

STATE OF NEW HAMPSHIRE
BEFORE THE
NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

PENNICHUCK EAST UTILITY, INC.

DOCKET NO. DW 17-___

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

PRE-FILED DIRECT TESTIMONY

OF

John J. Boisvert

March 1, 2017

1 **Professional and Educational Background**

2 **Q. What is your name and what is your position with Pennichuck East Utility, Inc.?**

3 **A.** My name is John J. Boisvert. I am the Chief Engineer of Pennichuck East Utility, Inc.
4 (hereinafter “PEU” or the “Company”). I have worked for PEU since February 1, 2006. I
5 am a licensed professional engineer in New Hampshire and Maine.

6 **Q. Please describe your educational background.**

7 **A.** I have a Bachelor of Science degree and a Master of Science degree in Civil Engineering
8 from the University of New Hampshire in Durham, New Hampshire. I also have a
9 Master’s degree in Environmental Law and Policy from Vermont Law School in South
10 Royalton, Vermont.

11 **Q. Please describe your professional background.**

12 **A.** Prior to joining PEU, I served as a Team Leader for Weston & Sampson Engineers of
13 Portsmouth, New Hampshire in their Water Practices Group from 2000 to 2006. Prior to
14 Weston & Sampson, I was employed by the Layne Christensen Company of Shawnee
15 Mission, Kansas as Regional Manager for their Geosciences Division in Dracut,
16 Massachusetts from 1994 to 2000. I completed graduate school in 1992 and was employed
17 by Hoyle, Tanner & Associates of Manchester, New Hampshire as a Project Engineer from
18 1992 to 1994. Prior to entering full time graduate programs at the University of New
19 Hampshire and Vermont Law School, I was employed by Civil Consultants of South
20 Berwick, Maine as a Project Engineer from 1986 to 1989 and by Underwood Engineers of
21 Portsmouth, New Hampshire as a project Engineer from 1985 to 1986.

22 **Q. What are your responsibilities as Chief Engineer of the Company?**

1 A. As Chief Engineer, I am responsible for the planning, design, permitting, construction, and
2 startup of major capital projects, including pipelines, reservoirs/dams, building structures,
3 pumping facilities, treatment facilities, and groundwater supplies. I also oversee and
4 direct the Company's Asset Management Initiative and provide regular technical assistance
5 to PEU and its affiliate's Water Supply Department, Operations Department, Customer
6 Service Department, and Senior Management.

7 **Q. What is the purpose of your testimony?**

8 A. I will be explaining the need and construction of an 18-inch water main crossing the
9 Merrimack River.

10 **Overview of Need**

11 **Q. Please explain the problem this main is intended to address.**

12 A. The main will address a number of problems and concerns including:
13 The main will serve as a primary source of water supply for PEU's Litchfield system as
14 well as portions of PEU's Pelham, Windham, and Londonderry systems. The main will
15 also serve as and a secondary supply for the Town of Hudson's water system. The Town
16 of Hudson and the PEU water systems were once a single system under a previous
17 ownership and that history forms the basis of the present interdependence between PEU
18 and Hudson. The systems operate collectively sharing sources of supply, distribution
19 main, and storage facilities. Currently, three wells located in the Town of Litchfield
20 provide the primary sources of supply to the PEU and Hudson systems: the Dame,
21 Ducharme, and Weinstein wells and they are owned by the Town of Hudson. Combined,
22 these three wells are permitted to supply a maximum of approximately 1,605,000 gallons
23 per day (gpd). Of this amount, Hudson obtains 1,368,500 gpd and PEU receives 236,500

