



U.S. Department
of Transportation

1200 New Jersey Avenue SE
Washington, DC 20590

**Pipeline and Hazardous
Materials Safety
Administration**

Mr. Douglas P. Scott
Chairman, Illinois Commerce Commission
527 East Capitol Avenue
Springfield, IL 62701

Dear Mr. Scott:

Pursuant to 49 U.S.C § 60118(d), the Pipeline and Hazardous Materials Safety Administration (PHMSA) reviewed your interim order of June 22, 2011, notifying us that the Illinois Commerce Commission (Commission) approved, pending PHMSA's acceptance, a state waiver to Nicor Gas Company (Nicor Gas). The waiver grants modification of compliance with certain sections of 49 CFR Part 192 as adopted by Illinois, pursuant to 83 Illinois Administrative Code Section 590.10. The waiver would allow installation and use of composite thermoplastic pipe (Smart Pipe[®]) inside up to four 6-inch diameter 230 psig steel intrastate natural gas distribution pipeline segments that cross underneath the Illinois River. The code sections involved are §§192.53, 192.121, 192.123, and 192.619(a).

Section 192.53(c) requires that materials for pipe must be "Qualified in accordance with the applicable requirements of this Subpart." Composite, reinforced thermoplastic pipe (RTP) is not addressed in Part 192. Therefore permeation rates, torsional fatigue of the wrap, and cyclic fatigue of the composite materials are not addressed. In addition, the design requirements in §192.121 is for plastic material and the §192.123 pressure limitation of 125 psig for plastic pipe is not applicable to Smart Pipe[®]. Similarly, the pressure testing requirements in §192.619(a) were designed for steel and plastic pipe, not composite RTP pipe. Nicor Gas must meet all other applicable parts of 49 CFR Part 192, including Subpart N, Qualification of Pipeline Personnel.

The waiver was initially effective September 8, 2011; however, on September 6, PHMSA requested an extension of time until September 30, 2011 to fully review the state waiver request. PHMSA has completed its technical review of the request and accompanying documents and has no objections to the waiver provided the following additional conditions are met:

- 1) **Design, Class Location, and HCA Design Requirements:** Nicor Gas shall design and operate the *state waiver segments* as follows:
 - a. At or below a MAOP of 230 psig and 120F.
 - b. With a safety design factor (DF) of 0.32 or less.
 - c. The application and follow-up correspondence showed these segments to be in a Class 1 area that would in no way be identified as a high consequence area

(HCA). If any portion(s) of the state waiver segment(s) become a Class 2, 3, or 4 location or HCA, at any time, Nicor Gas shall inform the Commission immediately and conduct a review to determine what, if any, additional measures are needed to provide an equivalent or better level of safety consistent with Part 192 requirements for these areas. If an equivalent or better level of safety cannot be achieved, Nicor Gas shall remove and replace that portion of Smart Pipe[®] with steel line pipe.

2) Material Design and Pre-installation Testing Requirements:

a. Pipe Layers and Design:

- i. Material and Design Requirements must meet the latest requirements provided in Smart Pipe[®] document D120-100/W12-100, REV.1, dated 09-15-2011, "Smart Pipe Design and Materials for Nicor Illinois River Crossing Project". Any changes to these requirements prior to installation must be reviewed by the Commission.
- ii. Prior to construction, a review meeting with personnel from the Commission and PHMSA must take place to confirm the material and design requirements are still the same, or if changes are needed for any reason, that such changes are acceptable and in compliance with all conditions of the waiver.

b. Outdoor Pipe Storage: Any polyethylene (PE) materials used in the state waiver segments shall comply with ASTM D-2513-99 requirements for outdoor storage and ultraviolet radiation exposure.

c. Factory Burst Pressure Testing:

- i. For these segments to be considered as distribution lines meeting the below 20% SMYS criteria and incorporated into Nicor Gas' Distribution Integrity Management Plan, actual factory burst test failure pressures referenced in Exhibit 2 must be at least 5 times the MAOP of the line (i.e. 5 x 230 psig MAOP or equal to or greater than 1150 psig) on sample(s) of dimensions and composition identical to those to be installed for the waiver segments. The burst tests must be conducted for

a duration sufficient for the samples to reach failure or at least one hour, whichever is less. The tests must be performed prior to installation, with records justifying the actual burst pressure values for the samples.

