



ILLINOIS COMMERCE COMMISSION

February 20, 2014

Mr. Willard Evans
President
North Shore Gas Company
130 E. Randolph
Chicago, IL, 60601

Re: Notice of Amendments (2014-A001-00003 through 2014-A001-00022)

Dear Mr. Evans:

Representatives of the Illinois Commerce Commission Pipeline Safety Program ("Staff") conducted a review of the North Shore Gas Company ("North Shore Gas") Operations and Maintenance Plan ("O&M") on January 30, 2014, and February 10, 11, and 13, 2014, (Inspection # 2014-P-00026). The audit has established that North Shore Gas' O&M plan is inadequate.

Below is the applicable section of the Code of Federal Regulations ("CFR") and the subsection language applicable to the violation. In some instances, additional sections of the CFR are referenced to clarify the inadequacy identified. Following the CFR or subsection language is a description of each inadequacy.

NOA # 2014-A001-00019

CFR §192.13 titled: "**What general requirements apply to pipelines regulated under this part**" states in paragraph (a), Each operator shall maintain, modify as appropriate, and follow the plans, procedures, and programs that it is required to establish under this part

Documentation could not be provided if the plan allows the use of pre-tested pipe for repairs.

NOA # 2014-A001-00020

CFR §192.605 titled: "**Procedural manual for operations, maintenance, and emergencies**" states in paragraph (a), "Each operator shall include the following in its operating and maintenance plan:

- (a) General. Each operator shall prepare and follow for each pipeline, a manual of written procedures for conducting operations and maintenance activities and for emergency response. For transmission lines, the manual must also

include procedures for handling abnormal operations. This manual must be reviewed and updated by the operator at intervals not exceeding 15 months, but at least one each calendar year. This manual must be prepared before operations of a pipeline system commence. Appropriate parts of the manual must be kept at locations where operations and maintenance activities are conducted.”

With reference to the requirements included in **CFR §192.605** titled: “**Procedural manual for operations, maintenance, and emergencies**” states in paragraph (b), “Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations

(5) Starting up and shutting down any part of the pipeline in a manner designed to assure operation within the MAOP limits prescribed by this part, plus the build-up allowed for operation of pressure-limiting and control devices.”

A procedure could not be located that contains provisions for startup and shutdown of a pipeline to assure operations within MAOP plus allowable buildup.

NOA # 2014-A001-00017

With reference to the requirements included in **CFR §192.609** titled: “**Change in class location: Required study**” states “Whenever an increase in population density indicates a change in class location for a segment of an existing steel pipeline operating at a hoop stress that is more than 40 percent of SMYS, or indicates that the hoop stress corresponding to the established maximum allowable operating pressure for a segment of existing pipeline is not commensurate with the present class location, the operator shall immediately make a study to determine;

- (a) The present class location for the segment involved.
- (b) The design, construction, and testing procedures followed in the original construction, and a comparison of these procedures with those required for the present class location by the applicable provisions of this part.
- (c) The physical condition of the segment to the extent it can be ascertained from available records;
- (d) The operating and maintenance history of the segment;
- (e) The maximum actual operating pressure and the corresponding operating hoop stress, taking pressure gradient into account, for the segment of pipeline involved; and,
- (f) The actual area affected by the population density increase, and physical barriers or other factors which may limit further expansion of the more densely populated area.”

Staff could not identify a procedure for conducting a class location survey when an increase in population density indicates a change in class location.

NOA # 2014-A001-00009

With reference to the requirements included in **CFR §192.619** titled: “**Maximum allowable operating pressure – steel or plastic pipelines**” states in paragraph (a)(1), “No person may operate a segment of steel or plastic pipeline at a pressure that

exceeds a maximum allowable operating pressure determined under paragraph (c) or (d) of this section, or the lowest of the following:

(1) The design pressure of the weakest element in the segment, determined in accordance with subparts C and D of this part. However, for steel pipe in pipelines being converted under §192.14 or uprated under subpart K of this part, if any variable necessary to determine the design pressure under the design formula (§192.105) is unknown, one of the following pressures is to be used as design pressure:

- (i) Eighty percent of the first test pressure that produces yield under section N5 of Appendix N of ASME B31.8 (incorporated by reference, see §192.7), reduced by the appropriate factor in paragraph (a)(2)(ii) of this section; or
- (ii) If the pipe is 12¾ inches (324 mm) or less in outside diameter and is not tested to yield under this paragraph, 200 p.s.i. (1379 kPa) gage.”

Documentation could not be provided for a procedure of how an MAOP is determined by test or design.