1 gpd in accordance with its Water Supply and Transmission Agreement with the Town of
2 Hudson that was docketed as DE 96-227 and approved by the NHPUC on 4/6/1998 in
3 Order No. 22,893. Historically, beginning in May and through October, water demand in
4 the PEU and Hudson systems exceed the capacity of the three wells. PEU addressed this
5 deficit in supply by way of the Taylor Falls interconnection with Pennichuck Water
6 Works, Inc. (PWW). Taylor Falls consists of a pumping station located in Nashua and a
7 pipeline suspended under the Route 111/102 Bridge across the Merrimack River
8 connecting the pumping station to the Hudson distribution system. The Taylor Falls
9 Station has two pumps and was designed with one pump to be the primary with the second
10 as a backup. Each pump is capable of delivering 1,100 gallons per minute (gpm) or
11 1,584,000 gpd. The three wells and Taylor Falls Station provide the PEU/Hudson system
12 with a maximum supply of 3,189,000 gpd, however, the PEU/Hudson system has
13 maximum daily demands that regularly exceed 2,600,000 gpd. The anticipated trend is for
14 demand to continue to increase as the number of customers continues to increase in
15 Hudson and PEU. New Hampshire Department of Environmental Services (NHDES) rules
16 require public water systems to meet their maximum daily demand with their largest
17 source of supply out of service. For PEU, Taylor Falls is the largest of the four sources.
18 The loss of Taylor Falls could result in a supply deficit of over 900,000 gpd. The proposed
19 interconnection under the Merrimack River would alleviate this deficit.

20 **Additional Source Capacity is Required for the PEU and Hudson Systems.**

21 The three wells identified above are gravel packed wells. The wells have come under
22 scrutiny by the NHDES in recent years and with greater interest over the past 24 months.
23 Withdrawals from the Dame and Ducharme wells are lowering the groundwater levels in

1 the Darrah Pond Aquifer which indicates that withdrawals are exceeding recharge to the
2 aquifer. Lower groundwater levels caused by the use of the Dame and Ducharme wells
3 have lowered the water level in Darrah Pond thus causing the NHDES to begin the process
4 of declaring a surface water quality violation against the Town of Hudson over its use of
5 the Dame and Ducharme wells. The third well (Weinstein) is currently being replaced by
6 the Town of Hudson because of well screen failure. Testing of the replacement well has
7 indicated similar dewatering of the aquifer surrounding it. The result is likely to trigger a
8 reduction in permitted withdrawal from the Weinstein well. A reduction in withdrawal
9 volumes from all three wells is expected from the NHDES to prevent over-drawing of the
10 aquifers and to reverse negative impacts to Darrah Pond. Any reduction in the permitted
11 withdrawal from the wells will reduce the volume of water available to PEU and Hudson.
12 This will put additional strain on Taylor Falls. These concerns caused PEU to review
13 additional water supply options and ultimately propose the proposed interconnection with
14 PWW.

15 **Drought Concerns**

16 The ongoing drought initiated in 2016 has demonstrated the vulnerability of groundwater
17 resources in southern NH. Access to reliable alternate sources of water is critical in
18 managing the effects of drought now and in the future. PWW has two primary sources of
19 supply: Pennichuck Brook and the Merrimack River. Maximum day withdrawals from the
20 Merrimack River remain a small percentage of the lowest statistical flows leaving
21 sufficient capacity for PWW to meet the needs of PEU and Hudson now and into the
22 future.

1 **Expanded Growth and Response to Water Contamination**

2 “Normal” or expected customer growth has continued to occur in the five town area east of
3 the Merrimack River (Litchfield, Hudson, Pelham, Windham, and Londonderry). New
4 customers have been added and distribution systems have expanded in these towns. This
5 growth has placed additional stress on the Hudson wells and Taylor Falls. The stress will
6 be further exacerbated by the expansion of the Litchfield water distribution system to over
7 400 homes and businesses in the northern end of Litchfield due to private well
8 contamination from the chemical compound perfluorooctanoic acid (PFOA). In addition,
9 water main was extended with funding from the NHDES Waste Management Bureau
10 further into Windham to address the contamination of private drinking water wells
11 contaminated by the gasoline additive MtBE. These expansion activities require
12 strengthening of the source of supply to PEU east of the Merrimack River.

13 **Q. Please describe whether there were other alternatives to addressing the problem and**
14 **why the Company did not pursue them.**

15 **A.** Yes, PEU as well as Hudson have investigated additional sources of supply. Hudson has
16 investigated the potential to site a large capacity well or wells within the Town of Hudson
17 over the last decade without success. Many areas having the ability to support well
18 development within Hudson have been lost to development or are unavailable for other
19 reasons (land use, contamination, proximity to surface water, and private land ownership).
20 PEU does not have sufficient property resources in the Town of Litchfield thus private
21 land acquisition would be required to secure a large capacity groundwater source. The cost
22 of private land acquisition (minimum of 13 acres to secure the 400 foot sanitary radius
23 required by the NHDES) would be a substantial up front expense compared to the

