DIRECT TESTIMONY OF

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SAFETY AND RELIABLITY DIVISION
ILLINOIS COMMERCE COMMISSION

The Southern Company, AGL Resources Inc., and Northern Illinois Gas Company d/b/a Nicor Gas Company

Joint Application for Approval of a Reorganization
Pursuant to Section 7-204 of the Public Utilities Act

Docket No. 15-0558

February 3, 2016

**WITNESS IDENTIFICATION**

**Q. What is your name and business address?**

A. My name is Bryan Pemble. My business address is 527 East Capitol Avenue, Springfield, Illinois.

**Q. By whom are you employed and in what capacity?**

A. I am employed by the Illinois Commerce Commission ("Commission" or "ICC") as a Pipeline Safety Analyst in the Pipeline Safety Program of the Safety and Reliability Division. In my current position, I perform the day-to-day operations of the Pipeline Safety Program ("PSP") which performs audits and inspections in accordance with the Guideline for State Programs issued by the United States Department of Transportation ("USDOT"), Pipeline and Hazardous Material Safety Administration ("PHMSA"). The audits and inspections are conducted to ensure that jurisdictional Illinois natural gas system operators are meeting the minimum federal standards as prescribed by 49 Code of Federal Regulations ("CFR") Sections 191. 192, 193, 199, and by the Illinois Gas Pipeline Safety Act. 220 ILCS 20/1, et seq.

**Q. Please describe your education and experience.**

A Prior to my employment as a Pipeline Safety Analyst, I was a Commission One-Call Enforcement Investigator in the One-Call Enforcement Program of the Safety and Reliability Division. My duties included objective investigations of suspected violations of the Illinois Underground Utility Facilities Damage Prevention Act (220 ILCS 50). The investigations consisted of utilizing data requests, witness

interviews, on-site investigations, and any other resources deemed appropriate for determination of written findings. Prior to my employment with the Commission, I was employed by Northern Illinois Gas Company d/b/a Nicor Gas. My duties with Nicor Gas included, but were not limited to, the investigation of underground utility facility damages by third parties, damage prevention training to Nicor Gas and subcontractor employees, emergency response for uncontrolled release of natural gas, supervising union personnel performing troubleshooting and repair of Nicor Gas' cathodic protection systems, advanced diagnosis of cathodic protection deficient segments of pipe, engineering design of cathodic protection systems, and supervision of Nicor Gas and subcontract personnel performing maintenance on natural gas pipelines.

Since coming to work in the Pipeline Safety Program at the Commission, I have received extensive training at the Transportation Safety Institute ("TSI") in Oklahoma City, which is where state and federal pipeline safety inspectors receive technical education pertaining to the application and enforcement of pipeline safety standards. My training at TSI includes subjects such as: Introduction to Part 192; Pipeline Safety Regulation Application and Compliance; Pipeline Failure Investigation; Pressure Regulation and Overpressure Protection; and other various technical aspects of natural gas pipeline operations. I have worked for the Commission for almost 9 years and have 16 years of experience in the natural gas transportation industry.

**<u>Purpose of Testimony</u>**

**Q. What is the purpose of this proceeding?**

A. On October 8, 2015, The Southern Company ("Southern Company"), AGL Resources Inc. ("AGL Resources"), and Northern Illinois Gas Company d/b/a Nicor Gas Company ("Nicor Gas") (collectively "Joint Applicants") filed an application requesting Commission approval to engage in a reorganization. This reorganization would allow AGL Resources to become a wholly-owned subsidiary of Southern Company. Nicor Gas would continue to operate as an Illinois public utility, with Southern Company as its ultimate parent company.

**Q. What are your duties and responsibilities associated with this docket?**

A. My duties include reviewing the testimony submitted by the Joint Applicants that addresses pipeline safety. Based upon that review, I address whether the proposed reorganization meets the requirements of Section 7-204(b)(5) of the Public Utilities Act ("Act"), which states in part that "the utility will remain subject to all applicable laws, regulations, rules, decisions and policies governing the regulation of Illinois public utilities." 220 ILCS 5/7-204(b)(5). I also address whether any conditions for approval of the reorganization should be imposed by the Commission as permitted by Section 7-204(f) of the Act, with respect to pipeline safety.

**Q. What overall recommendations are you making in this proceeding?**

A. I recommend that the Commission find that the Joint Applicants satisfy the requirements of 7-204(b)(5) of the Act. I also recommend the Commission impose a merger condition related to pipeline safety to provide that Nicor Gas work with Staff regarding the implementation of a Pipeline Safety Management System in

accordance with American Pipeline Institute ("API") Recommended Practice ("RP") 1173.

