Statement of Qualifications

I graduated from the University of Arkansas with a bachelor's degree in civil engineering and am a licensed Professional Engineer in the state of Arkansas. I have nearly 13 years of experience in engineering and operations roles within multiple natural gas utility companies. Prior to joining Black Hills, beginning in 2012, I held several roles of increasing responsibility with CenterPoint Energy and transitioned to a successor company, Summit Utilities. My responsibilities included distribution and transmission pipeline design and project management, leadership of the Arkansas and Oklahoma technical field operations team, capital budget management, and support of various capital rider and rate filings. I joined Black Hills in 2022 as Manager of Utility Construction Planning within the Arkansas Operations team and in 2024 was promoted to of Manager of Standards, Materials, and DIMP. In March 2025, I assumed my current position as Manager of Asset Risk.

AGA's Commitment to Enhancing Safety

AGA and its members are dedicated to the continued enhancement of pipeline safety. As such, we are committed to proactively collaborating with public officials, emergency responders, excavators, consumers, safety advocates and members of the public to continue to improve the industry's longstanding record of providing natural gas service safely and effectively to 177 million Americans. AGA and its members support the development of reasonable regulations to implement new federal legislation as well as the National Transportation Safety Board safety recommendations.

Below are voluntary actions that are being addressed by AGA or individual operators to help ensure the safe and reliable operation of the nation's 2.4 million miles of pipeline which span all 50 states representing diverse regions and operating conditions. In addressing these actions, AGA and its individual operators recognize the significant role that their state regulators or governing body will play in supporting and funding these actions.

It is the consensus of AGA members that the actions listed below enhance safety and gas utility operations when implemented as an integral part of each operator's system specific safety actions. However, both the need to implement and the timing of any implementation of these actions will vary with each operator. Each operator serves a unique and defined geographic area and their system infrastructures vary widely based on a multitude of factors, including facility condition, past engineering practices and materials. Each operator will need to evaluate the actions in light of system variables, the operator's independent integrity assessment, risk analysis and mitigation strategy and what has been deemed reasonable and prudent by their state regulators. It is recognized that not all of these recommendations will be applicable to all operators due to the unique set of circumstances that are attendant to their specific systems.

Building Pipelines for Safety

Construction

- Expand requirements of the Operator Qualification (OQ) rule to include new construction of distribution and transmission pipelines.
- Review established oversight procedures associated with pipeline construction to ensure adequacy and confirm that operator construction practices and procedures are followed.

Emergency Shutoff Valves

- Support the use of a risk based approach to the installation of automatic and/or remote control sectionalizing block valves where economically, technically and operationally feasible on transmission lines that are being newly constructed or entirely replaced. Develop guidelines for consideration of the use of automatic and/or remote control sectionalizing block valves on transmission lines that are already in service. Work collaboratively with appropriate regulatory agencies and policy makers to develop these criteria.
- Expand the use of excess flow valves to new and fully replaced branch services, small multi-family facilities, and small commercial facilities where economically, technically and operationally feasible.

Operating Pipelines Safely

Integrity Management

- Continue to advance integrity management programs and principles to mitigate system specific risks. This includes operational activities as well as the repair, replacement or rehabilitation of pipelines and associated facilities where it will most improve safety and reliability.
- Collaborate with stakeholders to develop and promote effective cost-recovery mechanisms to support pipeline assessment, repair, rehabilitation, and replacement programs.
- Develop industry guidelines for data management to advance data quality and knowledge related to pipeline integrity.
- Support development of processes and guidelines that enable the tracking and traceability of new pipeline components.

Excavation Damage Prevention

- Support strong enforcement of the 811 – Call Before You Dig program through state damage prevention laws.
- Improve the level of engagement between the operator and excavators working in the immediate vicinity of the operator's pipelines.

Enhancing Pipeline Safety

Safety Knowledge Sharing

- Review programs currently utilized for the sharing of safety information. Identify and implement models that will enhance safety knowledge exchange among operators, contractors, government and the public.

Stakeholder Engagement and Emergency Response

- Evaluate methods to more effectively communicate with public officials, excavators, consumers, safety advocates and members of the public about the presence of pipelines. Implement tested and proven communication methods to enhance those communications.
- Partner with emergency responders to share appropriate information and improve emergency response coordination.

Pipeline Planning Engagement

- Work with a coalition of Pipelines and Informed Planning Alliance (PIPA) Guidance stakeholders to increase awareness of risk based land use options and adopt existing PIPA recommended best practices.

