

STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: December 2, 2021

AT (OFFICE): NH Dept of Energy

FROM: Joseph M. Vercellotti, P.E. (*JMV*)
Utility Engineer, Division of Enforcement

SUBJECT: File No. CR 21-001 Unitil Gas (d/b/a Northern Utilities, Inc.)
Petition for a License to Construct and Maintain a Natural Gas
Pipeline beneath the Cocheco River in Rocheser, New Hampshire
Division of Enforcement Safety Bureau Staff Recommendation

TO: Jared S. Chicoine, Commissioner-Department of Energy
Christopher Ellms, Jr., Deputy Commissioner-Department of Energy

CC: Thomas Frantz, Director of Regulatory Division
Paul Kasper, Division of Enforcement
Lynn Fabrizio, Division of Enforcement

The Safety Bureau's review of the above petition consisted of the following elements:

- Petition contents, project overview and history
- Review of land ownership on each side of the river crossing
- Review of 49 CFR Part 192 and Puc 500 rule requirements
- Review of public need and public impact, including applicability of other State regulations
- Conclusions and Recommendations

Petition Contents, Project Overview and History

On August 6, 2021, Northern Utilities, Inc. (Northern) filed a petition, pursuant to RSA 371:17 and RSA 371:20, to construct and maintain a gas distribution main beneath a portion, approximating 100 feet of the Cocheco River in Rochester, New Hampshire. The natural gas distribution main will provide additional pipeline capacity to feed two district regulator stations for the City of Rochester. The water crossing involves a 100-foot section of the Cocheco River between Old Dover Road and Route 125 (Columbus Avenue). (See Attachment A)

In the petition, Northern stated that the Company did not submit an application for a license prior to constructing the project and requests that the Department of Energy grant a license on a retroactive basis. Northern further stated that for the purposes of supporting recent significant commercial customer load growth in the area, a 12" coated steel natural gas pipeline was installed by horizontal directional drill (HDD) under the

Cocheco River from Lot 137-3 (owned by Northern) to Lot 136-76 (owned by City of Rochester). Northern, consistent with RSA 371:17, crosses public waters as described in its petition, was exercised without substantially affecting public rights in said waters as required by RSA 371:20 and indicated the project is necessary in order to provide safe natural gas service to Rochester

The gas main consists of a 12-inch nominal diameter API 5L X52 0.375 wall coated steel pipe installed up to 12 feet below the river bottom. Northern intends to operate the gas main at up to approximately 500 psig, the anticipated maximum allowable design pressure per 49 CFR Part 192.619. The portion under the Cocheco River was installed on January 7, 2021 using HDD which is a trenchless pipe installation method allowing the installation of a new main without surface water impacts. Northern provided HDD construction specifications including pilot hole tolerances, guidance system notes, steering tool specifications, pressure tool specifications and pipe design calculations on Sheet 2 of the petition at Attachment A. Attachment A, Sheets 3, 4 and 5, show the crossing pipe layout, pipeline profile, and general site features.

On September 22, 2021 Northern provided a response to Staff data request DR-1 which confirmed the following additional information:

- 1 The crossing was completed on January 7, 2021.
- 2 The new pipe segment was pressure tested with the entire project.
- 3 The pipe used had a 14 to 16 mil fusion bonded epoxy (FBE) and 60 mil abrasion resistant overlay (ARO) coating.
- 4 Henniker Directional Drilling completed the work consistent with Northern's O&M procedures.
- 5 As built drawings were provided.
- 6 Pipeline markers were installed on each side of the crossing.
- 7 The public was notified regarding the work.

Land Ownership

Northern owns Lot 137-3 and the City of Rochester owns Lot 136-76 which are on each side of the river crossing. Northern obtained the necessary permission from the Rochester Planning Board to construct the pipeline. The project location and flood plain delineation are shown on Attachment A.

Review of Safety Requirements as Described in Puc 500

N.H. Admin. R. Puc 506.01, Pipeline Safety Standards, provides that:

- (a) All utilities shall comply with those pipeline safety regulations established by the United States Department of Transportation which are set forth in 49 CFR Parts 191, 192, 193, 198 and 199, including future amendments thereto.

(b) Where Puc 500 or Puc 800 establishes more stringent requirements than those pipeline safety regulations adopted pursuant to (a) above, the more stringent requirement set forth in Puc 500 or Puc 800 shall apply.

Northern's petition does not explicitly state that the administrative rules of Puc 500 will be met, but does provide engineering details that show overall compliance with 49 CFR Part 192, which is referenced in Puc 506.01.

The Safety Bureau's review of the petition and attachments submitted to date found the proposed crossing to be in conformance with the applicable requirements of Puc 500 and 49 CFR Part 192.

Public Need and Public Impact

Northern indicated the construction and maintenance of the pipeline segment under the Cocheco River in Rochester is necessary as a second feed for the city and provides pressure support to the other district regulating station which supplies the area. The Division of Enforcement Safety Bureau concludes any impact to the public from this water crossing is negligible as a result of completing the directional bore at the prescribed depth below the river bottom.

Safety Bureau Staff Recommendations

The Safety Bureau recommends approval of Northern's petition under RSA 371:17 and RSA 371:20 with the following conditions:

- a. Staff recommends that the approval be limited to the Northern natural gas pipeline under consideration in this docket.
- b. Northern is required to construct, operate, and maintain the piping consistent with both Puc 506.02 and 49 CFR Part 192 requirements.
- c. Northern shall maintain aboveground pipeline markers to identify the pipeline location with appropriate warning and company contact information on each side of the Cocheco River crossing.
- d. Northern stated that, due to an inadvertent oversight, the Company did not submit an application for a license prior to constructing the project and requested that the Department of Energy grant a license on a retroactive basis. Staff would like to remind Northern to ensure that all required permitting is obtained prior to any work on such installations on State land or across public waters in the future. If such an installation does occur prior to obtaining the required license in the future, additional enforcement action may be warranted.

If these conditions are met, the Safety Bureau is of the opinion that the natural gas pipeline crossing meets current safety standards under Puc 506.02 and 49 CFR Part 192. The construction of the new gas distribution main under this segment of the Cocheco River was completed without substantially affecting public rights in said waters and lands, as required by RSA 371:20.

The Safety Bureau is also of the opinion that the natural gas pipeline crossing is necessary to meet the reasonable requirements of service to the public pursuant to RSA 371:17.

Staff Attachment A

