STATE OF NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

DE 10-232

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

Petition for License to Construct and Maintain a Static Wire with Fiber Optic Cable Over the Public Waters of Glen Lake in the Town of Goffstown

Order Nisi Granting a License

ORDER NO. 25,157

October 15, 2010

On September 3, 2010, Public Service Company of New Hampshire (PSNH) filed a petition pursuant to RSA 371:17 for a license to replace an existing static wire with a static wire with optical ground wire cable (OPGW) on the C-196 115kV line between Merrimack Substation in Bow and the Greggs Substation in Goffstown. The C-196 line crosses Glen Lake in Goffstown. PSNH supplemented its petition on September 30, 2010. PSNH stated that the C-196 115kV line is an integral part of the PSNH transmission system and the overall New England transmission grid, and replacement of the existing static wire is necessary to improve and enhance the reliability and capacity of the communications system used in PSNH's electric system operations.

The Commission previously licensed the C-196 115kV line by Order No. 11,856 (June 6, 1975) in Docket DE 75-106. PSNH said that the in-service date for this project is November 18, 2010, to take advantage of an outage of the C-196 115kV line from October 25, 2010 through November 18, 2010.

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In support of its petition, PSNH submitted the following exhibits: a location plan depicting the geographic location of the proposed crossing (Exhibit 1); a plan and profile drawing depicting the location and projected elevations of the proposed crossing (Exhibit 2); and 3 construction detail drawings as follows: PSNH Transmission Standard for a 115kV Type D Structure (Figure 1); PSNH Transmission Standard for 115kV Pole Top Details (Figure 1A); and PSNH Transmission Standard for a 115kV Dead End Structure Type DA for Angles Greater than 50 Degrees (Figures 2). Figures 1, 1A, and 2 depict the construction specifications of the existing structures.

According to PSNH, the new OPGW cable crossing will have exactly the same alignment as the existing static wire crossing and will use both structures presently at the crossing location. PSNH said that it owns permanent easements not less than 375 feet wide for its facilities on both sides of Glenn Lake. PSNH attested that no New Hampshire Department of Environmental Services permits are necessary for the construction of this crossing.

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 OPGW cable to the water and land surface, and between the phase conductors and OPGW cable. According to PSNH, the OPGW cable will be sagged to maintain or exceed National Electrical Safety Code (NESC), American National Standards Institute (ANSI) C2-2007 required clearances under the most adverse conditions investigated.

PSNH obtained the flood level data for Glen Lake from the Hillsborough County Flood Insurance Rate Map issued by the Federal Emergency Management Agency. PSNH explained that, for a conservative design of the crossing, it used the 100-year flood for water elevations

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instead of the normal flood level or 10-year flood levels required by the NESC.

According to PSNH, 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 further attested 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]henever 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.

Commission Staff filed a memorandum on October 15, 2010 recommending approval of the petition. Staff indicated that the petition was reviewed by its engineering consultant, Accion Group (Accion) and that, according to Accion, PSNH provided sufficient information to justify construction of the proposed water crossing. Accion 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 Accion, and Staff's 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 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, Public Service Company of New Hampshire is authorized, pursuant to RSA 371:17 *et seq.*, to construct, maintain and operate an OPGW cable over and across the public waters of Glen Lake as described in its petition and depicted in its exhibits submitted September 3, 2010, supplemented on September 30, 2010, 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 shall 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) Town Clerk of Goffstown, (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 October 19, 2010, and to be documented by affidavit filed with this office on or before October 29, 2010; and it is

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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 20, 2010 and to be documented by affidavit filed with this office on or before October 29, 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 October 25, 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 October 27, 2010; and it is

FURTHER ORDERED, that this Order *Nisi* shall be effective October 29, 2010, unless the Petitioner 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 fifteenth day of October, 2010.

Thomas B. Getz Chairman Clifton C. Below Commissioner Amy L. Ignatius Commissioner

Attested by:

Debra A. Howland Executive Director