NOA # 2014-A001-00022

With reference to the requirements included in **CFR §192.619** titled: “**Maximum allowable operating pressure – steel or plastic pipelines**” states in paragraph (a)(2), “No person may operate a segment of steel or plastic pipeline at a pressure that exceeds a maximum allowable operating pressure determined under paragraph (c) or (d) of this section, or the lowest of the following:

(2) The pressure obtained by dividing the pressure to which the segment was tested after construction as follows:

- (i) For plastic pipe in all locations, the test pressure is divided by a factor of 1.5.
- (ii) For steel pipe operated at 100 p.s.i. (689 kPa) gage or more, the test pressure is divided by a factor determined in accordance with the following table:”

Class location	Segment Installed Before Nov. 12, 1970	Segment Installed After Nov.11, 1970	Segment Converted Under 192.14
1	1.1	1.1	1.25
2	1.25	1.25	1.25
3	1.4	1.5	1.5
4	1.4	1.5	1.5

Documentation could not be provided for a procedure requiring the MAOP to be determined by test pressure divided by applicable factor.

NOA # 2014-A001-00013

With reference to the requirements included in **CFR §192.619** titled: “**Maximum allowable operating pressure – steel or plastic pipelines**” states in paragraph (a)(3), “No person may operate a segment of steel or plastic pipeline at a pressure that

exceeds a maximum allowable operating pressure determined under paragraph (c) or (d) of this section, or the lowest of the following:

(3) The highest actual operating pressure to which the segment was subjected during the 5 years preceding the applicable date in the second column. This pressure restriction applies unless the segment was tested according to the requirements in paragraph (a)(2) of this section after the applicable date in the third column or the segment was updated according to the requirements in subpart K of this part.”

Pipeline segment	Pressure date	Test date
Onshore gathering line that first became subject to this part (other than §192.612) after April 13, 2006.	March 15, 2006, or date line becomes subject to this part, whichever is later.	5 years preceding applicable date in second column
Onshore transmission line that was gathering line not subject to this part before March 15, 2006.		
Offshore gathering lines	July 1, 1976	July 1, 1971
All other pipelines	July 1, 1970	July 1, 1965

Documentation could not be provided for a procedure requiring the MAOP to be determined by the highest operating pressure to which the segment of the line was subjected between July 1, 1965, and July 1, 1970.

NOA # 2014-A001-00015

With reference to the requirements included in **CFR §192.619** titled: “**Maximum allowable operating pressure – steel or plastic pipelines**” states in paragraph (b), “No person may operate a segment to which paragraph (a)(4) of this section is applicable, unless overpressure protective devices are installed on the segment in a manner that will prevent the maximum allowable operating pressure from being exceeded, in accordance with §192.195.”

Staff could not identify a procedure requiring overpressure devices be installed if .619(a)(4) is applicable.

NOA # 2014-A001-00010

With reference to the requirements included in **CFR §192.703** titled: “**General**” states in paragraph (b), “Each segment of pipeline that becomes unsafe must be replaced, repaired, or removed from service.”

A procedure could not be located which requires that each segment of pipeline that becomes unsafe must be replaced, repaired, or removed from service.

NOA # 2014-A001-00006

CFR §192.605 titled: “**Procedural manual for operations, maintenance, and emergencies**” states in paragraph (b), “Each operator shall include the following in its operating and maintenance plan:

(b) Maintenance and normal operations. The manual required by paragraph (a) of this section must include procedures for the following, if applicable, to provide safety during maintenance and operations.

(1) Operating, maintaining, and repairing the pipeline in accordance with each of the requirements of this subpart and Subpart M of this part.

(2) Controlling corrosion in accordance with the operations and maintenance requirements of Subpart I of this part.

(3) Making construction records, maps, and operating history available to appropriate operating personnel.

(4) Gathering of data needed for reporting incidents under Part 191 of this chapter in a timely and effective manner.

(5) Starting up and shutting down any part of the pipeline in a manner designed to assure operation within the MAOP limits prescribed by this part, plus the build-up allowed for operation of pressure-limiting and control devices.

(6) Maintaining compressor stations, including provisions for isolating units or sections of pipe and for purging before returning to service.

(7) Starting, operating and shutting down gas compressor units.

(8) Periodically reviewing the work done by operator personnel to determine the effectiveness and adequacy of the procedures used in normal operation and maintenance and modifying the procedure when deficiencies are found.

(9) Taking adequate precautions in excavated trenches to protect personnel from the hazards of unsafe accumulations of vapor or gas, and making available when needed at the excavation, emergency rescue equipment, including a breathing apparatus and, a rescue harness and line.

(10) Systematic and routine testing and inspection of pipe-type or bottle-type holders including -

(i) Provision for detecting external corrosion before the strength of the container has been impaired;

(ii) Periodic sampling and testing of gas in storage to determine the dew point of vapors contained in the stored gas which, if condensed, might cause internal corrosion or interfere with the safe operation of the storage plant; and,

(iii) Periodic inspection and testing of pressure limiting equipment to determine that it is in safe operating condition and has adequate capacity.

