampshire. The riser pole for the service is on PSNH Pole Route 820 of PSNH’s 63W1 distribution circuit. The 63W1 is a single phase 7.2 kV distribution line. The existing underwater cable crossing has previously been licensed by the Commission in Docket DE 76-96, Order No. 12,375, dated August 30, 1976.

2. The existing underwater cable conduit is damaged and missing in some areas, and portions of the conduit are exposed at all times. Additionally, there are no recorded easements for the service in the present location, and the current property owner on the Bow Lake mainland shoreline has requested that the service be removed and relocated. Because of the need to replace the deteriorated service cable and the mainland shoreline owner’s removal request, PSNH is proposing a new service installation under and across Bow Lake to provide service to the island. The new service is proposed to be constructed via directional boring beneath the lake bed, to prevent disturbance to the lake bed and surrounding jurisdictional areas.

3. The location of this proposed underground crossing of Bow Lake is shown on the attached location plan, marked as Exhibit 1.

4. The design and proposed construction of the crossing is shown on the attached PSNH Distribution Business Plan Drawing entitled “63W1 CIRCUIT – POLE ROTE 820, 240V SERVICE, BOW LAKE WATER CROSSING, PLAN VIEW”, marked as Exhibit 2.

5. The required technical information provided in this petition is based on the 2007 National Electrical Safety Code (NESC) C2-2007.

6. The proposed crossing will be installed via directional drilling below the bottom of the lake. The length of line between the new riser pole on the mainland northerly side of the crossing and the service hand hole on the island southerly side of the crossing is approximately 623± feet. The riser pole on the north side of the lake is identified as structure number 820/183C. The construction detail for the riser is attached as Exhibit 3. The construction detail for the hand hole structure on the island is attached as Exhibit 4. The conduit for the line will be 3" diameter for the length of the crossing, with 350 MCM conductor and 4/0 neutral wires. The typical depth of the line will be 15' below the bed of the lake.

7. A New Hampshire Department of Environmental Services wetlands permit is not required for this project.

8. The proposed crossing has been designed and will be constructed, maintained and operated by PSNH in accordance with the NESC.

9. PSNH has obtained the necessary easements for the new crossing from the property owners on the mainland (Town of Strafford Tax Map 24, Lot 9), and on the island (Town of Strafford Tax Map 25, Lots 31 and 32).

10. PSNH submits that the license petitioned for herein may be exercised without substantially affecting the rights of the public in the public waters of Bow Lake. The use and enjoyment by the public of the lake will not be diminished in any material respect as a result of the underground line crossing.

WHEREFORE, PSNH respectfully requests that the Commission:

- a. Find that the license petitioned for herein may be exercised without substantially affecting the public rights in the public waters which are the subject of this petition;
- b. Grant PSNH a license to construct and maintain electric lines under and across the public waters of Bow Lake in Strafford, New Hampshire, as specified in the petition; and
- c. Issue an Order Nisi and orders for its publication.

Dated at Manchester this 18<sup>th</sup> day of October, 2011.

Respectfully submitted,

PUBLIC SERVICE COMPANY OF NEW  
HAMPSHIRE

By Its Attorney

A handwritten signature in black ink, appearing to read "C. J. Allwarden", written over a horizontal line.

Christopher J. Allwarden  
Senior Counsel, Legal Department  
PSNH Energy Park  
780 North Commercial Street  
Manchester, NH 03101  
(603) 634-2459