APPENDIX A – AGA Membership Survey

Survey Purpose: The purpose of this survey is to understand industry present and future actions of InLine Inspection tool usage. The NTSB recommended that a strategy be developed and implemented for increasing the use of ILI tools as appropriate, with an emphasis on intrastate pipelines. The intent is to understand how our members are moving forward with this recommendation.

Questions:

- What is your company’s total intrastate transmission mileage?
- List the intrastate percent of mileage by state.
- In the next 10 years is your company more likely to retrofit existing lines to accommodate for ILI usage or replace pipeline for ILI usage? If your company plans 90% or more of retrofit, input RETROFIT. If your company plans 90% or more of replacement, input REPLACEMENT. If there is a mix of both RETRO and REPLACE, input BOTH. If there are no plans within the next 10 years to allow for ILI usage on pipe that currently cannot be InLine inspected, input N/A.
- What is your company’s plans to retrofit or replace existing transmission lines in the next 10 years? Estimate the percentage of pipe that your company is planning to RETROFIT or REPLACE in the next 10 years.
- For identified non-piggable segments, what percentage of mileage is associated with one of the following dominate obstacles? Associate mileage percentage that cannot be inline inspected due to common ILI obstacles:
  - Navigation Elevation
  - Navigation-Curves & Bends
  - Navigation-Interconnections Between Varying Mains
  - Motive Power – Current gas flows inhibit ILI
  - Access – Unable to Insert and Receive an ILI Tool
  - Other
- Does your company participate in industry forums and/or training promoting integrity management processes? Forums can include AGA, INGAA, B31.8S, etc. (Yes or No)
- Have industry forums triggered or focused more emphasis in using ILI tools in your company's pipeline?
- Has your company participated in AGA's Transmission Integrity Workshops? If yes, input how many times and if no, input no.
- Regarding industry sharing and knowledge with the intent to increase ILI usage, is there a forum or event that AGA could provide to help your company become more prepared in using ILI technology? If yes, explain.
IN THIS ISSUE:

- Rate & Regulatory Update
- 2016 Events

Rate & Regulatory Updates

Commission Changes & Updates

**AR: Commissioner Resigns**
On November 18, Arkansas Public Service Commission Commissioner Lamar B. Davis submitted his letter of resignation to Governor Asa Hutchinson (R), effective November 25, 2016. Davis, who was initially appointed to the PSC by Governor Mike Beebe, resigned to take a position in the private sector.

**CO: PUC Chair Announces Resignation**
On December 6, Colorado Public Utilities Commission Chairman Joshua Epel (D) announced that he will resign from the PUC effective January 1, 2017.

**GA: PSC Elects New Chairman**
On November 17, Stan Wise (R) was elected Chairman of the Georgia Public Service Commission for a two-year term commencing on January 1, 2017.

**IN: IURC Chair to Retire**
On December 1, Carol Stephan (R), Chairwoman of the Indiana Utility Regulatory Commission, informed Governor Mike Pence (R) of her intent to retire on January 1, 2017.
OH: Commissioner Announces Resignation
On December 2, Commissioner M. Howard Petricoff (D) announced his resignation from the Public Utilities Commission of Ohio (PUCO), effective December 31. Petricoff was appointed to the PUC by Gov. John Kasich (R) on June 23 and had been serving a term that extends to April 10, 2020, pending Senate confirmation.

Petricoff's decision to resign follows the Senate Public Utilities Committee's vote to recommend that the full Senate reject his appointment to the PUC. Legislators expressed concern that his previous experience as an energy industry attorney presented conflicts of interest that would have required him to recuse himself from many proceedings before the commission.

Rate & Regulatory Updates

AZ: Staff Recommends Rate Increase for Southwest Gas
On November 30, the Arizona Corporation Commission (ACC) staff filed testimony in Southwest Gas' pending rate case. Staff recommended that the company be authorized a $11.3 million rate increase premised upon a 9.25% return on equity. The company had requested a $31.9 million base rate increase premised upon a 10.25% return on equity. Southwest cited increased operating expenses and capital investments incurred since its last rate case as necessitating the request. The company is also seeking to implement a property-tax true-up mechanism as part of the filing, which ACC staff has opposed. A final ACC decision is expected in May 2017.