1 proposed project. PEU considered purchasing water from Manchester Water Works
2 (MWW) as it does for a large part of Londonderry and Bedford. Though technically
3 feasible, it would present a technical challenge in that MWW disinfects water with
4 chloramines while PEU/PWW/Hudson disinfect water with chlorine. Mixing water of
5 differing water chemistry would cause water quality concerns within the distribution
6 system. In addition, PEU's purchase from MWW of a large volume of water (especially in
7 the summer months) would cause PEU to incur a significant fee from MWW, known as the
8 Merrimack Source Development Charge (MSDC). The MSDC would likely exceed the
9 entire capital cost of the interconnection project, depending on how much water PEU
10 purchases from MWW during the peak two demand months of the year: July and August.
11 The proposed interconnection with PWW offers the most reliable, technically feasible, and
12 cost effective solution to the current and long term supply needs of PEU.

13 **Q. Does the Company expect to serve additional customers as a result of this project?**

14 **A.** Yes. As stated earlier, new customers continue to be added to the PEU system. New
15 development in Litchfield has extended the distribution system. Expansion of the system
16 has occurred in Windham and is planned for Pelham. The response in 2016 to PFOA
17 contamination will add over 20,000 feet of new water main in the north end of Litchfield
18 bringing PEU over 400 new customers by the end of 2017. PEU further anticipates
19 additional customers due to "fill-in" within the existing distribution network. Fill-in
20 occurs when an existing property with a private well connects to the water main at their
21 property. The heightened understanding of water quality and the potential effects of
22 extended drought may cause more property owns to become part of the public water
23 system.

1 **Overview of the Project**

2 **Q. Please describe the location of the proposed river crossing.**

3 **A.** The location of the river crossing and the entire interconnection is depicted on the map
4 included as Attachment JJB-1. The crossing runs from Merrimack west of the Merrimack
5 River to Litchfield east of the Merrimack River. The location is at PWW's existing
6 Merrimack River Intake north of the Town of Merrimack Wastewater Treatment Facility
7 and south to the Anheuser Bush Brewery on the west side of the Merrimack River and
8 almost directly west of the intersection of Talent Road and Route 3A on the east side of the
9 Merrimack River.

10 **Q. Please describe who owns the land associated with this construction project and how**
11 **the Company has or will secure access to the property.**

12 **A.** On the west side of the Merrimack River, all improvements will take place within existing
13 public rights of way, existing private easement, public easements (Town of Merrimack),
14 and property owned by PWW. On the east side of the river, PEU will obtain easements in
15 Litchfield. Two properties on the east side are impacted by the project. One parcel is
16 owned by the United States Fish & Wildlife Service (USF&WS) and the second parcel
17 owned by Margaret and Gerard Parent of Litchfield. All properties are shown on
18 Attachment JJB-2. Land ownership on the west side of the Merrimack River is secure.
19 PEU has been engaged with USF&WS and the Parents since August of 2016. PEU has
20 received permission from these landowners for our consultants to perform land and
21 boundary surveys, geotechnical investigations and other assessments required as part of
22 project funding and for environmental permits. PEU anticipates easements to be secured
23 by June 2017.

1 **Q. Please describe the project and the timing of construction, including the anticipated**
2 **in-service date.**

3 **A.** Water main improvements on the west side of the river and additions leading to and
4 including the booster station as well as the pipeline on the east side of the Merrimack River
5 are being designed by PEU's engineering staff. PEU engaged the services of the
6 consulting firm Tighe & Bond (T&B) of Portsmouth, New Hampshire to take the lead in
7 the design and permitting of the river crossing pipeline (Crossing). T&B, in turn, have
8 engaged sub-consultants for their technical expertise required to evaluate the Crossing
9 including Brierley Associates (geotechnical, tunneling, and horizontal directional drilling),
10 Doucet Survey (topographic and boundary surveying), and Normandeau Associates
11 (environmental science and permitting).

