STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: AT (OFFICE):

August 10, 2017

NHPUC

FROM:

Robert Wyatt, Assistant Director of Safety Division

RJW

SUBJECT:

DG 17-039 Petition of Northern Utilities, Inc. for a License

To Cross Public Waters

TO:

Debra Howland, Executive Director

Randy Knepper – Director of Safety Division Steve Frink, Assistant Director of Gas Division

Paul Dexter, Staff Attorney

Commission Safety Division'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 CFR Part 192 requirements, as described in Puc 500 rules
- Review of public need and public impact, including applicability of other State regulations
- Conclusions and Recommendations

Petition Contents, Project Overview and History

On March 8, 2017, Northern Utilities, Inc. ("Northern", or "the Company") filed a petition, pursuant to RSA 371:17 and RSA 371:20, to construct and maintain a distribution gas main under and across public waters of Little River in Exeter, New Hampshire. The natural gas distribution main crossing will replace the existing main that is contained within the Court Street Culvert and will be removed as part of the bridge replacement project. The Company states that the proposed new single span bridge cannot accommodate the gas main.

In its petition Northern asserts that the City of Exeter ("Exeter", or the "Town") plans to reconstruct the bridge and culvert structure that crosses the Little River in Exeter and carries the river under Court Street (the "Court Street Culvert"). This section of Court Street is also State Route 108, which passes through Exeter in an approximate north-south orientation. The Court Street Culvert is a structure that was built in 1965 and is comprised of three metal arch culverts spanning approximately 85 feet. The Town plans

to replace the structure in 2017 with a single span bridge as part of its Capital Improvement Program. Northern has coordinated with the Town to replace the existing gas main, which will be removed along with the old Court Street Culvert. This section of the Little River is defined as Public Waters per RSA 483-B:4, XVI(c), and as such is included on the State of New Hampshire Official List of Public Waters.¹

In the petition, Northern states that the construction of the new gas distribution main underneath the Little River in connection to the Court Street Culvert replacement project is necessary in order to provide safe natural gas service to its customers in Exeter, New Hampshire, as required in RSA 371:17.

Northern serves approximately 3,000 customers in and around Exeter. Northern believes this crossing of public waters, as described in its petition, can be exercised without substantially affecting public rights in said waters, as required in RSA 371:20.

New gas distribution main at the Court Street crossing location in Exeter

Northern proposes to use a Horizontal Directional Drilling ("HDD") process to install the
new main underneath Little River. Northern's new gas distribution main will be located
slightly west of the proposed Court Street bridge support structures and will be
constructed using the following engineering methodology and specifications:

- The Horizontal Directional Drilling process is a trenchless method allowing the Company to install the new main below the river bed without impacting the river
 - o The total length of the HDD will be approximately 450 feet, with approximately 150 feet being directly below the river
 - o The new gas main will consist of 4-inch diameter HDPE SDR-11 plastic carrier pipe inserted into an 8-inch diameter HDPE-SDR-17 plastic casing pipe.
 - o By using this pipe within a pipe configuration Northern will be able to maintain the carrier pipe without disruption to the river
 - o The casing pipe will never be closer than 12 feet below the river bed, which is 5 to 6 feet below existing grade

Land Ownership

Northern provided sufficient documentation to demonstrate that the gas distribution pipeline is to be located under the bed of the Little River as well as along the northern and southern shore of the Little River. During construction the HDD process will utilize temporary entry and exit pits slightly west of the new Court Street Bridge on each side of the Little River. The temporary entry and exit pits used during the HDD construction of

¹ The Little River becomes jurisdictional at the juncture of Dudley Brook, upstream of the Court Street Culvert in Exeter. New Hampshire Revised Statutes Annotated 271:20 (RSA 271:20) requires that the New Hampshire Division of Environmental Services create and maintain a list of all public waters in the state.

the proposed crossing will be located within the municipal right-of-way of the Town of Exeter. See Staff Attachment - A.

Review of safety requirements as described in Puc 500

N.H. Code Admin. Rules 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 C.F.R. 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 CFR Part 192, which is referenced in Puc 506.01.

The Safety Division review of the petition and attachments submitted to date found the proposed crossings to be in conformance with the applicable requirements of Puc 500 and CFR Part 192.

Public Need and Public Impact

The Safety Division believes any impact to the public from this river crossing will be negligible, as a result of the directional bore and the prescribed depth below the river bottom. Northern has stated that this replacement main is needed to supply its customer gas demand in greater Exeter. The Safety Division notes that without the proposed new gas distribution main, Northern would not be able to serve all of its existing Exeter customers.

Safety Division Staff Conclusion and Recommendation:

The Safety Division 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 Northern's natural gas pipeline under consideration in this docket.
- b. Northern should construct, operate, and maintain the piping consistent with both Puc 506.02 and 49 CFR Part 192 requirements.
- c. Northern should be directed to operate and maintain the crossing in conformance with the latest 49 CFR Part 192 amendments. Any and all future alterations to the

- crossing that may impact the public shall conform to the most current CFR Part 192 amendments in effect at the time of submittal of the alteration.
- d. Northern should use above ground pipeline markers for identification of the pipeline with appropriate warning and company contact information on each bank of the Little River crossing.

If these conditions are met, the Safety Division is of the opinion that the proposed natural gas pipeline crossing will meet all current safety standards (Puc 506.02 and 49 CFR Part 192).

The Safety Division believes the construction of the new gas distribution main under the Little River, as proposed, may be exercised without substantially affecting the public rights in said waters and lands (RSA 371:20).

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

$Staff\ Attachment-A$



SERVICE LIST - EMAIL ADDRESSES - DOCKET RELATED

Pursuant to N.H. Admin Rule Puc 203.11 (a) (1): Serve an electronic copy on each person identified on the service list.

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FILING INSTRUCTIONS:

a) Pursuant to N.H. Admin Rule Puc 203.02 (a), with the exception of Discovery, file 7 copies, as well as an electronic copy, of all documents including cover letter with:

DEBRA A HOWLAND

EXECUTIVE DIRECTOR

NHPUC

21 S. FRUIT ST, SUITE 10 CONCORD NH 03301-2429

- b) Serve an electronic copy with each person identified on the Commission's service list and with the Office of Consumer Advocate.
- c) Serve a written copy on each person on the service list not able to receive electronic mail.