

NORTH SLOPE BOROUGH

DEPARTMENT OF PUBLIC WORKS

P.O. Box 350

Barrow, Alaska 99723

Phone: 907-852-0489

RECEIVED
April 15, 2019
SPCO



Scott K. Danner, Director

April 15, 2019

Mr. Tom Stokes
State Pipeline Coordinator
Division of Oil and Gas
State Pipeline Coordinator's Section
3651 Penland Parkway
Anchorage, AK 99508

Re: Response to Letter No. 18-132-AS Notification of Renewal and Appraisal Due for the Nuiqsut Natural Gas Pipeline Right-of-Way Lease ADL 416202

Mr. Stokes,

In response to the Division of Oil and Gas, State Pipeline Coordinator's Section (SPCS) Letter No. 18-132-AS, dated May 9, 2018, the Lessee for the Nuiqsut Natural Gas Pipeline Right-of-Way Lease ADL 416202 the North Slope Borough (NSB) hereby seeks renewal of the Lease for 20 years, within the maximum period authorized by the law, and on the same terms and conditions as those set forth in the existing lease and amendments thereto.

The NSB offers the following to address the request for information presented in Letter No. 18-132-AS for the purpose of renewing the Lease.

1. Letter of Intent to Renew Lease
2. Lessee Commercial Information
3. Statement of Full Compliance with State Law
4. Pipeline and ROW Information
5. Lease Requirements
6. Management Program/Compliance Systems and Processes

NSB is attaching one confidential attachment. The attachment has been delivered on a separate hard (thumb) drive and is clearly identified in the lease renewal package and within the electronic file. We request that this confidential attachment be kept confidential.

Please contact NSB Consultant Bonnie York at 907-276-6664 or my office directly at Joe.Ramirez@North-Slope.org if you have any questions or require additional information.

Respectfully,

Joe Ramirez

Joe Ramirez
Division Program Manager
North Slope Borough
Department of Public Works

Attachments:

Public Submission:

Lease Renewal Package

Appendices A-M and O-S

Confidential Submission:

Appendix N

**NORTH SLOPE BOROUGH
NUIQSUT NATURAL GAS PIPELINE**

**RIGHT OF WAY LEASE
ADL 416202**

**LEASE RENEWAL PACKAGE
April 15, 2019**

Prepared For:



Prepared By:



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1. LETTER OF INTENT TO RENEW LEASE

See Appendix A for a copy of the Letter of Intent to Renew, dated December 21, 2018, submitted by the North Slope Borough (NSB).

NSB requests renewal for a term of 20 years.

2. LESSEE COMMERCIAL INFORMATION

a. Commercial Business License

NSB does not have a Commercial Business License.

b. Certificate of Good Standing/Compliance from Division of Corporations

NSB does not have a Certificate of Good Standing/Compliance from Division of Corporations, as the Borough is not a Corporation, but Municipal Government.

c. Annual Financial Statement and Balance Sheet for preceding three years

Please see the following attachments:

1. Appendix B: 2016 Comprehensive Annual Financial Report of the NSB
2. Appendix C: 2017 Comprehensive Annual Financial Report of the NSB
3. Appendix D: 2018 Comprehensive Annual Financial Report of the NSB
4. Appendix E: 2017-2018 NSB Final Budget Document

d. Ownership Interest Diagram

NSB is 100% owner of the Nuiqsut Natural Gas Pipeline.

3. STATEMENT OF FULL COMPLIANCE WITH STATE LAW

NSB ensures compliance with state law pertaining to regulation and taxation of the pipeline facility; with all terms of the right-of-way (ROW) lease; and with other state, borough, and federal regulations and authorizations through the following:

- Appendix F: NSB DPW 2018 Annual Work Plan Nuiqsut Transmission Line
- Appendix G: NSB Nuiqsut Gas Transmission Pipeline O&M Manual Rev. 8, 2018
- Appendix H: NSB NNGP Quality Assurance Program, 2019
- Appendix I: NSB Gas Transmission Pipeline Integrity Management Program, 2018
- Appendix J: NSB submission of annual reports to SPCS (See NSB Annual Comprehensive Report for 2017)

Statement of Full Compliance with State Law

The NSB Nuiqsut pipeline system is effective in maintaining compliance with state laws, as demonstrated by consistent oversight of operations by state and federal agencies. The NSB has met all compliance requirements for renewing the ROW lease. NSB is current in all tax filings required under the laws of the State of Alaska, pertaining to the Nuiqsut Pipeline as defined in the ROW Lease ADL 416202, Condition 17, executed on March 15, 1999.

4. PIPELINE AND R.O.W. INFORMATION

a. Pipeline characteristics and description

NSB constructed the 14.4-mile Nuiqsut Natural Gas Pipeline (NNGPL) to transport natural gas from the ConocoPhillips Alpine production facility to the village of Nuiqsut, a community of approximately 420 residents located within the Colville River Delta. It transports up to 3,500,000 CF of natural gas per day to the village of Nuiqsut.