Note the “within +/- 20%” of the design criterion referenced in 5.1 A of Exhibit 2 would not be acceptable if the -20% failure point is a value below the 5x MAOP value.

- ii. If actual burst pressure values do not meet the 5xMAOP criterion, additional design or operation measures must be implemented to meet the criterion, such as modifying the design of the Smart Pipe[®] to withstand a higher burst pressure value, lowering the MAOP, or other measures deemed sufficient by the Commission.
- iii. Nicor Gas shall submit records demonstrating that appropriate test specimens representing all state waiver segments pipe was factory pressure tested. Such records shall be traceable to all line pipe used within the state waiver segments or purchased for subsequent pipe repairs or replacement and shall include: Pressure test reports and all pressure testing parameters (pressure, time, procedure and/or standard number, date, etc. and test acceptance parameters) and pressure testing recorders with current calibration records. Nicor Gas shall also provide a certification from the pipe manufacturer that the tests were completed and that all pipe was visually checked during the pressure tests for leaks. Nicor Gas shall provide all testing procedures and standards to the Commission. Nicor Gas shall submit factory pressure test records to the Commission prior to installation of the state waiver segments.

3) General Construction Requirements:

- a. **Pre-construction Records and Review meeting:** In line with advance notice to the Commission and PHMSA prior to commencement of field activities per Commission order condition (6), Nicor Gas shall submit final manuals and procedures for design, Construction, Operation and Maintenance (O&M), and Emergency Response for review by the Commission and PHMSA at least 30

days prior to operation of the state waiver segment pipeline, unless otherwise indicated in writing by the Commission. A pre-construction review meeting must take place to confirm the final design and construction specifications and procedures are consistent with those subject to the waiver or if any changes are needed, they are mutually agreed upon by all parties.

- b. Construction Approach:** A phased approach shall be implemented for installation of the four (4) line segments. A post-construction review meeting after each mobilization shall take place with the Commission and PHMSA to review any issues that arose which would need to be addressed prior to next line installation. Any changes needed shall be agreed to by the State of Illinois and PHMSA prior to installation in the next segment. An overall construction review meeting must take place after all installations are completed and any issues that came up must be incorporated into a lessons learned document for use by the operator and available for review by any others considering this product.
- c. Branches:** Nicor Gas shall not tap, branch, or split the state waiver segment Smart Pipe[®].
- d. Pipeline weights and negative buoyancy:**

 - i.** The application and follow-up correspondence showed the majority of the installation to be through existing steel pipe that together with the construction through consolidated rock with additional sand cushion and backfilling had no history of buoyancy issues. For any short sections of direct buried Smart Pipe[®], buoyancy must be addressed on a design calculation basis demonstrating the necessity of pipeline weights (or lack thereof). Nicor Gas shall install pipeline weights in an amount and location such that, when combined with backfill material, provide a net negative buoyancy on the pipeline in flood plains based upon 100-year conditions. Alternative methods may also be acceptable if equivalent or better level of safety can be demonstrated.