12
13 The project includes four major components: 1) water main improvements and additions
14 on the west side of the Merrimack River, 2) a pumping station on the west bank of the
15 Merrimack River to boost water into PEU from PWW, 3) the Crossing, and 4) water main
16 on the east side of the Merrimack River to complete the interconnection to PEU near
17 Talent Road. These components are described as follows:

18
19 1. The project will include the installation of approximately 5,600 linear feet of new and
20 replacement water main. 3,900 linear feet of 12-inch diameter ductile iron water main will
21 be constructed in Merrimack leading up to the actual Crossing. The main will replace
22 approximately 700 feet of 8-inch diameter asbestos cement pipe in Mast Road. The
23 replacement with 12-inch main is necessary for capacity reasons and because there have

1 been three breaks on this section of 8-inch asbestos cement pipe in the past 16 years. A 30-
2 inch diameter pipe sleeve will be installed under the rail road (operated by Pan Am
3 Railways) to pass the new 12-inch main from the west side to the east side of the rail road.

4
5 2. Some cost savings are afforded by the fact that the project will utilize an existing
6 building structure, approximately 40 feet north of PWW's Merrimack River Raw Water
7 Pumping Station, for the booster station. This building structure is owned by PWW. The
8 booster station is currently in design but will have an initial design capacity of 1,000,000
9 gpd. The design flow will be achieved by three or more appropriately sized pumps such
10 that PEU's projected maximum day demand of 650,000 gpd can be achieved with one of
11 the pumps out of service. The station provides the source redundancy required by the
12 NHDES and was sized to include known and measurable development (new PFOA and
13 MtBE customers plus current property under development). The building will allow for
14 the upsizing of pumps or the addition of pumps in the future, if required. The existing
15 building is above the 100-year flood elevation.

16
17 3. The Crossing will be a combination of 18-inch diameter high density poly ethylene
18 (HDPE) water main and 16-inch ductile water main and associated fittings totaling
19 approximately 700 feet. HDPE is more appropriate for the crossing because the pipe is
20 fused (welded) at each joint. This will allow the pipe to be pulled through the Horizontal
21 Directional Drilling (HDD) borehole as a continuous section of pipe having the ability to
22 bend going into and out of the river bottom and overbanks. 18-inch diameter HDPE is
23 being used because it is close to the inside diameter of 16-inch diameter ductile iron.

1 4. There will be approximately 1,400 feet of 12-inch diameter ductile iron water main
2 from the end of the 18/16-inch diameter crossing to the interconnection point on Route 3A
3 in Litchfield on the east side of the river.

4
5 The pipeline configuration will allow for up to 1,500,000 gpd to be delivered to the east
6 side of the Merrimack River into the PEU distribution system without causing an adverse
7 pressure drop to PWW customers along the Daniel Webster Highway on the west side of
8 the river in Merrimack.

9
10 The crossing presents the greatest technical challenge for the project. The initial desire
11 was to install the crossing entirely by HDD. This would have avoided temporary shore
12 line, riverine, and wetland impacts as well as reduce or eliminate the amount of
13 environmental permitting associated with the project. However, topographic land surveys,
14 bathymetric river surveys, and geotechnical investigations revealed significantly different
15 geologic conditions between the west and east side of the river. Both banks are relatively
16 high above the normal river elevation as well as they are very steep from the uplands down
17 to the water level. This condition would force a long horizontal drill to start from one side
18 of the river and come out on the other side. Large diameter pipeline does not bend sharply.
19 As a result, drilling equipment would need to be set up further and further away from the
20 river bank to ensure the proper entrance angle going under the river and then transition to
21 the proper exit angle to come out on the other side. This option would have made for too
22 long of a drill and would be expensive. It would also pose considerable risk or uncertainty
23 with respect to a successful outcome, and require additional land resources. The geology

1 at and below the river bottom presents a problem as well. The bedrock substrate at the
2 proposed crossing location is highly fractured quartzite which is not conducive to HDD
3 and could result in the release of drilling material into the river which would result in
4 undesirable environmental impacts to the river on the east side of the Merrimack River. It
5 is our consultant's opinion that using HDD techniques in quartzite geology presents a high
6 risk of inadvertent release of drilling material into the river. For these reasons, PEU's
7 consultant recommends employing a hybrid approach whereby the main on the east side of
8 the river will be installed by traditional open cut methods performed within a coffer dam
9 and the main within the central third of the river will be placed on the river bottom and
10 protected by geotechnical woven concrete mats. The main on the west side of the river
11 will be installed by employing HDD. Attachment JJB-3 contains the preliminary design
12 drawings for the work. Attachment JJB-4 and Attachment JJB-5 describe the geotechnical
13 woven concrete mats.