(11) Responding promptly to a report of a gas odor inside or near a building, unless the operator's emergency procedures under §192.615(a)(3) specifically apply to these reports.

(12) Implementing the applicable control room management procedures required by § 192.631”

With reference to the requirements included in **CFR §192.453** titled: “**General**” states, “The corrosion control procedures required by §192.605(b)(2), including those for the design, installation, operation, and maintenance of cathodic protection systems, must be carried out by, or under the direction of, a person qualified in pipeline corrosion control methods.”

Documentation could not be provided that requires the operator's procedure including design, installation, operation and maintenance of cathodic protection systems

must be carried out by, or under the direction of a person qualified in pipeline corrosion control methods.

NOA # 2014-A001-00016

With reference to the requirements included in **CFR §192.455** titled: “**External corrosion control: Buried or submerged pipelines installed after July 31, 1971**” states in paragraph (a), “Except as provided in paragraphs (b), (c), and (f) of this section, each buried or submerged pipeline installed after July 31, 1971, must be protected against external corrosion, including the following:

- (1) It must have an external protective coating meeting the requirements of §192.461.
- (2) It must have a cathodic protection system designed to protect the pipeline in accordance with this subpart, installed and placed in operation within 1 year after completion of construction.”

Staff could not identify in the operator's procedure that requires pipelines installed after July 31, 1971, buried segments must be externally coated and cathodically protected within one year after the completion of construction.

NOA # 2014-A001-00007

With reference to the requirements included in **CFR §192.455** titled: “**External corrosion control: Buried or submerged pipelines installed after July 31, 1971**” states in paragraph (e), “Aluminum may not be installed in a buried or submerged pipeline if that aluminum is exposed to an environment with a natural pH in excess of 8, unless tests or experience indicate its suitability in the particular environment involved.”

Staff could not identify in the operator's procedure where aluminum may not be installed in a buried or submerged pipeline if that aluminum is exposed to an environment with a natural pH in excess of 8.

NOA # 2014-A001-00021

With reference to the requirements included in **CFR §192.457** titled: “**External corrosion control: Buried or submerged pipelines installed before August 1, 1971**” states in paragraph (a), “Except for buried piping at compressor, regulator, and measuring stations, each buried or submerged transmission line installed before August 1, 1971, that has an effective external coating must be cathodically protected along the entire area that is effectively coated, in accordance with this subpart. For the purposes of this subpart, a pipeline does not have an effective external coating if its cathodic protection current requirements are substantially the same as if it were bare. The operator shall make tests to determine the cathodic protection current requirements.”

Documentation could not be provided that requires coated steel transmission pipe installed prior to August 1, 1971, must be cathodically protected.

NOA # 2014-A001-00008

With reference to the requirements included in **CFR §192.475** titled: “**Internal corrosion control: General**” states in paragraph (b)(3), “Whenever any pipe is removed from a pipeline for any reason, the internal surface must be inspected for evidence of corrosion. If internal corrosion is found-
(3) Steps must be taken to minimize the internal corrosion”

Staff could not identify in the operator's procedure the steps that must be taken when internal corrosion is discovered.

NOA # 2014-A001-00014

With reference to the requirements included in **CFR §192.487** titled: “**Remedial measure: Distribution lines other than cast iron or ductile iron lines**” states in paragraph (a), “General corrosion. Except for cast iron or ductile iron pipe, each segment of generally corroded distribution line pipe with a remaining wall thickness less than that required for the MAOP of the pipeline, or a remaining wall thickness less than 30 percent of the nominal wall thickness, must be replaced. However, corroded pipe may be repaired by a method that reliable engineering tests and analyses show can permanently restore the serviceability of the pipe. Corrosion pitting so closely grouped as to affect the overall strength of the pipe is considered general corrosion for the purpose of this paragraph.”

Documentation could not be provided of a procedure to replace or repair distribution pipe if general corrosion has reduced the wall thickness.

NOA # 2014-A001-00012

With reference to the requirements included in **CFR §192.487** titled: “**Remedial measure: Distribution lines other than cast iron or ductile iron lines**” states in paragraph (b), “Localized corrosion pitting. Except for cast iron or ductile iron pipe, each segment of distribution line pipe with localized corrosion pitting to a degree where leakage might result must be replaced or repaired.”

Documentation could not be provided of a procedure to replace or repair distribution pipe if localized corrosion has reduced the wall thickness.

NOA # 2014-A001-00004

With reference to the requirements included in **CFR §192.741** titled: “**Pressure limiting and regulating stations: Telemetering or recording gauges**” states in paragraph (a), “Each distribution system supplied by more than one district pressure regulating station must be equipped with telemetering or recording pressure gauges to indicate the gas pressure in the district.”