Advancing Technology Development

- Increase investment, continue participation, and support research, development and deployment of technologies to improve safety. Evaluate and appropriately implement new technological advances.

Gas Utility Industry Actions To Be Implemented	Target Dates *
Confirm the established MAOP of transmission pipelines ***Note:*** Confirmation of established MAOP utilizes the guidance document developed by AGA, "*Industry Guidance on Records Review for Re-affirming Transmission Pipeline MAOPs,"* October 2011.	On an aggregate basis of AGA member companies, complete > 50% of class 3 & 4 locations + class 1&2 HCAs: 7/3/12 Remaining class 3&4 + 1&2 HCAs, based on PHMSA guidance: 7/3/13 Remaining class 1&2 by 7/3/15
Review and revise as necessary established construction procedures to provide for appropriate (risk-based) oversight of contractor installed pipeline facilities.	Trans: 12/31/12 Dist: 12/31/13
Under DIMP, evaluate risk associated with trenchless pipeline techniques and implement initiatives to mitigate risks	12/31/12
Under DIMP, identify distribution assets where increased leak surveys may be appropriate	12/31/12
Integrate applicable provisions of AGA's emergency response white paper and checklist into emergency response procedures	12/31/12
Extend Operator Qualification program to include tasks related to new main & service line construction	6/30/13
Expand EFV installation beyond single family residential homes	6/30/13
Incorporate an Incident Command System (ICS) type of structure into emergency response protocols	6/30/13
Extend transmission integrity management principles outside of HCAs using a risk-based approach	70% of population within PIR by 2020; 1&2 by 2030
Implement applicable portions of AGA's technical guidance documents: 1) Oversight of new construction tasks to ensure quality; 2) Ways to improve engagement between operators & excavators	Within 1 yr of AGA guidance
Begin risk-based evaluation on the use of ASVs, RCVs or equivalent technology on transmission block valves in HCAs	Within 6 months of Comptroller General study
Implement appropriate meter set protection practices identified through the Best Practices Program	Within 6 months of program results

* Target dates are based on an operator's evaluation of these actions in light of system variables, the operator's independent integrity assessment, risk analysis, and mitigation strategy. Target dates also assume state regulatory approval that action is prudent and reasonable and therefore recoverable in rates.

Gas Utility Industry Actions That Exceed 49 CFR Part 192
Incorporate systems and/or processes to reduce human error to enhance pipeline safety
Advocate programs to accelerate the risk-based repair, rehabilitation and replacement of pipelines
Support development of processes and guidelines that enable tracking and traceability of pipeline components
Encourage participation in One-Call by all underground operators and excavators
Influence and/or support state legislation to strengthen damage prevention programs
Use industry training facilities and evaluate opportunities to expand outreach and education programs to internal and external stakeholders
Support and enhance damage prevention programs through outreach, education, intervention and enforcement
Use a risk-based approach to improve excavation monitoring
Develop, support, enhance and promote CGA initiatives targeted at damage prevention, including data submission and 811
Support public awareness programs targeted at damage prevention
Continue AGA Safety Committee initiatives, such as sharing lessons learned through the Safety Information Resource Center, safety alerts through the AGA Safety Alert System, safety communications with customers and supporting AGA's Safety Culture Statement
Explore ways to educate, engage and provide appropriate information to stakeholders to increase pipeline public awareness
Conduct organizational response drills to improve emergency preparedness
Participate in state, regional and national multi-agency emergency response training exercises
Reach out to emergency responder community in order to enhance emergency response capabilities
Verify participation in a mutual assistance program, if appropriate; integrate into emergency response plans
Collaborate with stakeholders near existing transmission lines to increase awareness/adoption of appropriate PIPA recommended best practices
Promote benefits of R&D funding. Support R&D investment, pilot testing and technology implementation
Support technology development and deployment in critical applications
Collaborate on R&D

