

**STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION**

**DE 09-199**

**PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE**

**Petition for License to Construct and Maintain Electric Lines Over and Across the Public  
Waters of Mill Creek and the Ashuelot River in the City of Keene, New Hampshire**

**Order *Nisi* Granting License**

**ORDER NO. 25,070**

**January 25, 2010**

On October 16, 2009, Public Service Company of New Hampshire (PSNH) filed a petition pursuant to RSA 371:17 for a license to construct and maintain electric lines across Mill Creek and the Ashuelot River in the City of Keene, New Hampshire. PSNH stated that the crossings are required for the construction of a new 12.47 kV distribution line to serve growth in demand and to obtain a greater level of reliability in the Keene area. The new circuit will be added to the existing W-15 12.47 kV circuit that crosses Mill Creek, which is a double circuit crossing, and the existing W-9 and W-15 12.47 kV circuits that cross the Ashuelot River, which is a triple circuit crossing. The petition requests licenses for all 5 crossings as the existing 3 crossings are not licensed.

In support of its petition, PSNH submitted the following: a location plan depicting the geographic location of the proposed crossings (Exhibit 1) and two appendices, Appendix A for the Mill Creek crossing and Appendix B for the Ashuelot River crossing, which contain a plan and profile drawing depicting the location and projected elevations of the proposed crossings and construction detail drawings depicting the construction specifications of the proposed structures.

PSNH said that the new and the existing unlicensed crossings will remain within existing

rights-of-way or be constructed on land that PSNH owns. PSNH further states that no New Hampshire Department of Environmental Services or New Hampshire Department of Transportation permits are necessary for the construction of these crossings

At Mill Creek, the three phase conductors of the new W-185 line will be 795 kcmil aluminium conductors with 19 strands, and the three phase conductors of the existing W-15 line will be 477 kcmil aluminium conductors with 19 strands. The neutral conductor will be 052 AWA (Alumoweld and aluminium) with a 5/2 stranding on each line. All conductors will be tensioned to 2,000 pounds, and sagged at 60 degrees F. At the Ashuelot River, the three phase conductors of the new W-185 line will be 795 kcmil aluminium conductors with 19 strands, the three phase conductors of the existing W-15 line will be 477 kcmil aluminium conductors with 19 strands, and the three phase conductors of the existing W-9 line will be 336 kcmil aluminium conductors with 19 strands. The neutral conductor will be 052 AWA with a 5/2 stranding on each line. All conductors will be tensioned to 2,000 pounds, and sagged at 60 degrees F. Single wood pole structures with both horizontal and vertical bracket construction will be placed on each side of the water crossings.

PSNH investigated a multitude of weather and loading conditions for its design and used these design conditions and combinations thereof to determine the minimum clearance of the conductors to the water, land surfaces, and between the phase and neutral conductors. According to PSNH, all phase and neutral conductors will be sagged to maintain or exceed National Electrical Safety Code (NESC), American National Standards Institute (ANSI) C2-2007 clearances under the most adverse conditions investigated.

PSNH said that flood level data at these locations was determined from Cheshire County Flood Insurance Rate Map issued by the Federal Emergency Management Agency. PSNH stated that, to be conservative in its design of the crossing, it used the 100-year flood level for water elevations instead of the normal flood level or 10-year flood levels required by the NESC.

PSNH stated that the use and enjoyment by the public of these waters will not be diminished in any material respect as a result of the proposed electric line crossing. PSNH said that the crossing will be constructed, maintained, and operated in accordance with the requirements of the NESC, ANSI C2-2007.

RSA 371:17 provides in relevant part that “[w]hensoever it is necessary, in order to meet the reasonable requirements of service to the public, that any public utility should construct a line of poles or towers and wires and fixtures thereon, over, under or across any of the public waters of” New Hampshire, “it shall petition the Commission for a license to construct and maintain the same.” “Public waters,” as defined in RSA 371:17, means “all ponds of more than 10 acres, tidewater bodies, and such streams or portions thereof as the Commission may prescribe,” and includes the portions of the water bodies covered by the present petition.

Staff filed its recommendation on January 20, 2010, recommending approval of the petition. Staff indicated that the petition was reviewed by its engineering consultant, The Liberty Consulting Group (Liberty) and that according to Liberty PSNH provided sufficient information to justify construction of the proposed water crossing. Liberty further stated that, if the proposed facilities are constructed, operated, and maintained as proposed in its filing PSNH will be able to provide safe and reliable electric service to the public based on sound engineering standards and the 2007 NESC.

Based on the information presented by PSNH, the review and recommendation of Liberty, and Staff's January 20, 2010 memorandum recommending approval of the petition, we find this crossing necessary for PSNH to meet the reasonable requirements of reliable service to the public within PSNH's authorized franchise area as required by RSA 371:17 and that the requested license may be exercised without substantially affecting the public rights in the affected public waters as required for approval under RSA 371:20. We find that the crossing is in the public good and we approve the petition on a *nisi* basis in order to provide any interested party the opportunity to submit comments on said petition or to request a hearing.

**Based upon the foregoing, it is hereby**

**ORDERED *NISI***, that subject to the effective date below, PSNH is authorized, pursuant to RSA 371:17 *et seq.*, to construct, maintain and operate electric lines over and across the public waters described in its petition and depicted in its exhibits submitted October 16, 2009 and on file with this Commission; and it is

**FURTHER ORDERED**, that all construction and future reconstruction to this approved crossing shall conform to the requirements of the National Electrical Safety Code and all other applicable safety standards in existence at that time; and it is

**FURTHER ORDERED**, that PSNH maintain and operate this crossing in conformance with the National Electrical Safety Code; and it is

**FURTHER ORDERED**, that PSNH shall provide a copy of this order to the (i) City of Keene, (ii) New Hampshire Attorney General and the owners of the land bordering on said public waters at the location of the crossing, pursuant to RSA 371:19, and (iii) pursuant to RSA 422-B:13, New Hampshire Department of Transportation and the Office of Secretary, U.S.