Documentation could not be provided that requires the telemetering or recording gauges to be in place to indicate gas pressure in the district that supplies more than one regulating station.

NOA # 2014-A001-00011

With reference to the requirements included in **CFR §192.741** titled: “**Pressure limiting and regulating stations: Telemetry or recording gauges**” states in paragraph (b),

“On distribution systems supplied by a single pressure regulating station, the operator shall determine the necessity of installing telemetry or recording gauges in the district, taking into consideration the number of customers supplied, the operating pressures, the capacity of the installation, and other operating conditions.”

Documentation could not be located of a procedure that requires the operator to determine the necessity of installing telemetry or recording gauges in a distribution system supplied by only one district station.

NOA # 2014-A001-00018

With reference to the requirements included in **CFR §192.741** titled: “**Pressure limiting and regulating stations: Telemetry or recording gauges**” states in paragraph (c), “If there are indications of abnormally high- or low-pressure, the regulator and the auxiliary equipment must be inspected and the necessary measures employed to correct any unsatisfactory operating conditions.”

Documentation could not be provided for a procedure to require the operator to inspect equipment and take corrective measures when there are indications of abnormally high or low pressure.

NOA # 2014-A001-00003

CFR §192.613 titled: “**Continuing Surveillance**” states in paragraph (a), “Each operator shall have a procedure for continuing surveillance of its facilities to determine and take appropriate action concerning changes in class location, failures, leakage history, corrosion, substantial changes in cathodic protection requirements, and other unusual operating and maintenance conditions.”

With reference to the requirements included in **CFR §192.613** titled: “**Continuing Surveillance**” states in paragraph (b) “If a segment of pipeline is determined to be in unsatisfactory condition but no immediate hazard exists, the operator shall initiate a program to recondition or phase out the segment involved, or, if the segment cannot be reconditioned or phased out, reduce the maximum allowable operating pressure in accordance with §192.619 (a) and (b).”

A procedure could not be located which includes requirements for reducing the MAOP or other actions to be taken, if a segment of pipeline is in unsatisfactory condition.

IL ADM. CO.265.100 titled: “**Reporting of Suspected Violations**” states in paragraph (b), “Except for suspected violations that occur within the boundaries of a municipality of at least one million persons that operates its own underground facility notice system, facilities operators shall report suspected violations of the Act in the following circumstances:

- 1) An underground natural gas utility facilities operator shall report suspected violations when any gas main is damaged causing a gas leak;
- 2) An underground telecommunications utility facilities operator shall report suspected violations if the damage causes an outage to a provider of an emergency telephone system (i.e., a 9-1-1 system);
- 3) An underground utility facilities operator shall report a suspected violation if the occurrence results in a fatality or in personal injuries requiring hospitalization.”

NSG Order EOP, Section 5, item 3, states to notify the ICC JULIE Enforcement only on third party damage on transmission pipeline.

This letter serves as notice of inadequate procedures. A written response to this notice is requested by March 24, 2014. If you are contesting this Notice, include a detailed written explanation and any necessary supporting documents with your response.

If you are not contesting this Notice, the written response must acknowledge that amended procedures will be provided to this office by May 21, 2014. Once the inadequacies identified herein have been addressed in your amended procedures, this enforcement action will be closed. Any correspondence must include the Inspection Report Number as well as the corresponding NOA number.

Failure to respond to this Notice and take corrective action will result in the issuance of a Notice of Probable Violation and initiation of a Citation Order that will subject North Shore Gas Company to a penalty assessment as allowed under Section 7 of the Illinois Gas Pipeline Safety Act (220 ILCS 20/7).

Please be advised that pursuant to IL Adm. Code Part 596 of the Commission’s Rules, all information regarding this inspection in possession of the Commission, including communications regarding this inspection will be made available to the public and posted on the Commission’s website. Confidential and/or personal information including, but not limited to social security numbers, drivers license numbers, credit card numbers, debit card numbers, and medical records, etc. should be included in neither inspection documents nor correspondence with the Commission. Any person, as set forth in Section 596.20, who believes that any inspection information is confidential or proprietary shall request that the Commission enter an order to protect the confidential or proprietary information pursuant to 83 Ill. Adm. Code 200.430.

If you have any questions concerning this matter, please contact Steve Canestrini at (217) 299-7810, or I may be contacted at (217) 785-1165.

Sincerely,

A handwritten signature in black ink that reads "Darin R. Burk/mn". The signature is written in a cursive style with a large initial "D" and a trailing "mn" at the end.

Darin R. Burk
Manager- Pipeline Safety

DRB/mn

cc: Jodi Caro, VP Legal Services
Peoples Gas Light and Coke Company
130 E. Randolph Drive
Chicago, Illinois 60601