STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE:

November 12, 2010

AT (OFFICE): NHPUC

FROM:

Randy Knepper

Director of Safety

SUBJECT:

Review of Comcast's Petition for Existing Aerial Crossing of the

Merrimack River, Concord, NH

Docket No. DT 10-239

TO:

✓ Debra Howland, Executive Director

Lynn Fabrizio, Staff Attorney

CC:

Kathryn Bailey, Director of Telecommunications

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

- Summary of Petition and Petition History
- Applicable New Hampshire Statute
- Review of Existing Crossing(s) and Licenses Granted by the PUC
- Review of Land Ownership
- Review of NESC Code Requirements
- Review of Other Applicable State Agency License Requirements
- Sufficiency and Accuracy of Information Provided in the Petition
- Review of Public Need and Public Impact
- Conclusions and Recommendations



1. Summary of Petition and Petition History:

- On September 9, 2010, Comcast of Maine/New Hampshire, Inc. ("Comcast") filed a petition for a license regarding an existing aerial crossing over the Merrimack River in Concord, New Hampshire. The crossing includes multiple fiber optic cables, a support cable and an abandoned-in-place coaxial trunk cable on existing poles owned by Unitil Energy Services.
- The petition was filed to properly document the existing Comcast portion of the crossing referenced in Docket No. DT10-010 at the same location. Comcast seeks a license of the existing attachment across the Merrimack River for compliance with RSA 371:17 and Commission Order No. 25,139.
- On August 13, 2010, Staff filed a memorandum in Docket No. DT10-010 that included as Attachment 1 a Final Revised Drawing dated August 6, 2010 and submitted by BayRing Communications ("BayRing"). BayRing's Final Revised Drawing contains all the technical and location detail applicable to Comcast's crossing, including plan and elevations required for review, existing cables material and weights, loading conditions, cable sags, midspan clearances, clearances at poles and clearances from other attachees, including Comcast.

2. Applicable New Hampshire Statute

TITLE XXXIV PUBLIC UTILITIES

CHAPTER 371 PROCEEDINGS TO ACQUIRE PROPERTY OR RIGHTS

Rights in Public Waters and Lands

371:17 Petition. – Whenever it is necessary, in order to meet the reasonable requirements of service to the public, that any public utility should construct a pipeline, cable, or conduit, or a line of poles or towers and wires and fixtures thereon, over, under or across any of the public waters of this state, or over, under or across any of the land owned by this state, it shall petition the commission for a license to construct and maintain the same. For the purposes of this section, ""public waters" are defined to be all ponds of more than 10 acres, tidewater bodies, and such streams or portions thereof as the commission may prescribe. Every corporation and individual desiring to cross any public water or land for any purpose herein defined shall petition the commission for a license in the same manner prescribed for a public utility.

Source. 1921, 82:1. PL 244:8. RL 294:16. 1951, 203:48 par. 17. 1953, 52:1, eff. March 30, 1953.

- 3. Review of Existing Crossings and License(s) Granted by the PUC for the Merrimack River Crossing in Concord, NH.
 - a. <u>Historical review of the existing license for Concord Electric's Merrimack River Crossing.</u>

On October 18, 1962, the PUC issued Order No. 7907 granting a license to Concord Electric Company to construct and maintain lines of wires or submarine cables across public water at sites specified for eighteen crossings identified as Crossings 1-8; 23 through 27; and 31 through 35. Crossing No. 23 is described as

"From C.E. Pole #50 northerly across the Merrimack River, being the nearest crossing to the Federal bridge and on the westerly side thereof to C. E. Pole #51; both poles being located in what is now or formerly Eastman Street in Concord. This is a sole C.E. crossing. The span distance is 520 feet and the height above the water is approximately 25 feet."

This order was the result of a petition filed under Docket No. D-E 4054 by Concord Electric Co.

On December 31, 1984, the PUC in Docket No. DE 84-263, issued Supplemental Order No. 17,373, which approved Concord Electric Co. as a subsidiary of Unitil Corporation.

b. <u>Historical review of the existing license for BayRing Communications to construct and maintain fiber optic cables lashed to Comcast facilities at the Merrimack River Crossing.</u>

On Aug 17, 2010,s the Commission issued Order No. 25,139 approving a license for BayRing Communications to construct and maintain a fiber optic cable over the Merrimack River by lashing to an existing Comcast aerial cable crossing. This order was the result of a petition filed by BayRing in Docket No. DT10-010.

In its order, the Commission directed Comcast to petition for a license governing the same crossing so that its facilities would be properly licensed.

4. Review of Land Ownership.

According to the City of Concord's GIS database of parcels owned within the town, the southern pole, CE Pole 51, is within the public right of way for Commercial Street. (Parcel owner information is contained in Staff's memorandum filed in Docket No. DT 10-010.)

Similarly, the northern pole, CE Pole 50, is within the public right of way for West Portsmouth Street. Appendix B of DT 10-010 Staff Memorandum, Figures 14 and 15 list the State of New Hampshire as the owner of the adjacent parcel, which contains a state owned railroad.

5. Review of NESC Code Requirements as Described in Puc 300, Puc 400 and Puc 1300 Rules

N.H. Code of Administrative Rules PART Puc 433 requires a CLEC to construct, install and maintain its plant, structures, equipment, and lines to prevent interference with service furnished by other carriers and by other public service facilities, such as cable, fire alarm, electric, water, sewer, gas, or steam facilities. Puc 433.01(b). This requires compliance with the 2002 edition of the NESC. Puc 433.01(a).