- 4) Post installation pressure test:** Prior to Nicor Gas putting the pipe in service, the pipe, connections, and appurtenances shall be field pressure tested at 1.5 times the MAOP for a minimum of 24 hours with recording charts (pressure chart, temperature chart, dead weights and log, and calibration records of equipment, calibrated within 30 days of test), the results of which shall be presented to the Commission for review, including determination parameters of an acceptable test. Nicor Gas shall compensate for temperature and elevation variations and such compensation shall be documented on test records. An air/nitrogen test is an acceptable pressure test if hydrotesting is impractical or removal of the test water is harmful to the environment (i.e. can pollute the river).
- 5) Leakage Detection Surveys:** Nicor Gas shall perform leak testing at 1 month, 6 months, and 1 year following operation of the state waiver segments, with re-evaluation of surveys thereafter pending results of first year and timing subject to determination by Commission on acceptable intervals. The maximum leak surveying interval after the first year shall not exceed once every 3 years.
- 6) Tools and Equipment for Repairs:** Nicor Gas shall have tools and fittings in stock for operational maintenance and emergency repairs:
- i.** An inventory of tools and materials shall be indicated in the appropriate maintenance and emergency repairs procedures.
 - ii.** Nicor Gas shall maintain appropriate tools and fittings to repair and replace appurtenances and piping within the state waiver segment.
 - iii.** In the event of an emergency, the line valves on either side of the segment shall be closed isolating the affected state waiver segments.
- 7) Long Term Testing of Material:**
- a. Tests and procedures:** Nicor Gas shall prepare written test procedures and submit them to the Commission before installation of the state waiver segments for the following tests:

1. Nicor Gas shall determine the hydrostatic design basis (HDB) and long term hydrostatic strength (LTHS) information used for the calculation of design parameters in accordance with ASTM D-2992 (2006) “Standard Practice for Obtaining Hydrostatic or Pressure Design Basis for ‘Fiberglass’ (Glass-Fiber-Reinforced Thermosetting-Resin) Pipe and Fittings” Paragraph 14.1 for a representative sized pipe, using the same composition as the pipe used within the state waiver segment.
 2. **Cyclic Fatigue Tests:** The pipe (or representative sample) used in the state waiver segments must be subjected to a 1,000-hour minimum cyclic fatigue test on the pipe (or representative sample). The pipe used for such test must have the same dimensions and composition as the pipe used in the state waiver segments. The purpose of such test is to validate the representative regression curve and to ensure that the actual state waiver segment pipe performs like the representative sized pipe (same composition as the pipe used within the state waiver segment).
 3. The cyclic HDB and LTHS shall be determined through testing of full size pipe (actual dimensions and composition used within state waiver segment) per ASTM D-2992 Procedure A (Long-Term Cyclic) at 140 degrees F minimum.
- ii. **Timing:** If impractical to have these tests conducted prior to installation they can be run concurrently during and following installation, but Nicor Gas shall complete testing and provide a detailed written report of test findings to the Commission no later than five (5) years from the grant of this state waiver. Nicor Gas shall make available interim test results to the Commission as they become available.
- b. **Long Term Design and Integrity Testing of in-situ pipe**
- i. **Design:** In designing the pipeline, Nicor Gas shall consider and have procedures addressing all pipeline risk factors, including, but not limited

to: pressure and temperature cycling, and repairs under a range of ambient conditions; long term performance of composite material and mechanical fittings; cathodic protection of any metallic appurtenances; fiber migration over time; long term failure prediction of line pipe; risk of inter-lamellar or inter-layer intrusion of gas and the possible effect on integrity; and methods for assessment of buried or excavated pipe.

ii. Long Term Integrity Testing: Nicor Gas shall

1. Schedule and perform five (5) inspections during which non-destructive and destructive testing evaluation must be performed on the pipe material after installation. Nondestructive testing shall focus on the composition and degradation of the pipe material and destructive testing shall include a hydrotest to burst pressure. An example of non-destructive method of inspection could include a visual examination of the Smart Pipe[®] and connector ends, in addition to leak surveys. Permanent markings on the connector interface with the Smart Pipe[®] would be periodically re-measured at prescribed intervals. If destructive testing of the actual in-situ state waiver segments is impractical, destructive testing can be performed by other means through representative segments subject to similar operational conditions, such as through installation of a test leg.
2. At a minimum, Nicor Gas shall perform inspections and tests at 1, 2.5, 5, 10, and 20 year intervals after installation.
3. For each destructive testing, remove a minimum ten (10) foot pipe segment for inspection during each inspection.
4. Perform removal, replacement, and installation of pipe and fittings, and other actions related to the removal of test segments, in accordance with the requirements of this state waiver.
5. Nicor Gas shall report the results of the inspections and tests to the State of Illinois within 60 days of completion of testing.