Department of Commerce by first class mail, no later than January 28, 2010, and to be documented by affidavit filed with this office on or before February 8, 2010; and it is

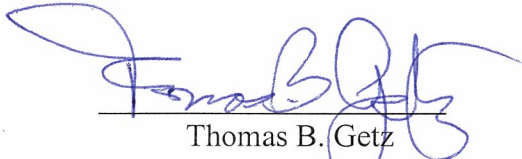
**FURTHER ORDERED**, that PSNH shall cause a copy of this Order *Nisi* to be published once in a statewide newspaper of general circulation or of circulation in those portions of the state where operations are conducted, such publication to be no later than January 28, 2010, and to be documented by affidavit filed with this office on or before February 8, 2010; and it is


**FURTHER ORDERED**, that all persons interested in responding to this Order *Nisi* be notified that they may submit their comments or file a written request for a hearing which states the reason and basis for a hearing no later than February 4, 2010 for the Commission's consideration; and it is

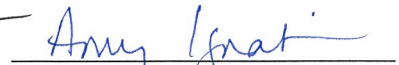
**FURTHER ORDERED**, that any party interested in responding to such comments or request for hearing shall do so no later than February 5, 2010; and it is

**FURTHER ORDERED**, that this Order *Nisi* shall be effective February 8, 2010, unless PSNH fails to satisfy the publication obligation set forth above or the Commission provides otherwise in a supplemental order issued prior to the effective date.

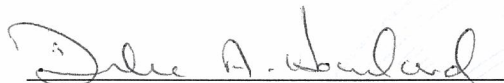
By order of the Public Utilities Commission of New Hampshire this twenty-fifth  
day of January, 2010.

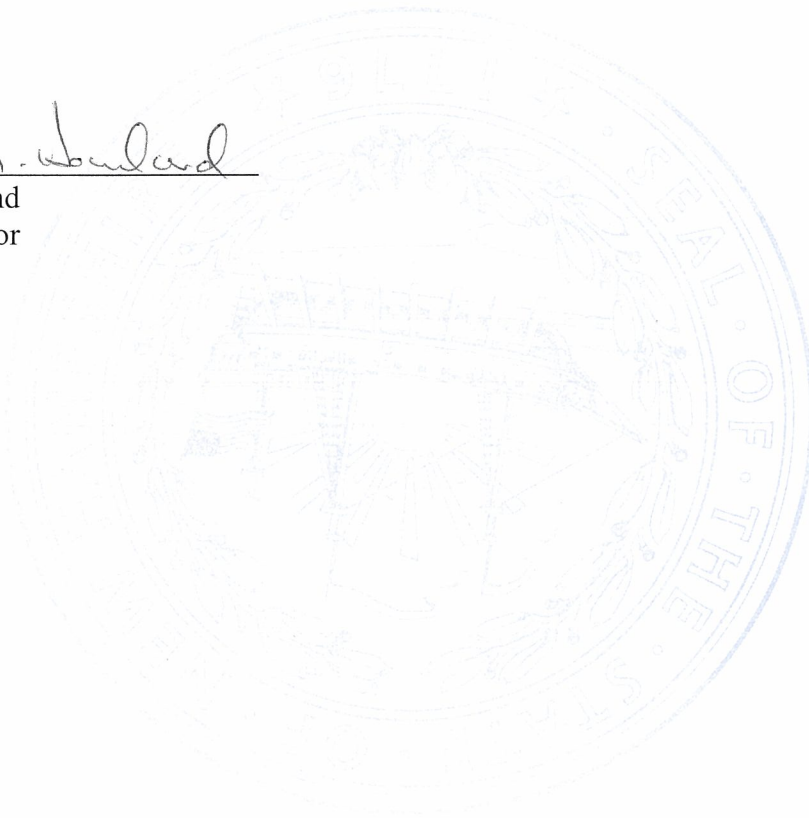
  
Thomas B. Getz  
Chairman

  
Clifton C. Below  
Commissioner

  
Amy L. Ignatius  
Commissioner

Attested by:

  
Debra A. Howland  
Executive Director



CHRISTOPHER J ALLWARDEN  
PUBLIC SVC OF NEW HAMPSHIRE  
780 NORTH COMMERCIAL ST  
PO BOX 330  
MANCHESTER NH 03105

MICHAEL CANNATA  
LIBERTY CONSULTING GROUP  
65A RIDGE RD  
DEERFIELD NH 03037

STEPHEN R HALL  
PSNH  
780 N COMMERCIAL ST  
PO BOX 330  
MANCHESTER NH 03105-0330

Docket #: 09-199 Printed: January 25, 2010

**FILING INSTRUCTIONS: PURSUANT TO N.H. ADMIN RULE PUC 203.02(a),**  
**WITH THE EXCEPTION OF DISCOVERY, FILE 7 COPIES (INCLUDING COVER LETTER) TO:**  
DEBRA A HOWLAND  
EXEC DIRECTOR & SECRETARY  
NHPUC  
21 SOUTH FRUIT STREET, SUITE 10  
CONCORD NH 03301-2429