***AGA's Commitment to Enhancing Safety:* AGA Actions**

ACTIONS COMPLETED

- ✓ Implement discussion groups to address safety issues including discussion groups for employee technical training, material supply chain issues, DIMP implementation, public awareness, work management and GPS/GIS
- ✓ Participate in 2012 DOT Automatic Shut-off Valve and Remote Control Valve Workshop
- ✓ Develop, with INGAA and API, a public document to explain ratemaking mechanisms used for pipeline infrastructure
- ✓ Create a Safety Information Resources Center for the sharing of safety information
- ✓ Hold regional operations executives' roundtables to discuss safety initiatives
- ✓ Sponsor workshop with INGAA and National Association of State Fire Marshals (NASFM) on emergency response
- ✓ Develop a technical note on industry considerations for emergency response plans
- ✓ Develop Emergency Response Resource center with a streamlined mutual assistance program
- ✓ Develop a task group comprised of AGA staff and members that will work closely with Pipelines and Informed Planning Alliance (PIPA) to ensure AGA member concerns are addressed in joint PIPA initiatives
- ✓ Work with INGAA, research consortiums and other pipeline trade associations to provide the NTSB with a compilation of the progress that has been made in advancing in-line inspection technology
- ✓ Host a roundtable focused on operator experience and lessons learned: 2012 Operations Conference
- ✓ Work with INGAA, API, AOPL, Canadian Gas Association and Canadian Energy Pipeline Association on a comprehensive safety management study that explores initiatives currently utilized by other sectors and the pipeline industry.

ONGOING ACTIONS

- ➢ Promote the use of innovative rate mechanisms for faster repair, rehabilitation or replacement.
- ➢ Maintain a clearinghouse on effective cost-recovery mechanisms that states have used to fund infrastructure repair, replacement and rehabilitation projects.
- ➢ Support legislation that strengthens enforcement of damage prevention programs and 811
- ➢ Support the Common Ground Alliance, use of 811 and other programs that address excavation damage
- ➢ Continue the work of the AGA Best Practices Programs to identify superior performing companies and innovative work practices that can be shared with others to improve operations and safety.
- ➢ Continue the Plastic Pipe Database Committee's work to collect and analyze plastic material failures
- ➢ Promote the AGA Safety Culture Statement and a positive safety culture throughout the natural gas industry
- ➢ Conduct workshops, teleconferences and other events to share information including pipeline safety reauthorization, DIMP/TIMP, fitness for service, records, in-line inspection, emergency response, and other key safety initiatives
- ➢ Hold an annual executive leadership safety summit.
- ➢ Recognize statistical top safety performers, promote safety performance and encourage knowledge sharing through AGA Safety Awards
- ➢ Support PHMSA and NAPSR workshops and other events
- ➢ Search for new and innovative ways to inform, engage and provide appropriate information to stakeholders, including emergency responders, public officials, excavators, consumers and safety advocates, and members of the public living in the vicinity of pipelines
- ➢ Participate in the Pipeline Safety Trust's annual conference to provide information on distribution and intrastate transmission pipelines, AGA and industry initiatives, and receive input
- ➢ Work with PHMSA to establish time limits for telephonic or electronic notice of reportable incidents to the National Response Center after the time of confirmed discovery by operator that an incident meets PHMSA incident reporting requirements
- ➢ Build an active coalition of AGA member representatives to work with PHMSA and other stakeholders to implement PIPA recommended practices pertaining to encroachment around existing transmission pipelines
- ➢ Advocate to state commissioners the inclusion of research funding in rate cases in an effort to increase overall funding for R&D
- ➢ Work with PHMSA and other stakeholders on opportunities to increase R&D funding and deployment of technologies
- ➢ Advocate acceptance of technologies that can improve safety

AGA's Commitment to Enhancing Safety: AGA Actions Continued

ACTIONS WITH TARGET DATES

- Develop guidance to determine a distribution or transmission pipeline's fitness for service and MAOP, and the critical records needed for that determination. **(5/30/12)**
- Create a Safety Alert Notification System that will allow AGA or its members to quickly notify other AGA members of safety issues that require immediate attention. **(5/30/12)**
- Develop a more comprehensive technical paper that presents benefits and disadvantages of the installation of ASV/RCV block valves on new, fully replaced and existing transmission pipelines. **(9/30/12)**
- Create technical guidance for oversight of new construction tasks to ensure quality. **(12/31/12)** (Track progress of industry's implementation of guidelines and summarize results annually)
- Utilize DIMP to evaluate the risks associated with trenchless pipeline techniques and implement, where necessary, initiatives to prevent and mitigate those risks. **(12/31/12)**
- Based on the results of the safety management study, identify and begin to implement initiatives that will enhance the appropriate sharing of safety information. **(12/31/12)**
- Include meter protection in 2013 AGA Distribution Best Practices Program with results. **(9/30/13)**