KS: KCC Adopts Settlement in Kansas Gas Service Rate Case
On November 29, the Kansas Corporation Commission (KCC) adopted a settlement authorizing Kansas Gas Service (KGS) a $15.5 million gas distribution base rate increase. The net ratepayer impact of the approved increase is $8 million, reflecting the transfer to base rates of $7.5 million that was being collected through the gas system reliability surcharge. The new rates are to take effect on January 1, 2017.

The approved settlement is silent with respect to traditional rate case parameters, but specifies that the company should use a 9.74% carrying charge that is gross of tax in calculating prospective rate adjustments under the GSRS rider.

KY: Louisville Gas & Electric Files Rate Case
On November 23, Louisville Gas and Electric (LGE) filed a rate case with the Kentucky Public Service Commission (PSC) for a $13.8 million gas rate increase premised upon a 10.23% return on equity and a test year ending on June 30, 2018. The company cited infrastructure investments and a relatively flat sales growth environment as the primary drivers of the request.

MI: PSC Staff to Develop Cybersecurity Rules
On November 22, the Michigan Public Service Commission directed its staff to develop rules concerning annual cybersecurity reporting to strengthen utility programs to protect against unwanted cyber intrusions on system operations and records.

The rules crafted by the MPSC staff will include an annual report that consists of an overview of the electric or gas provider's cybersecurity program; a list of the company's cybersecurity departments, staffing numbers position descriptions and the names of key contacts; a description of any cybersecurity training and exercises undergone by employees; an explanation of any cybersecurity investment made and the rationale for such investment; a discussion of the tools and methods used to conduct risk and vulnerability assessments; and a summary of cybersecurity incidents that resulted in a loss of service, financial harm, or a breach of sensitive business or customer information.
TX: RRC Approves Rate Increase for Texas Gas
On November 15, the Railroad Commission of Texas (RRC) issued an order adopting a settlement which authorized a $6.8 million rate increase for Texas Gas Service (TGS) for the company's newly-formed Central Texas Consolidated service area. The agreement and order also allow TGS to combine its Central Texas and South Texas service areas, and to implement a uniform rate structure within the newly-formed consolidated territory. The authorized increase is effective retroactive to November 1, 2016. Additionally, the settlement and RRC order specify that a 9.5% ROE is to be used for a host of regulatory purposes, including rate adjustments implemented under the company's gas infrastructure improvement plan (GRIP) mechanism.

VA: SCC Staff Recommends Rate Increase for Columbia Gas of Virginia
On November 18, the Virginia State Corporation Commission (SCC) staff filed testimony in Columbia Gas of Virginia's (CGV) base rate proceeding. SCC Staff recommended a $25.5 million base rate increase premised upon a 9.3% return on equity. The company had requested a $37 million rate increase premised upon an 11.25% return on equity.

CGV cited infrastructure investments and costs associated with the safety and reliability of its distribution system, as well as the need to accommodate increasing demand for service, as reasons for filing its initial request. A final order is expected by March 3, 2017.

WI: PSC Approves Gas Rate Increase for Madison Gas and Electric
On November 9, the Public Service Commission of Wisconsin voted on the issues in Madison Gas and Electric's (MGE) base rate case and authorized the company a $3.1 million gas rate increase premised upon a 9.8% return on equity and a calendar-2017 test year. The new rates are expected to be effective on January 1, 2017, and a written PSC order is in the coming weeks.

WI: PSC Approves Gas Rate Increase for Wisconsin Power and Light
On November 18, the Public Service Commission of Wisconsin voted on the issues in the Wisconsin Power and Light's (WPL) base rate case and authorized the company a $9.4 million two step gas rate increase premised upon a 10% return on equity and a calendar-2017 test year. Under the approved plan, a $9.2 million increase is to become effective January 1, 2017, and an additional $0.2 million increase would become effective January 1, 2018. A written PSC order is expected in the coming weeks.