**Q. Please describe your understanding of the ICC's authority or jurisdiction with respect to pipeline safety.**

A. While I am not an attorney, it is my understanding that, through the enactment of the Natural Gas Pipeline Safety Act ("Federal Act"), enacted as Public Law 90-481, Congress mandated gas pipeline safety regulation by the United States Department of Transportation ("USDOT") in 1968. The Federal Act provided for state pipeline safety regulation in states certified by USDOT. In 1969, the Illinois General Assembly enacted the Illinois Gas Pipeline Safety Act ("Illinois Act"), enacted as Public Act 76-1288. 220 ILCS 20/1 et seq. Subsection 3(a) of the Illinois Act charges the Commission with adopting rules that are at least as inclusive and as stringent as the pipeline safety regulations adopted by the USDOT, and required the Commission to seek federal certification to regulate pipeline safety within Illinois. 220 ILCS 20/3(a). Section 9 of the Illinois Act requires the Commission to prepare and file with the Secretary of Transportation the initial and annual certification and report required by Subsection 5(a) of the Federal Act. 220 ILCS 20/9. Since the 1970s, the Commission has maintained certification under rules codified Part 590 of the Commission's Administrative Rules. 83 Ill. Adm. Code 590.10. Finally, the federal standards codified under 49 CFR Parts 191, 192, 193, and 199 have been adopted by the Commission in Part 590 as required to maintain the Commission's authority for enforcement of the Minimum Federal Safety Standards granted to the Commission under an

agreement to Section 5 of the Federal Act (49 U.S.C.A. § 60105) with the USDOT Office of Pipeline Safety.

**Q. How does the Commission meet the federal certification requirements to regulate pipeline safety within Illinois?**

A. The PSP, within the Safety and Reliability Division, under the Public Utilities Bureau, conducts periodic audits and inspections of intrastate natural gas system operators within Illinois. The audits and inspections are conducted to determine operator compliance with the minimum safety standards adopted by 83 Illinois Administrative Code Part 590. When the Pipeline Safety Inspector findings establish that an operator is in apparent non-compliance with one or more of the standards, a Notice of Probable Violation ("NOPV") is issued to the operator. To resolve an NOPV, the operator is required to explain the action it will initiate to correct the violation as well as actions it intends to take to prevent a reoccurrence of a similar violation of the specific code section. If the operator does not acknowledge the alleged violation, refuses to take the corrective actions, or the actions taken by the operator are not adequate to correct the NOPV, Staff recommends a citation order proceeding be initiated to resolve the issue and in some cases, civil penalties are assessed.

**Q. Please briefly summarize the Joint Applicants' testimony regarding Section 7-204(b)(5) of the Act and pipeline safety in general.**

A. In direct testimony, Henry Linginfelter, Executive Vice President of Distribution Operations for AGL Operations, stated that "Nicor Gas will continue to operate as an Illinois public utility and will remain subject to the Commission's jurisdiction and

applicable Illinois law and regulation." (Joint Applicants' Ex. 2.0, 10.) In addition, Mr. Linginfelter testified that "Nicor Gas will have all of the necessary resources to provide adequate, reliable, efficient, safe, and least-cost service to Nicor Gas' Customers." Id. Mr. Linginfelter further stated that "the Joint Applicants will commit to renew or extend the relevant conditions that are integral to Nicor Gas' operations, such as…a two year extension of the Conditions related to pipeline safety, which were otherwise set to expire in 2016." Id. at 11.

**Q. What are your conclusions regarding the Joint Applicants' pipeline safety proposals if the reorganization is approved?**

A. Aside from the recommendation that Nicor Gas work with PSP Staff to provide more detail regarding when and how Nicor Gas will implement a Pipeline Safety Management System ("PSMS"), I am not aware of any other concerns pertaining to Nicor Gas' pipeline safety program in light of the testimony that the Joint Applicants have committed to a two year extension of the conditions related to pipeline safety, items 2-7, detailed in Joint Applicants Exhibit 1.2.

**Q. Describe the role of the American Pipeline Institute relative to natural gas pipeline safety.**

A. The American Pipeline Institute ("API") is the largest natural gas and oil trade association in the U.S. representing approximately 600 corporations involved in the production, refinement, distribution of oil and natural gas. API functions include the advocacy, negotiation, and lobbying with governmental, legal, and regulatory agencies on behalf of their corporate members. In addition, API conducts or

sponsors research for the development and establishment of natural gas and petroleum operating standards.