14
15 PEU anticipates that the entire project will be in service on or before December 31, 2017,
16 provided, the required environmental permits are obtained in a timely manner and the N.H.
17 Public Utilities Commission approves the project financing as well as this petition. PEU's
18 financing request is being filed separately.

19 **Q. Is PEU hiring contractors to perform the construction of the 16-inch main?**

20 **A.** Yes, because funding is being provided by a loan from the NHDES State Revolving Loan
21 Fund (SRF) program we are required to issue the project for competitive bid which is also
22 the policy of PEU. PEU will manage the construction of the project with in-house staff
23 and the assistance of our design consultants T&B and Brierley. Bids will be sought from

1 construction contractors qualified and with the experience to successfully complete the
2 project. PEU's intention is to bid the project the pipeline portion (pipeline east and west of
3 the Merrimack River and the crossing) under a single contract. PEU anticipates that bids
4 will be received on or about May 15, 2017. Bids will be held until all permits and
5 regulatory approvals are received. The contract will be awarded to the contractor with the
6 lowest price qualified to perform the work. Contract award is anticipated for June 1, 2017
7 and mobilization and construction will commence shortly thereafter.

8 **Q. Please explain who will be operating and maintaining the main, once constructed.**

9 **A.** As noted above, a portion of the project is being constructed within PWW's franchise
10 territory and a portion is being constructed within PEU's franchise territory. The water
11 mains will be owned, operated, and maintained by PWW and PEU, depending on whether
12 the assets are located within PWW or PEU's franchise boundary.

13 **Q. Will the project require any adjustment in the franchise boundary between PWW
14 and PEU?**

15 **A.** No.

16 **Q. Please explain whether the completed project is expected to affect the public's right in
17 the public waters of the Merrimack River.**

18 **A.** The completed project is not planned to substantially impede the public's use and
19 enjoyment of the river and lands in any manner. The pipeline will be buried in both river
20 banks and partially buried in the river bottom and partially exposed on top of the river
21 bottom. The main will be more than 8 feet deep approaching the river banks while greater
22 than 12 feet below the water surface in the deeper section of the crossing. Flow will pass
23 over the protective mats covering the main.

1 **Q. Is the construction of the river crossing 16-inch water main going to result in the**
2 **abandonment of other assets or structures?**

3 **A.** The project will result in the retirement of approximately 700 feet of 8 inch diameter
4 asbestos cement water main located in Mast Road in Merrimack as discussed previously in
5 this testimony

6 **Q. Does PEU or its staff have experience with river crossings?**

7 **A.** Yes. In house engineering staff has designed river and lake crossings using HDD. In
8 particular a 1,000 foot crossing of the Saco River in Conway, New Hampshire to connect
9 PEU's Birch Hill community water system to the North Conway Water Precinct and a 900
10 foot crossing of Locke Lake to support distribution system improvements. The instant
11 project presents additional challenges for PEU and that is why PEU brought in T&B and
12 Brierley for their knowledge and experience to assess, design, and help PEU move the
13 project forward.

14 **Q. Whereas PWW will be supplying water to PEU through this 16-inch main, please**
15 **describe evidence PWW has provided PEU that indicates PWW has sufficient supply**
16 **to furnish water to PEU.**

17 **A.** PWW has sufficient supply capacity to deliver the supply to PEU. PWW has the capacity
18 to treat 35 million gallons per day (MGD) from the water treatment facility located at 200
19 Concord Street in Nashua, NH. Current average day production from the Concord Street
20 facility ranges between about 8.0 MGD in the winter months and 25.0 MGD in the
21 summer. PWW has sufficient treatment capacity to deliver the maximum design flow of
22 the pipeline of 1.5 MGD for PEU.

1 The sale of water from PWW to PEU will be pursuant to a special contract for wholesale
2 supply. PEU and PWW are preparing a separate petition to the Commission to request
3 approval of the special contract.

4 **Q. Please describe how the Company will finance the construction project?**

5 **A.** The approximate capital cost for the interconnection is estimated at \$2,800,000 of which
6 \$2,400,000 will be paid directly by PEU from the SRF loan. The remaining monies will be
7 paid by PWW and later recovered via a contribution in aid of construction from PEU
8 which will be determined by the final construction cost associated with the water main
9 work on the west side of the River from the DW Highway to the pumping station. As will
10 be more fully described in the financing petition to be filed with the Commission, the SRF
11 loan will carry a financing term of 20 years and an interest rate of 1.96%. The PWW share
12 of the project is being financed by revenue bonds to be issued through the Business
13 Finance Authority of NH with a term of 30 years and a projected interest rate of 5.0%. The
14 PWW financing will be the subject of a PWW financing petition in the Spring of 2017.

