The State of New Hampshire Before the Public Utilities Commission

To the Public Utilities Commission:

Merrimack County Telephone Co. d/b/a/ TDS Telecom, 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, pursuant to the RSA 371:17, for a license to construct and maintain telecommunications lines over and across the Public Waters of the North Branch River in the City of Antrim, New Hampshire, and in support of its petition states as follows:

- 1. In order to meet the reasonable requirements of service to the public, TDS Telecom is proposing to construct a 100 pair copper count cable and a 200 pair copper count cable. These cables will continue to serve our existing customers. But will also facilitate the construction of a new bridge over said river.
- 2. The new line will cross the North Branch River next to the Old North Branch Bridge. Along the southern side of the bridge.
- 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 "Exhibit 1 Locus Map, Exhibit 2 Plan, Exhibit 3 Profile and Exhibit 4 Pole Detail."
- 5. The proposed crossing will occur between two existing utility poles set approximately 173 feet apart. The existing pole on the north side of the North Branch River, utility pole TDS 120 is approximately 45 feet tall. The existing pole on the south side of the North Branch River, Utility pole TDS 121 is approximately 40 feet tall. The line will be made up of two materials; Conductor nominal diameter 5/16in 7-strand steel EHS and 2 non-supporting cables, added diameter = 2.30in, weight = 1.57lb/ft which contains 300 twisted pair copper. The strand and non-supporting cable will be sagged using the Heavy Load condition (0° F, psf wing loading and ½ inch radial ice) with a maximum tension of 4374 lbs under that load.
- 6. The flood water elevation for the North Branch River is based on the information provided by the flood Insurance Rate Map (FIRM), City of Antrim, New Hampshire, Merrimack County, Community Panel Number: 330082 0002 B, Map revised April, 1 1981. The 100 year flood elevation for this location is approximately 880 feet. These elevations are based on the National Geodetic Vertical Datum of 1929) (NGVD¹). For the purposes of this

petition, the more conservative 100 year flood elevation was used as the basis for the 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 copper cable under this condition is (2.0'). The minimum clearance to land is (24.8'). The minimum clearance to the 100 year flood level is (34').

B. 120° Non-supporting cable – The maximum sag on the copper cable under this condition is (2.6'). The minimum clearance to land is (22.8'). The minimum clearance to the 100 year flood level is (32.1').

C. 60° F, Non-supporting cable – The maximum sag on the copper cable under this condition is (2.2'). The minimum clearance to land is (23'). The minimum clearance to the 100 year flood level is (32.5').

- 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 TDS Telecom, its affiliates and contractors.
- 10. TDS Telecom submits that the license petitioned for herein may be exercised without substantially affecting the rights of the public in the public water of the North Branch River. Minimum safe line clearance above the waters surface and affected shorelines will be maintained at all times. The use and enjoyment of the public of the North Branch River will not be diminished in any material respect as a result of the overhead line crossing.

WHEREFORE, TDS TELECOM respectfully requests that the New Hampshire Public Utilities Commission:

- a. Find that the license petitioned for herein may be exercised without substantially affecting the public rights in the public waters which are the subject of this petition.
- b. Grant TDS Telecom a license to construct and maintain communication lines over and across the public waters of the

North Branch River in Antrim, New Hampshire, as specified in the petition; and

c. Issue an Order <u>Nisi</u> and orders for its publication Dated at Northfield, Vermont, October 18, 2010.

Respectfully submitted, TDS Telecom By Its Manager of State Government Affairs

Thomas Murray Manager of State Government Affairs

harn V. Lisdaie Notary Public Ny commission impores 10-february 2011