**Q. Describe a Pipeline Safety Management System ("PSMS") and the key elements of Recommended Practice ("RP") 1173.**

A. The elements of API RP 1173 are structured to minimize nonconformity with other pipeline safety processes and procedures. While this RP may include some elements of other management systems (such as those particular to environmental management, occupational health, personnel safety management, financial management, or insurance risk management), it does not include all requirements specific to those systems. This RP may be used either in conjunction with or independently of other industry-specified documents. Finally, this RP builds upon and augments existing requirements and is not intended to duplicate requirements of any other consensus standards or regulations.

**Q. Please describe the challenges encountered by pipeline operators that would necessitate a PSMS?**

A. Safe and effective pipeline operation requires awareness and management of many linked activities, yielding complex processes. Examples of such activities include designing, constructing, operating, and maintaining the pipeline. Major accidents with high consequences rarely occur but when they do, the accident occurs because of an alignment of weaknesses or failures across multiple activities. While safety efforts may be applied individually to each activity, more effective safety performance is achieved when viewing the linked activities as processes that are better dealt with holistically.

Managing processes requires different techniques than managing individual activities. Pipeline safety management includes determining needs throughout the pipeline life cycle, provisioning sufficient qualified human and financial resources, identifying the proper sequence of a series of activities, monitoring and measuring the effectiveness of the activities performed, and applying changes to activities as needed.

**Q. Please explain the benefits of implementing a PSMS?**

A. Adopting and implementing a PSMS will strengthen the safety culture of an organization. Leaders, managers, and employees acting to make safety performance and risk reduction decisions over time will improve pipeline safety. Managing the safety of a complex process, as well as simpler systems, requires coordinated actions to address multiple dynamic activities and circumstances. Pursuing the industry-wide goal of zero incidents requires comprehensive, systematic effort. Some efforts within a safety management system are directed to a specific need or activity. For example, non-punitive reporting of near misses is one element that can be used to identify potential risks and initiate proactive measures. Though process related incidents are relatively infrequent, they can lead to serious consequences. The elements of a safety management system address ways to continually operate and improve safety performance.

**Q. Please explain how a PSMS can improve safety and reduce risk?**

A. Effective risk reduction can be achieved through communication between various departments and thereby assists in identifying potential and interactive threats. Indirect broader efforts include

a. Demonstrating management commitment;

b. Structuring pipeline safety risk-management decisions;

c. Increasing confidence in risk prevention and mitigation;

d. Providing a platform for sharing knowledge and lessons learned; and

e. Promoting a safety-orientated culture.

Building on these efforts yields the following principles on which to base a safety management system:

a. Commitment, leadership, and oversight from top management are vital to the overall success of a PSMS.

b. A safety-oriented culture is essential to enable to the effective implementation and continuous improvement of safety management system processes and procedures.

c. Risk management is an integral part of design, construction, maintenance, and operation of a pipeline.

d. Pipelines are designed, constructed, operated, and maintained in a manner that complies with Federal, state, and local regulations, and conforms to applicable industry codes and consensus standards with the goal of reducing risk, preventing releases, and minimizing the occurrence of abnormal operations.

e. Defined operational controls are essential to the safe operation and maintenance of pipelines.

f. Incident response improves the likelihood of protection of life and property and minimizes adverse environmental consequences.

g. The creation of a learning environment for continuous improvement is achieved by investigating incidents thoroughly, fostering non-punitive reporting systems, and communicating lessons learned.

h. Periodic assessment of risk management effectiveness and pipeline safety performance improvement, as well as audits, is essential to ensure effective PSMS performance.

i. Pipeline operating personnel throughout the organization must effectively communicate and collaborate with one another. Further, communicating with service providers to share information that supports decision making and completing planned tasks (processes and procedures) is essential.

**Q. Does Nicor Gas currently have a PSMS?**

A. No. In response to Staff Data Request ("DR") PSP 1.01 that asked if Nicor Gas has a PSMS or equivalent program, the Joint Applicant's responded:

> No. The Joint Applicants note that gas utilities are not required to meet the recommendations of the American Pipeline Institute's ("API") Recommended Practice 1173 ("RP"). Nonetheless, the Joint Applicants recognize that there are benefits associated with development and implementation of a Pipeline Safety Management System ("PSMS") or equivalent program. To that end, Nicor Gas and AGL Resources personnel actively participated in PHMSA/Industry workshops and teams through the development and publication of the API RP 1173 recommended practice.
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> The Joint Applicants further note that AGL Resources has already committed to and is pursuing the development of a PSMA pilot program at an AGL Resources utility. Virginia Natural Gas ("VNG") was selected for the pilot program because the Pipeline Safety Director for the Virginia Commission was a leader on the team that developed API RP 1173. AGL Resources personnel will use the lessons learned from the VGN pilot program to gain a better understanding in regards to the application, development and implementation of PSMS programs for future use at Nicor Gas and all other AGL Resources utility subsidiaries.
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> The Joint Applicants believe that gaining such experience through a pilot program is critical. The development and implementation of a program of this scope and scale will be extremely complex for a gas utility of the size of Nicor Gas. Thus, in order to prudently deploy the resources necessary to implement an enterprise-wide PSMS or similar program cost-effectively, the Joint Applicants will take the lessoned learned from the VGN pilot program – as was well as the experiences gained from other utility best practices – to develop a program best suited to meet the needs of Nicor Gas and its customers. (JA Resp. to Staff DR PSP 1.01.)