N.H. Code of Administrative Rules PART Puc 1303 requires a CLEC or any other pole attaching entity to *install in accordance with the 2007 edition of the NESC*. Puc 1303.07(a).

Thus, compliance with both the 2002 and the 2007 editions of the NESC was reviewed.

Comcast's petition indicates the details represented in Attachment 1, Final Revised Petition Drawing attached to Staff's Memorandum of August 13, 2010, in Docket No. DT 10-010 show the orientation and location relationship of the existing fiber optic lines in relationship to existing pole owners and attaching entities at both the pole locations and at midspan above the Merrimack River. The existing pole attaching entities are identified as Bay Ring Communications, Comcast and the City of Concord fire alarm cables, while the owner of the poles and associated facilities is identified as Unitil Energy Services (UES). BayRing's revised petition in that docket also shows the relationship of proposed fiber optic cables to vertical clearances from the ground level of poles and vertical clearances from the 100-year and 10-year water levels measured in a water surface survey taken on November 18, 2009.

NESC Section 230.F.1.e and Section 230.F.2 are considered by the Safety Division to be applicable to fiber optic cables.

On Oct 12, 2010 the Safety Division verified with photo documentation that the re-installation of Comcast's fiber with BayRing overlashing was completed in accordance with the technical specifications referenced in Docket No. DT10-010.

The Safety Division confirmed through field investigation that the poles in question are 45 feet in length, wooden Class 2 poles made of Southern Pine with creosote treatment applied in 1997, according to markings on the pole

The Comcast crossing does not implicate the applicable activities that would trigger the requirement of an individual permit or a general programmatic permitting review from the Army Corps of Engineers. A New Hampshire DES permit is also not required for the re-installation of Comcast's facilities.

Field visits confirmed that sailboating is limited if not impractical for this section of the river, based on the existing construction and clearances of the

adjacent Federal Bridge to the water levels. Therefore, NESC vertical clearance requirements are met, as outlined below.

A review of the vertical clearance between UES facilities and the existing Comcast facilities reveals that the existing 42-inch clearance is in conformance with the minimum required vertical clearance of 40 inch per NESC Table 235-5 (1a). This minimum separation is maintained under all loading conditions throughout the span.

A review of the vertical clearance between the existing City of Concord and Comcast facilities reveals that the minimum vertical clearance requirement of 12 inches is maintained in compliance with Section 235.C.2.b(1)(a) of the NESC at the pole.

6. Review of Public need and Public Impact

Comcast states the crossing is needed to meet the reasonable requirements of its obligation to provide broadband communications services to customers within its franchise area in and around the Concord Area. According to Comcast, no environmental permits are required of the crossing. Comcast states that the "license petition for herein may be exercised without substantially affecting the rights of the public in the public water of the Merrimack River. Minimum safe line clearances above the water surface and affected shorelines will be maintained at all times. The use and enjoyment by the public of the Merrimack River will not be diminished in any material respect as a result of the overhead line crossing."

Based on its review of the petition and applicable code requirements, the Safety Division concurs with Comcast's statements regarding public need and public impact.

7. Recommendations and Conclusions

The Safety Division recommends approval of Comcast's petition to the Commission with the following conditions:

- a. Comcast should be required to maintain and operate the crossings in conformance with the NESC.
- b. The Commission should require that all future alterations to the crossings conform to the requirements of both the 2002 and 2007 editions of the NESC.

Appendix A



Figure 1 Merrimack River Crossing looking southerly. Aerial Cable Crossing and Electric Crossing are shown on the Left and are subject to this license. Unitil 34.5kv crossing is shown on the right and is not the subject of this license.



Figure 2 Concord Pole 50 on south side of Merrimack River showing recently installed guying to support increased tensions applied to pole resulting from aerial crossing.

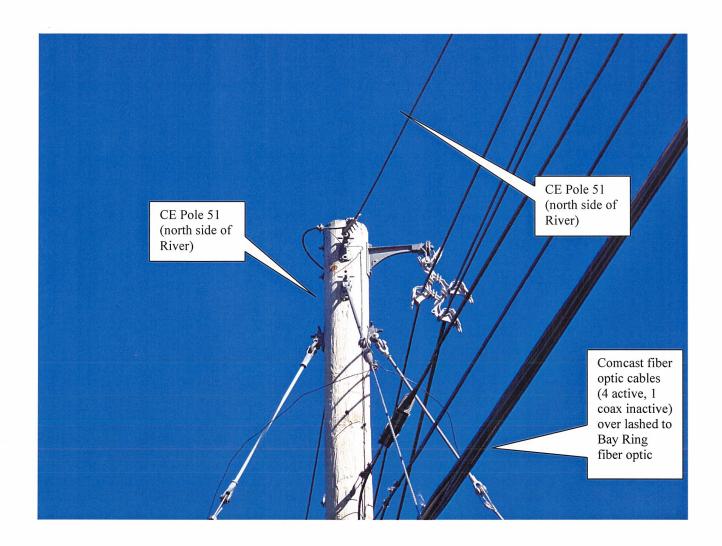


Figure 3 Concord Pole 51 on north side showing recently lashed Bay Ring Fiber Optic to Comcast Fiber Optics at the bottom of the pole. Top of the pole shows the distribution level covered electric lines