

**The State of New Hampshire
Before the
Public Utilities Commission**

**PETITION OF FREEDOM RING COMMUNICATIONS d/b/a BAYRING COMMUNICATIONS FOR
LICENSE TO CONSTRUCT AND MAINTAIN A UTILITY CABLE/CONDUIT OVER AND ACROSS THE
MERRIMACK RIVER BETWEEN UTILITY POLE CECO 51 AND UTILITY POLE CECO 50.**

TO THE PUBLIC UTILITIES COMMISSION:

Freedom Ring Communications d/b/a BayRing Communications, a public utility engaged in the generation, transmission, distribution and sale of telecommunications in the State of New Hampshire, hereby petitions the Public Utilities Commission ("Commission"), pursuant to RSA 371:17, for a license to construct and maintain telecommunication lines over and across the public waters of the Merrimack River in the City of Concord, New Hampshire, and in support of its petition states as follows:

1. In order to meet the reasonable requirements of service to the public, BayRing Communications is proposing to construct a new 216 fiber optic line. The new line will help to accommodate the growth in demand and to obtain a greater level of service reliability in the Concord area.
2. The new line will cross the Merrimack River along the northwest side of Federal Bridge – Bridge I-72 "E. Concord" – (Old Bridge #5).
3. The location of the proposed crossing is shown on the attached location map.
4. The design and proposed construction of the crossing is shown on the attached Dewsnap Engineering Associates LLP Distribution Business Plan Consulting Engineers and Group Inc. Profile drawing entitled "Existing Overhead River Crossing, Plan of Land in Concord, NH".
5. The proposed crossing will occur between two existing Utility poles set approximately 524 feet apart. The existing pole on the north side of the Merrimack River, Utility Pole CECO 51 is approximately 70 feet tall. The existing pole on the south side of the Merrimack River, Utility Pole CECO 50 is approximately 70 feet tall. The line will be made up of two materials; Conductor nominal diameter 5/16in 7-strand steel EHS and 1 non-supporting cable, added diameter = 0.750 in, weight = 0.124lb/F which contains 216 fiber optic. The Strand and non-supporting cable will be sagged using the Heavy Load condition (0° F, pounds psf wing loading and ½" radial ice) with a maximum tension of 4374 lbs under that load.

6. The flood water elevation for the Merrimack River is based on information from the flood Insurance Rate Map (FIRM), City of Concord, New Hampshire, Merrimack County, Community Panel Number: 330110 0020 B, Map revised August 23, 1999. The 100-year flood elevation for this location is approximately 234.5 feet. These elevations are based on the national Geodetic Vertical Datum of 1929 (NGVD 29). For the purpose of this petition, the more conservative 100 year flood elevation was used as the basis for design of the conductor clearance.
7. Using the above design criteria, the maximum sag of the non-supporting cable and minimum clearances for the crossing have been determined and designed as follows:
 - A. 0° F, Non-supporting cable – The maximum sag on the fiber optic cable under this condition is 7.7'. The minimum clearance to land is 22.5'. The minimum clearance to the 100 year flood level is 8'.
 - B. 120° F, Non-supporting cable – The maximum sag on the fiber optic cable under this condition is 5'. The minimum clearance to land is 22.5'. The minimum clearance to the 100 year flood level is 15'.
 - C. 50° F, Non-supporting cable – The maximum sag on the fiber optic cable under this condition is 2.5'. The minimum clearance to land is 22.5'. The minimum clearance to the 100 year flood level is 15.7'.
8. There are no NHDES or NHDOT permits necessary specifically for the construction of this crossing.
9. The proposed crossing has been designed and will be constructed, maintained and operated by BayRing Communications, its affiliates and contractors.
10. BayRing Communications submits that the license petitioned 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.

WHEREFORE, BAYRING COMMUNICATIONS respectfully requests that the Commission:

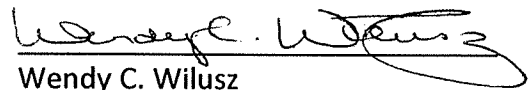
- a. Find that the license petitioned for herein may be exercised without substantially affecting the public rights in the public water which are the subject of this petition;

- b. Grant BayRing Communications a license to construct and maintain communication lines over and across the public waters of the Merrimack River in Concord, New Hampshire, as specified in the petition; and
- c. Issue an Order Nisi and orders for its publication.

Dated at Portsmouth the 11th day of January 2010.

Respectfully submitted,

BAYRING COMMUNICATIONS
By Its Director of Operations

A handwritten signature in black ink, appearing to read "Wendy C. Wilusz", written over a horizontal line.

Wendy C. Wilusz
Director of Operations
BayRing Communications
359 Corporate Drive
Portsmouth, NH 03801
(603) 766-1000

Water Crossing Location