WV: Commission Approves Mountaineer IREP Plan
On November 17, the Public Service Commission of West Virginia (PSC) adopted a joint stipulation approving Mountaineer Gas Company's 2017 Infrastructure Replacement and Expansion Program (IREP). The PSC order includes a $1.35 million revenue increase for 2017.

Spurred by 2015 state legislation that authorized the PSC to accelerate cost recovery for gas utility pipeline infrastructure, Mountaineer Gas will be able to recover additional expenses related to system growth and upgrades in 2017. The legislation was intended to address both safety concerns and a growing interest in expanding the state's gas infrastructure.

Additionally, the PSC approved the construction of a 24-mile distribution trunk line between Morgan County and Martinsburg as an eligible project under the IREP. That segment is expected to cost $30 million and is slated for construction in 2018. The company will still need to consult with federal and state agencies with jurisdiction over the pipe placement.

2016 Events
December 2016
NCSL Capitol Forum
December 6-9 | Washington, DC

CSG National Conference
December 8-11 | Williamsburg, VA

NCSL Symposium for Legislative Leaders
December 14-16 | St. Thomas, US Virgin Islands
This workshop will feature presentations and case studies from pipeline operators, regulators and service providers. Presentations will focus on areas where transmission pipeline operators are going beyond current regulations in light of existing proposed federal rulemakings. Regulators, pipeline operators, and service providers are all invited to participate in this forum.

Presentations and discussions will focus on key issues such as:
- MAOP Validation through Material Strength Verification
- Modernization of GIS & the National Pipeline Mapping System
- The evolution of TIMP Risk Models
- Operator Lessons Learned on Transmission Pipelines

**Wednesday, March 18, 2015**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:15</td>
<td><strong>Event Registration and Continental Breakfast</strong></td>
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<tr>
<td>8:00</td>
<td><strong>Welcome &amp; Opening Remarks – Erin Kurilla, AGA</strong></td>
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<tr>
<td>8:15</td>
<td><strong>NTSB Transmission Integrity Management Safety Study</strong></td>
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<tr>
<td>9:00</td>
<td><strong>Panel Discussion: Material Strength Verification</strong></td>
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<tr>
<td>10:30</td>
<td><strong>Break</strong></td>
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**Panelists:**
1. Steve Nanney, PHMSA
2. Bill Amend, DNV-GL
3. Lloyd Pirtle, TD Williamson
APPENDIX C – AGA Transmission Workshop

10:45 am  Panel Discussion: Evolution of TIMP Risk Models

- The panel will discuss the need for robust Transmission Integrity Management Program Risk Models. The panel will address the increasing attention on interacting and potential threats to pipelines systems.

Panelists:
1. Steve Nanney, PHMSA
2. Dave Merte, NYSEARCH
3. Keith Vanderlee, AGL Resources

12:00 pm  Lunch – Gallery 2

1:00 pm  Panel Discussion: Modernizing GIS

- In order for operators to appropriate implement robust risk management programs, a high level of data quality and integration must be achieved. The panel will discuss the continuous need for advanced data integration systems and GIS.

Panelists:
1. Tom Coolidge, ESRI
2. Charles Jansen, Southern California Gas Company
3. Steve Nanney, PHMSA

2:15 pm  Panel Discussion: Pipeline Seam Threats (ERW Pipe)

- Due to advances in inspection techniques and technologies operators are able to more readily address seam threats, especially those found in ERW pipe. The panel will discuss the need for this threat identification and the lessons learned from operators that have found them.

Panelists:
1. Paul Wolven, Consumers Energy
2. Steve Nanney, PHMSA
3. Jeffery Harris, ROSEN

3:30 pm  Afternoon Break

3:45 pm  Open Discussion Roundtable – moderated by AGA staff

4:45 pm  Adjourn

5:15-6:15 pm  Reception – all are invited
APPENDIX C – AGA Transmission Workshop

Thursday, March 19, 2015

7:30 am  Continental Breakfast

8:00 am  Welcome to Day 2 – Erin Kurilla, AGA

8:15 am  Getting Ahead of Regulations: Installation of Automated Valves in HCAs
– Carol Zadra, Dominion East Ohio
DEO recently completed an evaluation of HCAs, and have a documented process that looks at any HCAs that qualify as hard to evacuate. DEO evaluated many different factors for a risk ranking of those HCAs, and are currently designing the installation of several valves in 2016. DEO plans to continue installing valves in the upcoming years as budgets allow and will evaluate their effectiveness and use over time.