15 **Permits**

16 **Q. Please identify all local, State, and Federal permits the Company will need to obtain
17 for this project.**

18 **A.** PWW and PEU are working with the permitting authorities to obtain the necessary
19 permits. Under the present design of the project, PEU anticipates the following permits are
20 required or will be necessary:

- 21 • Wetlands and Shoreland Protection are required for the project and PEU anticipates filing
22 its completed application shortly.

- 1 • NHDOT trench permit for work within the shoulder of Route 3 in Merrimack and Route
2 3A in Litchfield are required from the contractor performing the work, therefore, the
3 application for this permit will be filed after award of the construction contract.
- 4 • The project, as confirmed by the ACOE and the NHDES, will fall under the New
5 Hampshire’s Programmatic General Permit (PGP)¹, therefore, an individual Section 401
6 Water Quality Certificate for this project will not be required.
- 7 • The NHDES has confirmed that an Alteration of Terrain Permit is not required for the
8 project.
- 9 • The Town of Merrimack will require a street opening permit from the contractor
10 performing the work in Mast Road. PEU expects to file for this permit in the next few
11 weeks.

12 **Support and Coordination with Landowners**

13 **Q. Have the affected municipalities indicated whether they support the project?**

14 **A.** As stated earlier, PEU is in regular contact with the Town of Litchfield and Town of
15 Merrimack regarding this project. The NHDES has requested the assistance in its response
16 to the PFOA contamination in Litchfield. See
17 <http://www.des.nh.gov/organization/commissioner/pfoa.htm> for further information and
18 updates by the NHDES. The Town of Litchfield filed a letter in Docket No. DW 17-003 to
19 support delivery of potable water to its residents. The instant project will also enable PEU
20 to provide potable water to Litchfield residents.

¹ New Hampshire’s Programmatic General Permit (PGP) is intended to expedite review of minimal impact work in coastal and inland waters and wetlands within the State of New Hampshire. The PGP minimizes duplication between New Hampshire's regulatory program governing work within coastal and inland waters and wetlands and the U.S. Army Corps of Engineers’ regulatory program and eliminates the need to apply for separate approval from the Corps for most minor, non-controversial work in New Hampshire when that work is authorized by the NHDES Wetlands Bureau.

1 **Q. Please explain any discussions PEU has had with affected landowners to prepare**
2 **them for the construction and describe what measures PEU will be taking to**
3 **minimize disruptions to the landowners and neighborhoods.**

4 **A.** PEU has held preliminary meetings with the Town of Merrimack's Public Works staff to
5 review and coordinate within public rights of way on Mast Road and within existing
6 easements held by PWW on lands owned by the Town of Merrimack at its wastewater
7 treatment facility.

8 PEU has been in contact with the owners of land over which PWW has existing easement
9 to inform them of the proposed project. No new easements or land acquisitions are
10 required for work on the west side of the Merrimack River.

11 PEU is actively engaged with USF&WS to secure the required right of way on their
12 property east of the Merrimack River. PEU is drafting easement documents to secure a
13 permanent easement from the remaining private landowner between the USF&WS
14 property and Route 3A. In addition to specific outreach to impacted landowners, PEU will
15 be appearing before the Conservation Commissions in the Towns of Merrimack and
16 Litchfield as part of the wetland and shore land permit applications. PEU is also attending
17 a meeting of the Litchfield Planning Board to brief the Board on the project. There is no
18 requirement to go before the Planning Board but in PEU's experience, going before
19 Planning Boards is very helpful in informing the public of the project specifics and
20 necessity. As can be seen on Attachment JJB-1 and JJB-2, the USF&WS property and the
21 Parent property are large and minimally developed. Existing residences are at a fair
22 distance from the work and no excavation is planned in public roadways, except Mast
23 Road in Merrimack. The only stakeholder on Mast Road is the Town of Merrimack

1 wastewater treatment facility and discussions with them regarding the timing and
2 coordination that work are ongoing.

3 **Q. Does this complete your testimony?**

4 **A.** Yes.