ACTIONS – TARGET DATES NOT APPLICABLE

- Work with PHMSA and distribution operators on ways to address risk to meters from vehicular damage, natural and other outside forces.
- Engage PHMSA and NAPSR in discussions on whether TIMP should be expanded beyond HCAs and the benefits and challenges of applying integrity management principles to additional areas.
- Highlight in DOT workshops, NAPSR meetings and discussions with Government Accountability Office that: 1) Many AGA members are required to manage DIMP and TIMP programs that overlap. The effectiveness, inefficiencies and duplication of multiple integrity management programs must be explored. 2) Low-stress pipelines operating below 30% SMYS should be treated differently.
- Work with industry and regulators to evaluate how the grandfather clause can be modified to reduce and/or effectively eliminate its use for transmission pipelines.
- Work with other stakeholders to develop potential technological solutions that allow for tracking and traceability of new pipeline components (pipe, valves, fittings and other appurtenances attached to the pipe).
- Develop guidelines that provide for an improved level of engagement between operators and excavators.
- Work with other stakeholders to improve pipeline safety data collection and analysis, convert data into meaningful information, determine opportunities to improve safety based on data analysis, identify gaps in the data collected by PHMSA and others, and communicate consistent messages based on the data.
- Develop publications dedicated to improving safety and operations
- Pilot application of PIPA guidelines with select member utilities.

AGA's Commitment to Enhancing Safety: February 2014 Update

AGA and its members are dedicated to the continued enhancement of pipeline safety. As such, we are committed to proactively collaborating with public officials, emergency responders, excavators, consumers, safety advocates and members of the public to continue to improve the industry's longstanding record of providing natural gas service safely and effectively to 177 million Americans. AGA and its members support the development of reasonable regulations to implement new federal legislation as well as the National Transportation Safety Board safety recommendations.

Below are voluntary actions that are being addressed by AGA or individual operators to help ensure the safe and reliable operation of the nation's 2.4 million miles of pipeline which span all 50 states representing diverse regions and operating conditions. In addressing these actions, AGA and its individual operators recognize the significant role that their state regulators or governing body will play in supporting and funding these actions.

It is the consensus of AGA members that the actions listed below enhance safety and gas utility operations when implemented as an integral part of each operator's system specific safety actions. However, both the need to implement and the timing of any implementation of these actions will vary with each operator. Each operator serves a unique and defined geographic area and their system infrastructures vary widely based on a multitude of factors, including facility condition, past engineering practices and materials. Each operator will need to evaluate the actions in light of system variables, the operator's independent integrity assessment, risk analysis and mitigation strategy and what has been deemed reasonable and prudent by their state regulators. It is recognized that not all of these recommendations will be applicable to all operators due to the unique set of circumstances that are attendant to their specific systems.

Building Pipelines for Safety

Construction

- Expand requirements of the Operator Qualification (OQ) rule to include new construction of distribution and transmission pipelines.
- Review established oversight procedures associated with pipeline construction to ensure adequacy and confirm that operator construction practices and procedures are followed.

Emergency Shutoff Valves

- Support the use of a risk based approach to the installation of automatic and/or remote control sectionalizing block valves where economically, technically and operationally feasible on transmission lines that are being newly constructed or entirely replaced. Develop guidelines for consideration of the use of automatic and/or remote control sectionalizing block valves on transmission lines that are already in service. Work collaboratively with appropriate regulatory agencies and policy makers to develop these criteria.
- Expand the use of excess flow valves to new and fully replaced branch services, small multi-family facilities, and small commercial facilities where economically, technically and operationally feasible.

Operating Pipelines Safely

Integrity Management

- Continue to advance integrity management programs and principles to mitigate system specific risks. This includes operational activities as well as the repair, replacement or rehabilitation of pipelines and associated facilities where it will most improve safety and reliability.
- Collaborate with stakeholders to develop and promote effective cost-recovery mechanisms to support pipeline assessment, repair, rehabilitation, and replacement programs.
- Develop industry guidelines for data management to advance data quality and knowledge related to pipeline integrity.
- Support development of processes and guidelines that enable the tracking and traceability of new pipeline components.

Excavation Damage Prevention

- Support strong enforcement of the 811 – Call Before You Dig program through state damage prevention laws.
- Improve the level of engagement between the operator and excavators working in the immediate vicinity of the operator's pipelines.

Enhancing Pipeline Safety

Safety Knowledge Sharing

- Review programs currently utilized for the sharing of safety information. Identify and implement models that will enhance safety knowledge exchange among operators, contractors, government and the public.

Stakeholder Engagement and Emergency Response

- Evaluate methods to more effectively communicate with public officials, excavators, consumers, safety advocates and members of the public about the presence of pipelines. Implement tested and proven communication methods to enhance those communications.
- Partner with emergency responders to share appropriate information and improve emergency response coordination.

