

STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION

DE 09-124

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

Petition for License to Construct and Maintain Electric Lines Over and Across the Public  
Waters of the Bellamy River in Dover, New Hampshire

Order *Nisi* Granting License

ORDER NO. 25,023

October 7, 2009

On July 2, 2009, Public Service Company of New Hampshire (PSNH) filed a petition pursuant to RSA 371:17 for a license to upgrade and maintain its PSNH M-183 115 kV transmission line across public waters of the Bellamy River in Dover. As a result of Staff's engineering review and recommendations, PSNH filed a revised petition on September 8, 2009. In support of its petition, PSNH stated that the modification and upgrade of the existing crossing is necessary to allow PSNH to meet the reasonable requirements of service to the public in the seacoast region of New Hampshire.

The M-183 115 kV line connects the PSNH Madbury Substation to the PSNH Dover Substation. The line, as presently constructed, crosses public waters of the Bellamy River in Dover.<sup>1</sup> PSNH states that the line is an integral part of the PSNH transmission system and the overall New England transmission grid. The majority of the line is constructed with 795 kcmil ACSR conductors; however, a 3.2 mile section, including the Bellamy River Crossing, is constructed with smaller 477 kcmil ACSR conductors. According to PSNH, load growth in the seacoast area requires that this small section of line be upgraded to match the power capacity of

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<sup>1</sup> The Commission granted a license for the existing crossing in Docket D-E3442, Order No. 6668 (August 31, 1955).

the remainder of the line. PSNH said it also plans to upgrade the existing static wire conductors providing lightning protection at the crossing.

With its petition, PSNH supplied a locational geographic map, plan and profile drawing for the water crossing (Exhibits 1 and 2); construction details of the structure types (Figures 1, 1A); various sea level calculations (Figure 3); flood profiles of the Bellamy River (Figure 4); a locational flood geographic map (Figure 5); and a letter from the Department of the Army Corps of Engineers (COE) approving revised clearance requirements for this location (Figure 6).

PSNH stated that it holds permanent easements for its facilities on both sides of the public waters at the proposed crossing location and that the crossing will be constructed within the limits of those easements. PSNH said that no wetland permits will be required from the New Hampshire Department of Environmental Services..

PSNH explained that it investigated various weather and loading conditions to determine the minimum clearance requirements of the conductors and static wires to the water surfaces, land surfaces, as well as the distances between the phase conductors and the static wires. According to the Company, all conductors and static wires will be sagged to maintain National Electrical Safety Code (NESC) required clearances under the most adverse conditions for those conductors, and such clearances will exceed the COE clearance requirements.

PSNH said it used the Federal Emergency Management Agency (FEMA) flood data to determine flood water elevations at the crossing location, including the impacts of sea water elevations, and designed the distance of the phase conductors to water surfaces based on this information. PSNH said it employed conservative assumptions in the design by using the 100-year flood elevation (instead of the NESC required 10-year flood elevation) and including an

allowance of 5 feet in consideration of possible inaccuracies in tide information.

RSA 371:17 requires a utility to obtain Commission approval before constructing poles, towers and associated wires and fixtures over under or across any public waters or across any land owned by the state. "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."

Staff filed its recommendation on September 30, 2009. Staff indicated that the filing was reviewed by its engineering consultant, The Liberty Group (Liberty). According to Liberty, PSNH had provided sufficient information and data to justify construction of new electric lines across public waters at the Bellamy River Crossing of the M-183 115 kV line. 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 service to the public based on sound engineering standards and the 2007 NESC. Relying on Liberty's review of the proposed crossing, Staff recommended that the Commission approve the petition.

Based on the information presented by PSNH, the review and recommendation of Liberty, and Staff's September 30, 2009 memorandum recommending approval of the petition, we find that this crossing is necessary for PSNH to meet the "reasonable requirements of reliable service to the public" as required by RSA 371:17 and that it will not substantially affect the public's rights in the public waters in question as required for approval under RSA 371:20. 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, appendix, and figures as contained in its revised filing of September 8, 2009, and on file with this Commission; and it is

**FURTHER ORDERED**, that all construction and future reconstruction to these approved crossings shall conform to the requirements of the NESC and all other applicable safety standards in existence at that time; and it is

**FURTHER ORDERED**, that PSNH maintains and operates these crossings in conformance with the NESC; and it is

**FURTHER ORDERED**, that PSNH shall provide a copy of this order (1) to the clerk of the affected municipality, (2) the Attorney General, other owners of land parcels bordering on public waters at and immediately upstream and downstream of the location the crossing, (3) the New Hampshire Department of Transportation, the Office of Secretary, U.S. Department of Commerce, and (4) the New Hampshire Department of Environmental Services by first class mail, no later than October 19, 2009, and to be documented by affidavit filed with this office on or before November 7, 2009; and it is

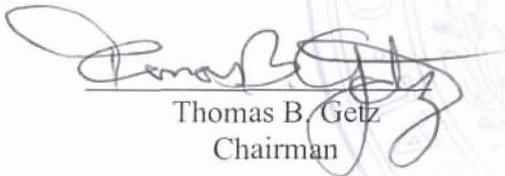
**FURTHER ORDERED**, that PSNH shall cause a copy of this Order *Nisi* to be published once in a statewide newspaper of general circulation or of circulation in those portions of the state where operations are conducted, such publication to be no later than October 19, 2009 and to be documented by affidavit filed with this office on or before November 7, 2009; 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 October 26, 2009 for the Commission's consideration; and it is

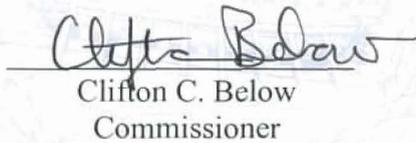
**FURTHER ORDERED**, that any party interested in responding to such comments or request for hearing shall do so no later than November 2, 2009 and it is

**FURTHER ORDERED**, that this Order *Nisi* shall be effective November 7, 2009, unless PSNH fails to satisfy the publication obligation or affidavit requirements set forth above or the Commission provides otherwise in a supplemental order issued prior to the effective date.

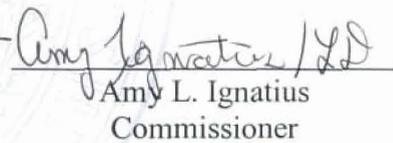
By order of the Public Utilities Commission of New Hampshire this seventh day of October, 2009.



Thomas B. Getz  
Chairman

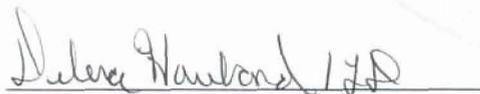


Clifton C. Below  
Commissioner



Amy L. Ignatius  
Commissioner

Attested by:



Debra A. Howland  
Executive Director