8) Pressure and Temperature Control and Monitoring

- a. **Over-pressure Protection:** Nicor Gas shall install appropriate over-pressure protection equipment necessary to keep the pipeline pressure from exceeding 230 psig at any time.
- b. **Pressure Monitoring:** Nicor Gas shall monitor operating pressures in the state waiver segments continuously or at appropriate intervals determined by the Commission. Monitoring via SCADA at the outlet of its regulating station located approximately 7.5 miles upstream from the state waiver segments is acceptable if pressures in the state waiver segments can be accurately measured. It is acceptable if the current SCADA system provides data by polling the transducers at periodic intervals and a pressure recorder provides for continuous uninterrupted monitoring that together can be used to determine the pressures at any given point. Nicor Gas shall also provide a means to inform operator personnel performing work on the pipeline of the pressure on the line.
- c. **Gas Temperature:** Nicor Gas shall continuously monitor natural gas temperature in order that the pipeline is not exposed to temperatures exceeding 120 degrees F. Monitoring via the same SCADA system that monitor pressures is acceptable. If the Smart line pipe is exposed to temperatures exceeding 120 degrees F, the state waiver segment pipeline shall be shut down and the Commission notified within 24 hours of the detection for their review.

9) Gas Quality:

- a. Nicor Gas shall develop and implement a program to monitor and mitigate the presence of deleterious gas stream constituents, particularly any that may affect the integrity of the Smart Pipe[®] layers.
- b. Nicor Gas shall, at a minimum, address deleterious gas stream constituents as follows:
 - i. Limit carbon dioxide to 3 percent by volume;
 - ii. Allow no free water and otherwise limit water to seven pounds per million cubic feet of gas; and
 - iii. Limit hydrogen sulfide to 1.00 grain per hundred cubic feet (16 ppm) of

gas, where the hydrogen sulfide is greater than 0.5 grain per hundred cubic feet (8 ppm) of gas, the gas stream constituents shall be reviewed with the Commission and Nicor Gas shall develop a gas quality program.

- iv. Review the program at least on a quarterly basis, based on the gas stream constituents, and implement adjustments to monitor for, and mitigate the presence of, deleterious gas stream constituents.
- c. If it is determined that the commodity transported in this pipeline state waiver segment is not compatible with, and proves detrimental to, this pipe material, the Commission reserves the right, as a condition of this waiver, to curtail or discontinue the use of this pipe material.

10) Records and Communication:

- a. **Material Records:** Nicor Gas shall provide records showing manufacturer personnel and a Quality Assurance (QA)/Quality Control (QC) inspector were onsite at all times during installation of all connections, flanges, and the laying of pipe to ensure that proper technical evaluation of installation procedures was conducted.
- b. **Pipe Installation Records:** Nicor Gas shall provide an installation report detailing any Construction or QA/QC issues that arose during installation that may have compromised the integrity of the pipe and how such issues were addressed to maintain integrity.
- c. **Communication:**
 - i. If at any time Nicor Gas becomes aware of a threat to the integrity of the state waiver segment pipe that poses a risk to the public, or a failure risk, Nicor Gas shall notify the Commission immediately. Concurrent with such notification, Nicor Gas shall outline the potential mitigative and integrity measures that could be used to address the threat or risk, including replacement with steel pipe per 49 CFR Part 192.
 - ii. Nicor Gas shall notify the Commission if:

1. Repairs and modifications are required or made to the Smart Pipe[®], including fittings;
 2. The state waiver segment is at any time damaged or hit; or
 3. The pipe or fitting manufacturer modifies or discontinues any items used in the state waiver segment.
- iii. Any failure that occurs must be reported to the Commission and a detailed root cause analysis performed, the results of which must be presented to the Commission and PHMSA for review, and incorporated into updates of lessons learned and best practices documents that are available to future customers or regulatory agencies that may be considering using this product.
- iv. Additional safety requirements may be imposed by the Commission if the Commission determines at any time that alternate safety measures are necessary to insure the safe operation of the state waiver pipe

11) Annual Review with State of Illinois: Nicor shall conduct a one (1) year O&M review with State of IL and annually thereafter, not to exceed 15 months. The review shall be scheduled each calendar year by Nicor Gas with the Commission after pipeline operations (in-service) begin in the state waiver segment.

12) Annual Reporting: Annually following the grant of this state waiver, Nicor Gas shall report the following to the Commission:

- a. The number of new residences, other structures intended for human occupancy, and public gathering areas built within 220 yards of the pipeline centerline and along the state waiver segment.
- b. Any new integrity threats identified during the previous year and the results of any excavations or other integrity assessments performed during the previous year in the state waiver segment.
- c. Any reportable incident, any leak normally indicated on the DOT Annual Report, and all repairs on the pipeline that occurred during the previous year in the state waiver segment.

- d. Any on-going damage prevention initiatives affecting the state waiver segment and a discussion of the success of the initiatives.
- e. Any mergers, acquisitions, transfer of assets, or other events affecting the regulatory responsibility of the company operating the pipeline.

Thank you for your participation in the State waiver review process and follow-up communications with my technical staff. If you wish to discuss this or any other pipeline safety matter related to this request, my staff would be pleased to assist you. Please call John Gale, Director, Standards and Rulemaking Division at 202-366-0434, for regulatory matters or Jeffery Gilliam, Director, Engineering and Research Division at 202-366-0568 for technical matters specific to this request. Understanding that certain modifications to the language of the conditions above may be needed for practical purposes, such modifications may be acceptable if they are determined to still meet the intent of the conditions, provide an equivalent or better level of safety, and are mutually agreed upon by all involved.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Wiese". The signature is fluid and cursive, with a large initial "J" and "W".

Jeffrey D. Wiese
Associate Administrator for Pipeline Safety

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

NORTHERN ILLINOIS GAS COMPANY)	
)	Docket No. 11-0252
Application for Waiver of 49 CFR Sections)	
192.53(c), 192.121, 192.123, and 192.619(a).)	

AMENDED APPLICATION FOR WAIVER

Northern Illinois Gas Company d/b/a Nicor Gas Company (“Nicor Gas”), pursuant to 220 ILCS 20/4, respectfully submits its amended application to the Illinois Commerce Commission for a waiver of 49 CFR Sections 192.53(c), 192.121, 192.123, and 192.619(a), and states as follows:

1. Nicor Gas is an Illinois corporation with its general office located at 1844 Ferry Road, Naperville, Illinois 60563-9600. Nicor Gas is engaged principally in the business of distributing and selling natural gas to customers located primarily in the northern part of the State of Illinois, and is a public utility subject to the jurisdiction of the Illinois Commerce Commission (the “Commission”) under the Illinois Public Utilities Act (220 ILCS 5/1 et seq.) (the “Act”).

2. Nicor Gas is subject to the Illinois Gas Pipeline Safety Act (220 ILCS 20/1 et. seq.) (“Illinois Pipeline Safety Act”). Nicor Gas owns and operates “pipeline facilities” and engages in the “transportation of gas” as such terms are defined in the Illinois Pipeline Safety Act. Furthermore, Nicor Gas is subject to the regulations enacted by the Commission under the Illinois Pipeline Safety Act. 220 ILCS 20/3.

3. Pursuant to Section 20/3 of the Illinois Pipeline Safety Act, the Commission has adopted the standards for pipeline safety set forth in 49 CFR Sections 191.23, 192, 193 and 199 as of January 1, 2009, as its minimum safety standards for the transportation of gas and for gas pipeline facilities. 83 Ill. Admin. Code Section 590.10.