From the production facility in a generally southern direction, the aboveground NNGPL shares horizontal and vertical supports with the Alpine oil, diesel, and utility pipelines for approximately 8.8 miles. At the west bank of the Colville river where the Alpine pipelines continue east under the Colville river, the NNGPL transitions belowground for approximately 5.6 miles south and west to the village of Nuiqsut, including a water crossing at the Nigliq (Nechelik) channel of the Colville River. Approximately 2.66 miles of the NNGPL are located on State of Alaska land. State lands include two sections of the aboveground pipeline and the trenched crossing of the Nigliq (Nechelik) Channel.

NNGPL is a 3.5-inch diameter continuous electric resistance welded coiled pipe with a wall thickness of 0.203 inches designed to operate at a maximum pressure of 1,440 psig. The NNGPL is protected against external corrosion by an extruded high-density polyethylene (HDPE) "yellow jacket" pipe coating and a galvanized cathodic protection system belowground.

Manual isolation valves upstream of the river crossing enable isolation of the product as needed for operation and maintenance and emergency response. Downstream of the river crossing, valves are located at the pipeline terminus.

The pipeline project began in 1999, with start-up and commissioning of the entire system in 2008.

Attached is the as-built survey of NNGPL (416202) dated April 10, 2003, which shows the center of alignment for the pipeline's operational ROW boundary over State Lands.

Please see 2003 As-built Survey attached in Appendix K.

b. Discussion of useful life, design life, physical life and economic life

Useful Life

The useful life of the NNGPL is the period during which a benefit can be derived from continuing operations and maintenance of the pipeline system, and during which time it can continue to operate safely and without harm to the environment. The useful life of the pipeline is a combination of the design life, physical life, and economic life.

Design Life

The NNGPL system is designed to withstand arctic operating conditions while protecting the environment by functioning reliably, safely, and with structural integrity. Programs such as the Quality Assurance Program (Appendix H), the Annual Work Plan (Appendix F), and O&M Manual procedures (Appendix G) ensure the viability and functioning of the pipeline systems and gauge the status of the pipeline systems against the original design standards.

Physical Life

Studies of Alaska pipelines have confirmed that age does not increase risk to pipeline integrity. (e.g. *Duration for the Right-of-Way Renewal for the Trans Alaska Pipeline System*). According to a Cook Inlet oil study, the maintenance of a pipeline and how operating conditions compare to design conditions are the determining factors for pipeline integrity.

A pipeline's physical life is dependent on the pipeline system integrity, which is assured by implementing proactive maintenance programs that promote continued safe and environmentally sound transport of natural gas. See the attached O&M Procedures for routine maintenance activities and schedules for the NNGPL.

In addition, the following projects have been performed or are planned for the NNGPL:

- 2007 Nuiqsut Channel Crossing Repair (see as-built in Appendix L)
- 2018 Coating Repairs (see attached report summary in Appendix M)
- 2019 H₂S Scrubber Project (planned)

The NNGPL is reported to be in serviceable condition. The physical life should not limit the useful life.

Economic Life

The economic life of the NNGPL is dependent upon the availability of natural gas from the Alpine field, and the cost ratio of the operation and maintenance of the pipeline versus the cost of obtaining natural gas from another source. The NSB does not foresee a more economic alternative to the NNGPL for the next 20 years.

c. Condition of the ROW

NSB NNGPL monitoring and inspection programs ensure the integrity of the pipeline and the condition of the leasehold. See the attached 2017 Annual Comprehensive Report (Appendix J) for specific examples of inspection and maintenance of the ROW. Also see Section 6 *Environmental Compliance* of this document, for discussion of measures to minimize erosion and contamination. There are no known contaminated sites within the ROW caused by the NNGPL system.

NSB meets the compliance requirements for renewing the ROW lease.

5. LEASE REQUIREMENTS

a. Current Appraisal

Appraisal File No. 18-3235 dated January 10, 2019 and submitted in hard copy to ADNR on February 4, 2019 was approved by ADNR Appraiser on February 5, 2019.

b. Annual Report

Please see the following attachment in Appendix J:

1. NSB Annual Comprehensive Report for 2017. The 2018 Annual Report will be transmitted to SPCS as soon as it is available.

6. MANAGEMENT PROGRAM /COMPLIANCE SYSTEMS AND PROCEDURES

a. Quality Assurance Program

Please see the NSB NNGP Quality Assurance Program in Appendix H.

b. Conduct of Operations: As-built engineering diagram & most recent design criteria

Please see the following attachments:

1. CONFIDENTIAL Appendix N: Aboveground As-built.
 - i. As a ConocoPhillips document, this as-built is confidential and should not be distributed for public review.
2. Appendix O: Belowground As-built
3. Appendix L: Nuiqsut Channel Crossing Repair As-Built
4. Nechelik Bathymetric Survey (attached as Appendix P to accompany the Channel Repair)
5. Appendix M: Coating Repairs Summary

Although the "Coating Repairs Summary" is not an as-built engineering diagram, it is included in this section as a repair. The H₂S Gas Scrubber project has not been included in this lease renewal request, as it is still in the design phase.

