THE STATE OF NEW HAMPSHIRE BEFORE THE PUBLIC UTILITIES COMMISSION

Docket No. DW 17-____

Pennichuck East Utility, Inc.

Petition for a License to Construct and Maintain a Water Main under the Merrimack River

Pennichuck East Utility, Inc. ("PEU") is a regulated public utility pursuant to RSA 362:4 and provides retail water service to approximately 7,000 customers in the towns of Atkinson, Barnstead, Bow, Chester, Conway, Derry, Exeter, Hooksett, Lee, Litchfield, Londonderry, Middleton, Pelham, Plaistow, Raymond, Sandown, Tilton, Weare, and Windham. PEU respectfully petitions the Commission for a license to construct and maintain a water main under the Merrimack River in the Towns of Litchfield and Merrimack, New Hampshire. In support of this request, PEU states as follows:

- 1. The Merrimack River is a public water listed by the Department of Environmental Services ("NHDES"). Because PEU seeks to construct a water main that will cross this public water, it is required to obtain Commission approval pursuant to RSA Chapter 371.
- 2. PEU obtains water from the Town of Hudson to supply customers of its Litchfield, Pelham, Windham, and Londonderry water systems. The Town of Hudson owns three wells that provide water supply for its and PEU's customers. This historical connection stems from PEU's purchase from the Town of Hudson of the non-Hudson water systems, formerly owned by Consumers New Hampshire Water Company. See, *Consumers New Hampshire Water Company*, Docket No. DE 96-227, Order No. 22,792 (November 21, 1997) and Order No. 22,880 (March 23, 1998). The Town of Hudson wells have recently come under scrutiny by the New Hampshire Department of Environmental Services ("NHDES") because of

the adverse impact pumping of the wells is having on local aquifers and on the fact that customer demand from May to October exceeds the capacity of these three wells.

- 3. The Town of Hudson attempted to remedy the supply problems by developing additional wells, however, to date those efforts have not been fruitful. PEU also attempted to address its water supply deficiencies by connecting to its affiliate, Pennichuck Water Works, Inc. ("PWW") at the Taylor Falls interconnection. Although the Taylor Falls interconnection mitigated the deficiency, PEU still has difficulty satisfying its maximum daily demand requirement under the NHDES rules because the demand is calculated with PEU's largest supply source off-line. Assuming Taylor Falls is off-line, PEU has a calculated deficit of 900,000 gallons per day ("gpd").
- 4. PWW has sufficient supply capacity and has offered to interconnect with PEU near PWW's Merrimack River Intake. PWW's intake is located upstream of the Town of Merrimack's wastewater treatment facility and downstream of the Anheuser Bush Brewery. It is at this point in the Merrimack River that the river crossing is proposed to occur.
- 5. The river crossing, water main extension, and interconnection is more thoroughly described in the Pre-Filed Direct Testimony of John J. Boisvert attached to this petition. The project will include installation of approximately 5,600 linear feet of water main. Describing the project from west to east, 3,900 linear feet will be of 12-inch diameter ductile iron main and will be constructed in the Town of Merrimack leading up to the actual river crossing. A 30-inch diameter pipe sleeve will be installed under the nearby rail road to bring the water main from the west to the east side of the rail road. The river crossing will include an 18-inch diameter high density poly ethylene water main and 16-inch ductile iron water main. As discussed at pages 10 and 11 of Mr. Boisvert's testimony, the steep river banks are not conducive to using Horizontal

Directional Drilling ("HDD") for the entire river crossing. Therefore, roughly one-third of the river crossing will be installed using HDD technology, one-third will be installed with geotechnical woven concrete mats overlaying the water main, and another third will be constructed using traditional open-cut methods performed within a coffer dam. Then, approximately 1,400 feet of 12-inch diameter ductile iron water main will run from the end of the 18/16-inch river crossing to the interconnection point with the Litchfield system on Route 3A on the east side of the Merrimack River.

- 6. PEU and PWW will utilize an existing building structure near PWW's booster station on the west side of the river and will install three or more pumps. The pumps and large water mains will enable PEU to achieve a maximum daily demand of 650,000 gpd although the pipeline configuration will allow for up to 1,500,000 gpd to be delivered to PEU without causing an adverse pressure drop to PWW's customers in the Town of Merrimack.
- 7. The engineering staff supporting PEU and its affiliates have experience in constructing river crossings. See page 13 of Mr. Boisvert's testimony. In addition, as described at page 8 of Mr. Boisvert's testimony, PEU has retained the services of skilled engineers and technical consultants to address the unique difficulties associated with the geology of the Merrimack River.
- 8. PEU will be considering bid proposals this spring and anticipates awarding a contract by June 1st. PEU anticipates the project will be in-service on or before December 31, 2017.
- 9. PEU has already commenced meetings with stakeholders and local, state, and federal permitting agencies. It is presently completing the necessary permitting for this project in time for its anticipated construction window. As described in Mr. Boisvert's testimony, PEU

has all easements necessary for the west side of the Merrimack River and is in active discussions with the two landowners on the east side of the river for easements on those parcels.

- 10. Approval of long-term financing for this project will be sought under separate financing filings. PEU estimates the cost of the interconnection to be \$2,800,000. \$2,400,000 will be paid directly by PEU from a State Revolving Loan program ("SRF"). The remaining monies will be paid by PWW and later recovered through a contribution in aid of construction from PEU which will be determined by the final construction cost associated with the water main work on the west side of the river from the Daniel Webster Highway to the pumping station. PWW will finance its share of the project through revenue bonds which will be described in more detail in PWW's separate financing filing. Approval of a special contract between PWW and PEU for the water supply will also be sought in a separate filing.
- the proposed river crossing is necessary to meet the reasonable requirements of reliable service to the public and that the requested license may be exercised without substantially affecting the public rights in the waters in question. As the Commission is aware, PEU is obligated under RSA 374:1 to provide reasonably safe and adequate service to its customers. The Town of Hudson and PEU have sought prior solutions to the water supply issues but those efforts have not resolved PEU's calculated water deficiency. The proposed river crossing has been studied and is the most technically feasible, environmentally sound, and economical solution to PEU's water supply needs. The proposed river crossing is not expected to substantially adversely affect the public's right in the waters in question. The interconnection with PWW is also not anticipated to adversely affect water supply to PWW's customers.

WHEREFORE, Pennichuck East Utility, Inc. respectfully requests that the Commission:

A. Issue an Order *Nisi* finding that the river crossing license sought by PEU and described in the instant filing may be exercised without substantially adversely affecting the public's use of the Merrimack River;

B. Grant PEU a license to construct and maintain the water main beneath and on the bottom of the Merrimack River as requested in this petition and as illustrated in the testimony of John J. Boisvert and attachments; and

C. Grant such other and further relief as may be just and equitable.

Respectfully submitted,

PENNICHUCK EAST UTILITY, INC.

By its Attorney,

NH BROWN LAW, PLLC

Date: March 1, 2017

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Certificate of Service

I hereby certify that a copy of the foregoing petition has been emailed this 1st day of March, 2017 to the Office of the Consumer Advocate; Troy R. Brown, Town Administrator, Town of Litchfield; and Eileen Cabanel, Town Manager, Town of Merrimack.

Marcia A. Brown, Esq.