4. Nicor Gas requests a waiver of 49 CFR Sections 192.53(c), 192.121, 192.123, and 192.619(a) to permit the installation and use of a non-metallic, composite, reinforced thermoplastic pipe (“RTP”) manufactured by Smart Pipe® (“Smart Pipe®”) for rehabilitation of up to four 6-inch diameter 230-psig steel intrastate gas distribution pipeline segments that cross underneath the Illinois River approximately one mile southeast of Ottawa, Illinois. Smart Pipe® will be used as a tight-fit liner inserted into and encased within the existing steel pipelines, each with a maximum allowable operating pressure (“MAOP”) of 230-psig. The length of each segment rehabilitated will be approximately 2,700 feet long. Smart Pipe® segments shall be placed between emergency shut down valves and such valves shall be inspected annually in accordance with 49 CFR 192.747. The existing steel pipeline segments will remain in place as insertion sleeves thus providing additional protection against external forces and third-party damage and cathodic protection shall be maintained on the existing steel pipelines. Exhibit 2 referenced below provides details on the pipe pulling operation including tension monitoring and lubrication. The project location encompasses the width of the Illinois River and its banks. The river is subject to heavy barge and recreational traffic. Specifics of the project are discussed in Exhibit 1 referenced below. Nicor Gas shall adhere to the procedures and specifications set forth in this Amended Application for Waiver and Exhibits 1 and 2 referenced below. Operator qualification requirements are applicable to the project and Nicor Gas shall adhere to the requirements described in the section titled “Personnel Considerations” set forth in Exhibit 1 referenced below. Inserting the Smart Pipe® into the existing steel pipelines will improve the

integrity of Nicor Gas' system by eliminating corrosion, reducing environmental impact versus alternative construction methods at the river, and increasing resistance to third-party damage. As discussed in Exhibit 3D referenced below titled "Chemical Resistance", Smart Pipe® material is fully compatible with exposure to a wide range of chemical components which might be encountered in a river crossing environment. Subsequent to installation, the Smart Pipe® segment shall be incorporated into Nicor Gas' Distribution Integrity Management Plan: the plan shall provide ongoing monitoring requirements including leak survey, cathodic protection, and river crossing inspections. Nicor Gas shall provide reasonable advance notice to the ICC Pipeline Safety section and federal Pipeline and Hazardous Materials Safety Administration staff prior to Nicor Gas' commencement of field activities involving the handling and installation of Smart Pipe® to provide an opportunity for such staff to be present.

5. Smart Pipe® utilizes high strength fabric and fibers wound over a thermoplastic (high density polyethylene) core pipe. RTP using fiber reinforcement and/or fabric wrap is quite common in the gas and oil industry and is widely used for high-pressure hoses in many applications, including marine loading lines and fire hoses. Smart Pipe® introduces a new design for a pipeline capable of handling high pressures that is immune to both internal and external corrosion and offers better resistance to third-party damage. Smart Pipe® is designed in accordance with the American Petroleum Institute Recommended Practice 15S "Qualification of Spoolable Composite Pipe" and manufactured in accordance with ISO 9001 standards.

Smart Pipe® offers a number of unique advantages:

- a. eliminates the need for cathodic protection systems, including rectifiers, ground beds, insulation joints, test stations, and anodes;
- b. eliminates the need for internal or external corrosion inspections;
- c. eliminates the need for coating inspection and repair;

- d. eliminates need for welding of pipe, and;
- e. minimizes environmental impacts in comparison to open cut and directional drill construction methods.

Exhibit 2 provides additional information on the design and installation of Smart Pipe®.