The 1998 Nuiqsut Natural Gas Pipeline Design Basis, submitted to SPCS on November 25, 1998, is the most recent design criteria for the pipeline. Once the final design for the H₂S Gas Scrubber has been approved and the facility constructed, as-builts will be submitted to SPCS.

c. Surveillance and Monitoring Program

Although the NSB does not have a stand-alone Surveillance and Monitoring Program, surveillance and monitoring activities are captured in the annual work plans and the O&M Manual (see Appendices F and G).

i. Most recent results of walking-speed survey

Please see the following attachments:

1. Appendix Q: Aboveground Survey, Mar 2018

2. Appendix R: Belowground Survey, Sept 2018
3. Appendix M: Coating Repairs Summary

The most recent atmospheric corrosion data is included in the Coating Repairs Summary. The complete report containing individual site inspections is available by request.

ii. Detection system of corrosion in accordance with 49 CFR 192

Please see the following attachments:

1. Appendix F: Annual Work Plan, 2018
2. Appendix G: O&M Manual, 2018

The Nuiqsut Natural Gas Transmission Pipeline Annual Work Plan is prepared to meet the requirements of ADL 416202 and 49 CFR, Part 192. The plan includes surveillance and monitoring of the pipeline.

The Nuiqsut Gas Transmission Pipeline O&M Manual is intended to provide the information necessary for compliance with 49 CFR Parts 191 and 192. The O&M Manual includes procedures and forms for use during annual work.

d. Environmental Compliance

i. Reports with most recent inspections and maintenance at river and stream crossing inspections:

Please see the following attachments:

1. Appendix Q: Aboveground Survey, Mar 2018
2. Appendix R: Belowground Survey, Sept 2018
3. Appendix F: Annual Work Plan, 2018

The March 2018 Aboveground Survey includes a belowground leakage and surveillance report.

Attachment 8 of the 2018 Annual Work Plan includes a 2013 River Bank Erosion Survey.

ii. A discussion of measures to minimize erosion and sedimentation:

A set of routine operations and maintenance procedures is in place to minimize erosion and sedimentation within the pipeline ROW. Please see the following attachments, which are discussed below.

1. Appendix F: Annual Work Plan, 2018
2. Appendix G: O&M Manual, 2018
3. Appendix J: Annual Comprehensive Report, 2017

Annual Work Plan:

- Attachment 1 contains a list of reportable conditions to be surveyed at a defined frequency, as well as reporting limits and notification requirements for each condition.
 - Page 2 includes Environmental aspects to be monitored, and their reportable conditions.
 - Page 3 includes Nechelik Channel Crossing “reportable conditions”, including Bank Erosion and Fish Reporting requirements.
- Highlighting the importance of erosion minimization, Attachment 8 includes an Erosion Survey comparing readings from 2010 and 2013 at the Nechelik Channel Crossing river bank.

O&M Manual:

Section 3.3 of the O&M Procedures includes a discussion of routine compliance requirements and further “if/then” compliance requirements. Examples of procedures and reporting forms pertaining to the minimization of erosion and sedimentation include:

- Procedures P-192-705 “Right-of-Way Patrol”
- Procedure P-192.711 “Pipeline repair procedures”
- Form F-192.705 “Right-of-Way Inspections
- Form F-192-709 “Leak Investigation/Repair and Exposed Pipe Report

Annual Report 2017:

The Annual Report includes a summary of the state of the leasehold.

- For example, Section 3.0, subsection h, states “No damage to leasehold during the plan year”.
- Page 17, stipulation 2.3 details Erosion and Sedimentation Control lease stipulations and addresses each. For example, “Activities have been conducted along pipeline only when adequate snow cover or with Argo equipped with special tracks that are permitted to travel on the tundra during summer months”.
- Stipulation 2.4 (Fish and Wildlife Protection) includes stream crossing erosion issues. To support fish and wildlife, “erosion control measures have been installed at the channel crossing to encourage vegetation growing on the side slopes to limit erosion into the channel”. During maintenance inspections at the channel, different Argo paths up the river bank are utilized, rather than one path continuously.

e. Geospatial Data

NSB does not currently have geospatial data for the NNGPL.

APPENDICES

- A. Copy of the Letter of Intent to Renew
- B. 2016 Comprehensive Annual Financial Report of the NSB
- C. 2017 Comprehensive Annual Financial Report of the NSB
- D. 2018 Comprehensive Annual Financial Report of the NSB
- E. 2017-2018 NSB Final Budget Document
- F. NSB DPW 2018 Annual Work Plan Nuiqsut Transmission Line
- G. NSB Nuiqsut Gas Transmission Pipeline Operations and Maintenance Manual Rev. 8, 2018
- H. NSB NNGP Quality Assurance Program, 2019
- I. NSB Gas Transmission Pipeline Integrity Management Program, 2018
- J. NSB Annual Comprehensive Report for 2017
- K. 2003 As-built Survey
- L. Nuiqsut Channel Crossing Repair As-Built
- M. NSB CIPM Group NNGPL Coating Repairs Summary and Data List, 2018
- N. CONFIDENTIAL Aboveground As-built
- O. Belowground As-built
- P. Nechelik Bathymetric Survey
- Q. Aboveground Survey, March 2018
- R. Belowground Survey, Sept 2018
- S. Appendix Reference Table