

# STATE OF NEW HAMPSHIRE

## Inter-Department Communication

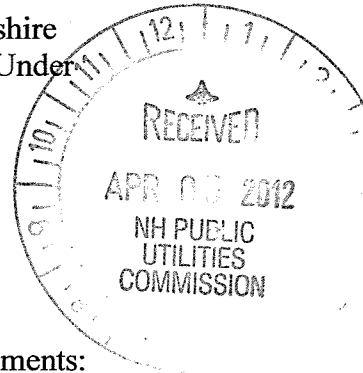
**DATE:** April 5, 2012

**AT (OFFICE):** NHPUC

**FROM:** Randy Knepper, Director Safety Division *RK*

**SUBJECT:** Docket No. DE 11-187 Public Service Company of New Hampshire  
Petition for a License to Construct and Maintain Electric Lines Under  
And Across Perkins Pond in the Towns of Troy and Jaffrey,  
New Hampshire

**TO:** Debra Howland, Executive Director  
Tom Frantz, Director, Electric Division  
Lynn Fabrizio, Staff Attorney



The Safety Division review of the above petition consisted of the following elements:

- Petition contents and history
- Review of public need and public impact, including applicability of other State regulations
- Conclusions and recommendations

**1. Petition contents and history.**

- On August 29, 2011, Public Service Company of New Hampshire (PSNH) filed a petition to construct and maintain an electric line under and across Perkins Pond in the Towns of Jaffrey and Troy, New Hampshire. This underwater crossing comprises a portion of line 3120 distribution circuit which would be extended across Perkins Pond and traverses the town line of Troy and Jaffrey. The 3120 circuit operates as a 7.2 kV distribution line. Currently there is no existing crossing of Perkins Pond and thus no prior license.
- PSNH has determined it is necessary to extend the 3120 line in order to meet the reasonable requirements of service to the public. The upgrade is necessitated to relieve the potential overload, improve reliability and remediate melted fuses that occurred at two separate locations in 2010.
- PSNH is petitioning to place a new service under and across Perkins Pond on the Southwest side of NH Rte 124 via directional boring. Three phase 1/0 35 kV Hendrix cable will be installed inside a 5" diameter conduit for the length of the underground water crossing. The typical depth of the conduit and cable will be 15 feet below the bottom bed of Perkins Pond. The directional bore will be 832 feet in length but the underwater portion will be approximately 430 feet.

- A New Hampshire Department of Environmental Services wetlands permit is required for this proposed underwater crossing as the underground cable will be in the vicinity of wetlands once the cable is placed and a pull box is constructed on eastern side of the bank in Troy and a new pole is placed on the western bank in Jaffrey.
- PSNH has obtained the necessary easements for a portion of location from the affected property owner as well as license from the NH DOT for installation and maintenance of the poles and underground conduit and wire in the portion within the NH Route 124.
- The water crossing locations listed in the petition are listed as Public Lakes and Ponds on the DES official list of public waters in which RSA 371:17 is applicable see:  
<http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/olpw.pdf>

## **2. Review of public need and public impact.**

The Safety Division's review of the petition finds the petition to be in conformance with the applicable sections of the NESC C2-2002.

Staff has determined, after reviewing the petition, that the water crossing requires a license under RSA 371:17. PSNH has demonstrated a public need for the proposed crossing.

## **3. Recommendations and Conclusions.**

The Safety Division recommends the Commission approval of Public Service Company of New Hampshire petition to construct and maintain electric lines under and across Perkins Pond in the Towns of Troy and Jaffrey, New Hampshire, with the following conditions:

- a) Any slurry used in the directional drilling shall be properly disposed and measures shall be taken to reduce the possibility of frack outs.
- b) Sleeving material shall be used that reduces the quantity of joints to minimize the possibility of water entrance into the interior of the sleeve.
- c) Measurements shall be recorded and documented along the bore path of depth and location of the facilities.
- d) The Commission should require that all future alterations, that may affect the public, to the crossing conform to the requirements of both the 2002 and 2007 editions of the NESC (Part 3) and be resubmitted to the Commission 60 days prior to the alteration.
- e) PSNH should be required to maintain and operate the crossings in conformance with the NESC Part 3.