9:00 am  Lessons Learned: TransCanada’s January 2014 Outage Experience
– Daron Moore, TransCanada
In October 2014 TransCanada experienced a pipeline rupture directly affecting 9 communities and over 4,000 customers during temperatures approaching -30⁰F. The presentation will discuss lessons learned from a design, construction, and operational perspective, as well as the TransCanda’s incident response. Interacting threats will be emphasized throughout the presentation.

9:45 am  Break

10:00 am  Lessons Learned: Robotic Pigging Seven Miles of Coupled Transmission Pipeline
– Kyle Woodley, CenterPoint Energy
This presentation will detail CenterPoint Energy’s experience when assessing seven miles of coupled transmission pipeline using a robotic ILI tool. The presentation will feature findings from the assessment as well as valuable lessons learned from the deployment of the tool and post inspection of the pipeline.

10:45 am  Transmission Pipeline Integrity Replacement Projects
– Mara Sikora, Piedmont Natural Gas
Piedmont will discuss their plans for the replacement of a 60-year-old grandfathered transmission pipeline.

11:30 am  Open Roundtable Discussion
AGA Full Members Only

12:00 pm  Adjourn
2015 IN-LINE INSPECTION WORKSHOP

Agenda

The Westin Oaks Houston at the Galleria
Houston, TX
September 2, 2015

Wednesday, September 2\textsuperscript{nd}, 2015
7:00 a.m. - 7:50 a.m.  \textbf{CONTINENTAL BREAKFAST}

8:00 a.m.  \textbf{WELCOMING REMARKS & WORKSHOP GOALS}
RICH HOFFMANN, EXECUTIVE DIRECTOR, INGAA FOUNDATION
MARK HERETH, BLACKSMITH/P-Pic

8:20 a.m. - 9:20 a.m.  \textbf{IDENTIFYING AND DEMONSTRATING MATERIAL STRENGTH}
\textbf{Panel Moderator:} WENDY WAGSTER, INGAA
\textbf{Panelists:} DAVID COOMES, SOUTHERN STAR
Evan white, WILLIAMS
CHUCK HARRIS, TDWILLIAMSON

9:25 a.m. - 9:45 a.m.  \textbf{BREAK}

9:45 a.m. - 11:45 a.m.  \textbf{IDENTIFYING AND CHARACTERIZING CRACKS IN NAT GAS PIPES}
\textbf{Panel Moderator:} MARK HERETH, BLACKSMITH/P-Pic
\textbf{Panelists:} TIM CLARKE, BOARDWALK
RICHARD KANIA, TRANS CANADA
DAN CASTRO, WILLIAMS COMPANIES
THOMAS BEUKER, ROSEN

12:00 p.m. - 1:00 p.m.  \textbf{LUNCH}

1:00 p.m. - 2:00 p.m.  \textbf{DATA INTEGRATION, RISK ASSESSMENT AND RISK MODELS}
\textbf{Panel Moderator:} WENDY WAGSTER, INGAA
\textbf{Panelists:} DARRAL WARD, BOARDWALK
SHAHANI KARIYAWASAM, TRANS CANADA
ED WIEGEL, WILLBROS

2:00 p.m. - 2:20 p.m.  \textbf{BREAK}

2:20 p.m. - 3:20 p.m.  \textbf{METHANE CONTROL AND MITIGATION, REPAIR TECHNIQUES}
\textbf{Panel Moderator:} TERRY BOSS, INGAA
\textbf{Panelists:} SCOTT FANNIN, PGE
CHRIS WHITNEY, KINDER MORGAN
SHAWN LAUGHLIN, CLOCK SPRING