**Q. Why do you recommend that Nicor Gas implement a Pipeline Safety Management System?**

A. A PSMS would improve Nicor Gas' internal lines of communication and would require all facets of their organization to have better understanding of their roles and what is required of them to reduce the level of risk in their organization to as

low as reasonably practicable for the safe operation and maintenance of their pipelines. The PSMS would allow Nicor Gas to examine safety as an integrated system, across the boundaries of their business functions.

**Q. Please address the Joint Applicants' Response to Staff Data Request PSP 1.01.**

A. The Joint Applicant indicated that AGL Resources is in the process of developing a PSMS through a pilot program at Virginia Natural Gas ("VNG") and has indicated the lessons learned from the pilot program in Virginia will be utilized to develop a program at Nicor Gas. However, it is not clear from the response if Nicor Gas will proceed to the initiation of a PSMS in the future and there is no commitment on how quickly Nicor Gas would initiate the implementation of a PSMS.

While Staff commends the Joint Applicants for recognizing the value of a PSMS and implementing a pilot program at VNG, VNG is less than one-seventh the size of Nicor Gas. The development of a PSMS is a complex process that takes a comprehensive review of the processes and procedures of the individual pipeline operator. What performs well at one pipeline operator may not necessarily have the desired affect at a different pipeline operator. A PSMS should be customized to the organization structure, policies and procedures, and operating environment of Nicor Gas. Accidents are often due to the unique aspects of the operating environment of the individual pipeline operator and the causal factors of some of these incidents are not common to every pipeline operator. The factors must be found and addressed with methods sensitive to the nuances of the individual operator's situation.

**Q. Has the ICC ever required an operator to implement a PSMS?**

A. Yes. In Docket No. 14-0496, as a condition for the approval of the reorganization of Wisconsin Energy Corporation, Integrys Energy Group, Inc. People's Energy, LLC, The Peoples Gas and Light and Coke Company ("PGL"), North Shore Gas Company, ATC Management, Inc., and American Transmission Company, LLC, the Commission ordered PGL to work with Staff to develop a PSMS and present a draft PSMS to the Commission within two years of the close of the reorganization.

**Q. Are you aware of any examples of Safety Management Systems in other industries?**

A. Yes. Safety Management Systems ("SMS") have been successfully introduced in several different industries including petrochemical, civil aviation, maritime industry, railway industry, and occupational safety and health organizations. The Federal Aviation Administration has concluded that SMS is an effective approach that can deliver real safety benefits. The benefits materialize as organizations evolve from a reactive to proactive to predictive entities.

**Q. Has Staff had any recent pipeline safety issues with Nicor Gas that a PSMS may have alleviated?**

A. Yes. Nicor Gas was the subject of several recent NOPVs (2014-V001-00055, 2015-V001-00034, and 2015-V002-00034) that can be attributed to a breakdown in communication between separate departments. As both interdepartmental and external communication with contractors is an essential element of a PSMS, developing a PSMS may allow for Nicor Gas to avert a recurrence of this type of

failure. In addition, the PSMS would encourage Nicor Gas to perform a systemic review and evaluation of the deficient processes for lessons learned to be shared and integrated among all the appropriate operator and contractor processes.

**Summary**

**Q. Please summarize your testimony.**

A. First, I conclude that the proposed reorganization meets the requirements of 7-204(b)(5). Second, I recommend the Commission order Nicor Gas to comply with the following merger condition:

> Nicor Gas will work with Pipeline Safety Program Staff to provide more detail regarding when and how Nicor Gas will implement a Pipeline Safety Management System, in line with American Petroleum Institute Recommended Practice 1173, in order to improve Nicor Gas' ability to recognize and react to the requirements of 49 CFR 192 and move beyond minimum efforts to simply achieve compliance towards a true safety culture.

Finally, I recommend the Commission order Nicor Gas to commit to a two year extension of the conditions related to pipeline safety, items 2-7, detailed in Joint Applicants Exhibit 1.2.

Q. **Does this conclude your direct testimony?**

A. Yes.