6. Nicor Gas notes that the use of non-metallic, plastic pipe in gas pipelines is widespread at distribution pressures up to 125 psig. However, Nicor Gas believes a waiver of 49 CFR Sections 192.53(c), 192.121, 192.123, and 192.619(a) is necessary because composite piping systems, including Smart Pipe®, are not expressly addressed in 49 CFR 192 and because Nicor Gas' requested use of RTP anticipates operation at pressures higher than 125 psig. Nicor Gas notes that 49 CFR 192 does not expressly restrict the use of other qualified materials.

7. 49 CFR 192.53(c) requires that materials for pipe and components must be “[q]ualified in accordance with the applicable requirements of this subpart.” Nicor Gas seeks a waiver of this requirement as composite RTP is not specifically addressed in 49 CFR 192.

8. 49 CFR 192.121 sets forth the design requirements for plastic pipe. Nicor Gas seeks a waiver of this requirement as the design formula set forth in Section 192.121 is for a monolithic plastic and does not address design requirement for composite RTP.

9. 49 CFR 192.123 sets forth the pressure limitations for plastic pipe. Nicor Gas seeks a waiver of this requirement as the pressure limitation of 125 psig for plastic pipe is not applicable to Smart Pipe®.

10. 49 CFR 192.619(a) requires plastic pipe to be pressure tested to 1.5 times desired MAOP. Nicor Gas seeks a waiver of this requirement as the design formula set forth in Section 192.619(a) is for a monolithic plastic and does not address composite RTP. Nicor Gas notes that the pressure test set forth in Section 192.619(a) can easily be achieved by Smart Pipe®. Nicor

Gas will pressure test the Smart Pipe® segments in accordance with 49 CFR Sections 192.507 and 192.619(a)(2)(i).

11. Approval of this Amended Application for Waiver is warranted because the installation and use of Smart Pipe® will improve the integrity of Nicor Gas' system by eliminating corrosion, reducing environmental impact of alternative construction methodologies at the Illinois River, and increase resistance to third-party damage.

12. The below listed Exhibits contain supporting information providing detailed information on the Smart Pipe® technology, design, manufacture, and construction and include information on the quality assurance/quality control (QA/QC) program regarding the performance of Smart Pipe®. The following Exhibits are attached hereto and by this reference made a part of this Amended Application for Waiver:

- a. Exhibit 1 – Description of Scope and Design of Nicor Gas' (Smart Pipe®) Project.
- b. Exhibit 2 – Smart Pipe® materials, design, testing, and installation overview.
- c. Exhibit 3 – Smart Pipe® Company, Inc. supporting information including marketing materials, presentations, and technical papers.

13. Section 4 of the Illinois Gas Pipeline Safety Act provides that "...the Commission may, upon application of any person engaged in the transportation of gas or the operation of pipeline facilities, waive in whole or in part, compliance with any standard established under this Act, if it determines that such a waiver is not inconsistent with gas pipeline safety." 220 ILCS 20/4. This Amended Application for Waiver by Nicor Gas is not inconsistent with gas pipeline safety, and therefore should be approved.

WHEREFORE, for the reasons set forth herein, Nicor Gas respectfully requests that the Commission grant a waiver of 49 CFR Sections 192.53(c), 192.121, 192.123, and 192.619(a) so that Nicor Gas may install and use Smart Pipe® for rehabilitation of up to four 6-inch diameter 230-psig steel intrastate gas distribution pipeline segments that cross underneath the Illinois River approximately one mile southeast of Ottawa, Illinois.

Dated: May 31, 2011

NORTHERN ILLINOIS GAS COMPANY
D/B/A NICOR GAS COMPANY

By: /s/ John E. Rooney

John E. Rooney
Rooney Rippie & Ratnaswamy LLP
350 West Hubbard Street, Suite 430
Chicago, Illinois 60654
(312) 447-2800
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CERTIFICATE OF SERVICE

I, John E. Rooney, hereby certify that I caused a copy of the Amended Application for Waiver to be served electronically upon the service list in Docket No. 11-0252 on May 31, 2011.

/s/ John E. Rooney
John E. Rooney