

1997 K-165 379 OPGW

82 NH PUC 539

Re Public Service Company of New Hampshire

DE 97-117

Order No. 22,660

New Hampshire Public Utilities Commission

July 14, 1997

ORDER authorizing an electric utility to construct and maintain electric lines and fiber optic cables using existing transmission lines crossing over public waters at five locations in Nashua, Manchester, Hudson, Litchfield, and Merrimack.

1. ELECTRICITY, § 7

[N.H.] Authorization for new power lines — Installation of fiber optic cable — Use of existing transmission lines — Multiple site locations — Crossing of public waters as a factor. p. 541.

2. CONSTRUCTION AND EQUIPMENT, § 5

[N.H.] Cable lines — Fiber optic cables — Use of existing transmission lines — Multiple site locations — Crossing of public waters as a factor — Electric utility. p. 541.

BY THE COMMISSION:

ORDER

On June 10, 1997, Public Service Company of New Hampshire (PSNH) filed with the New Hampshire Public Utilities Commission (Commission) a petition pursuant to RSA 371:17 to construct and maintain electric lines and fiber optic cable at existing transmission line crossings over public waters at five (5) locations in the Cities of Nashua and Manchester and the Towns of Hudson, Litchfield, and Merrimack, New Hampshire.

In order to meet the requirements of service to the public, PSNH has constructed and currently maintains electric transmission lines over and across certain public waters, which lines are an integral part of its electric system. The definition of public waters contained in RSA 371:17 includes, "all ponds of more than ten acres, tidewater bodies, and such streams or portions thereof as the Commission may prescribe." The Commission has determined that these subject crossings are over and across public waters.

PSNH has stated, and staff has verified, that all five of the existing transmission line crossings have been previously licensed by the Commission. The installation of these five fiber optic cable sections is for upgrading the reliability and capacity of the communications system
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used in PSNH's electric system operations. These fiber optic cable sections are a continuation of the 5-COM project specified in Docket DE 96-370. A summary listing of the subject crossings

is listed below in Table-A, which includes for each crossing the PSNH line number and voltage, crossing location, and docket and order numbers for each crossing previously licensed. PSNH has stated that as the installation methods used to place the fiber optic cable will avoid any impacts to any wetlands in the areas of the crossings, no permit is required from the Department of Environmental Service's Wetlands Board. The following (Table-A) summarizes information regarding these crossings: [Graphic(s) below may extend beyond size of screen or contain distortions.]

Table-A

Summary of PSNH Petition Information

LineLine NHPUC NHPUC

No. Voltage Location Docket Order

379 345 kV Merrimack River, DE-5805 9,883

(1) Litchfield/Merrimack

K165 115 kV Merrimack River, DE-74244 11,691

(2) Nashua/Hudson

K165 115 kV Merrimack River, DE-5747 9,829

(2) Litchfield/Merrimack

K165 115 kV Merrimack River, DE-7622 12,219

(2) Litchfield/Merrimack

372 34.5 kV Merrimack River DE-7622 12,219

(2) Manchester

(1) OPGW

(2) ADSS

On one of the existing crossings, PSNH proposes to replace one of the existing overhead shield wires with a new shield wire containing a core of glass optical fibers, known as Fiber Optic Groundwire (OPGW) cable. This type of installation does not affect the existing clearance between the water and the lowest cable presently crossing the water. The one location where the OPGW cable is to be installed will be on Line 379 crossing the Merrimack River in Litchfield and Merrimack. The other four crossings will use under built, all dielectric, self supporting fiber optic cable, known as ADSS cable.

The minimum required clearances above the water surfaces were determined referencing the National Electrical Safety Code (NESC) Rule 232. The four crossings at which ADSS cable will be installed are:

1) Line K165 (Bridge Street Tap) crossing the Merrimack River in Nashua and Hudson, NH.

The length is approximately 475'. Based on a constant river width of 475' the one mile impoundment is approximately 57.6 acres. This requires a minimum clearance of 25.5', the actual clearance will be 36.7'.

2) Line K165 (Busch Tap) crossing the Merrimack River between Litchfield and Merrimack, NH.

The length is approximately 539'. Based on a constant river width of 539' the one mile impoundment is approximately 65.3 acres. This requires a minimum clearance of 25.5', the actual clearance will be 36.6'.

3) Line K165 (Reeds Ferry to Hudson) crossing the Merrimack River in Litchfield and Merrimack, NH.

The length is approximately 519'. Based on a constant river width of 519' the one mile impoundment is approximately 62.9 acres. This requires a minimum clearance of 25.5', the actual clearance will be 28.2'

4) Line 372 crossing the Merrimack River in Manchester, NH.

The length is approximately 617'. Based on a constant river width of 617' the one mile impoundment is approximately 75 acres. This requires a minimum clearance of 25.5', the actual clearance will be 36.1'. This ADSS cable will be installed on the Northerly side of the existing transmission structures, the southerly side of the towers contains an ADSS cable previously licensed through the Commission.

[1, 2] PSNH has attested and Staff agrees that the construction of the fiber optic cables will meet or exceed the requirements of the NESC. PSNH has stated that the use and enjoyment by the public of said public waters will not be diminished in any material respect as a result of the overhead line and cable crossings.

The Commission finds the fiber optic cable crossings and electric line crossings necessary for PSNH to meet the reasonable requirements of service to the public. However, the public should be offered, consistent with RSA 371:20, the opportunity to respond in support of, or in opposition to, PSNH's petition.

Based upon the foregoing, it is hereby

ORDERED NISI, that PSNH is authorized, pursuant to RSA 371:17, et seq., to construct and maintain electric lines and fiber optic cable over and across public waters at five (5) locations in the Cities of Nashua and Manchester and the Towns of Hudson, Litchfield, and Merrimack, New Hampshire, unless the Commission directs otherwise prior to the proposed effective date; and it is

FURTHER ORDERED, that all reconstruction hereafter performed conform to the requirements of the NESC and all other applicable safety standards in existence at that time; and it is

FURTHER ORDERED, that pursuant to N.H. Admin. Rules, Puc 1601.05, PSNH shall cause a copy of this Order Nisi to be published once in a newspaper of general circulation in the aforementioned Towns and Cities, such publications to be no later than July 21, 1997 and to be documented by affidavit filed with this office on or before July 28, 1997; and it is

FURTHER ORDERED, that PSNH notify the aforementioned Towns and Cities of this matter by serving a copy of this order on the Town/City Clerks by First Class U.S. Mail, said notification to be verified by affidavit filed on or before July 28, 1997; and it is

FURTHER ORDERED, that all persons interested in responding to this petition be notified that they may submit their comments or file a written request for a hearing on this matter before the Commission no later than August 4, 1997; and it is

FURTHER ORDERED, that any party interested in responding to such comments or request for hearing shall do so no later than August 11, 1997; and it is

FURTHER ORDERED, that this Order Nisi shall be effective August 13, 1997, unless 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 fourteenth day of July, 1997.

EDITOR'S APPENDIX

Citations in Text

[N.H.] Re Public Service Co. of New Hampshire, DE 74-224, Order No. 11,691, 60 NH PUC 345, Jan. 3, 1975. [N.H.] Re Public Service Co. of New Hampshire, DE 76-22, Order No. 12,219, 61 NH PUC 97, Apr. 2