Pipeline Planning Engagement

- Work with a coalition of Pipelines and Informed Planning Alliance (PIPA) Guidance stakeholders to increase awareness of risk based land use options and adopt existing PIPA recommended best practices.

Advancing Technology Development

- Increase investment, continue participation, and support research, development and deployment of technologies to improve safety. Evaluate and appropriately implement new technological advances.

Gas Utility Industry Actions To Be Implemented	Target Dates *
1. Confirm the established MAOP of transmission pipelines ***Note:*** Confirmation of established MAOP utilizes the guidance document developed by AGA, "*Industry Guidance on Records Review for Re-affirming Transmission Pipeline MAOPs,"* October 2011.	On an aggregate basis of AGA member companies, complete > 50% of class 3 & 4 locations + class 1&2 HCAs: 7/3/12 Remaining class 3&4 + 1&2 HCAs, based on PHMSA guidance: 7/3/13 ***– Per DOT, MAOP confirmed for all but 5,401 miles*** Remaining class 1&2 by 7/3/15
2. Review and revise as necessary established construction procedures to provide for appropriate (risk-based) oversight of contractor installed pipeline facilities. ***Construction oversight document released 4/13.***	Trans: 12/31/12 Dist: 12/31/13
3. Implement applicable portions of AGA's technical guidance documents: 1) Oversight of new construction tasks to ensure quality; 2) Ways to improve engagement between operators & excavators	Within 1 yr of AGA guidance
4a. Under DIMP, evaluate risk associated with trenchless pipeline techniques and implement initiatives to mitigate risks	12/31/12
4b. Under DIMP, identify distribution assets where increased leak surveys may be appropriate	12/31/12
5. Integrate applicable provisions of AGA's emergency response white paper and checklist into emergency response procedures ***Emergency response white paper & checklist complete***	12/31/12
6. Extend Operator Qualification program to include tasks related to new main & service line construction	6/30/13
7. Expand EFV installation beyond single family residential homes to small commercial and multi-family residential services	6/30/13
8. Implement appropriate meter set protection practices identified through AGA Gas Utility Best Practices Program. Roundtable is being held October 31, 2013.	5/1/14
9. Incorporate an Incident Command System (ICS) type of structure into emergency response protocols	6/30/13
10. Extend transmission integrity management principles to transmission pipelines outside of HCAs using a risk-based approach *Note: Document on integrity management principles is on hold due to PHMSA's Integrity Verification Process initiative*	70% of population within PIR by 2020; 100% of population by 2030
11. Begin risk-based evaluation on the use of ASVs, RCVs or equivalent technology on transmission block valves in HCAs – Controller General Study completed January 2013	July 2013

* Target dates are based on an operator's evaluation of these actions in light of system variables, the operator's independent integrity assessment, risk analysis, and mitigation strategy. Target dates also assume state regulatory approval that action is prudent and reasonable and therefore recoverable in rates. **Per AGA surveys, all target goals have been met by most AGA members**

Gas Utility Industry Actions That Exceed 49 CFR Part 192
Incorporate systems and/or processes to reduce human error to enhance pipeline safety
Advocate programs to accelerate the risk-based repair, rehabilitation and replacement of pipelines
Support development of processes and guidelines that enable tracking and traceability of pipeline components
Encourage participation in One-Call by all underground operators and excavators
Influence and/or support state legislation to strengthen damage prevention programs
Use industry training facilities and evaluate opportunities to expand outreach/education programs to internal and external stakeholders
Support and enhance damage prevention programs through outreach, education, intervention and enforcement
Use a risk-based approach to improve excavation monitoring
Develop, support, enhance and promote CGA initiatives targeted at damage prevention, including data submission and 811
Support public awareness programs targeted at damage prevention
Continue AGA Safety Committee initiatives, such as sharing lessons learned through the Safety Information Resource Center, safety alerts through the AGA Safety Alert System, safety communications with customers and supporting AGA's Safety Culture Statement
Explore ways to educate, engage and provide appropriate information to stakeholders to increase pipeline public awareness
Conduct organizational response drills to improve emergency preparedness
Participate in state, regional and national multi-agency emergency response training exercises
Reach out to emergency responder community in order to enhance emergency response capabilities
Verify participation in a mutual assistance program, if appropriate; integrate into emergency response plans
Collaborate with stakeholders near existing transmission lines to increase awareness/adoption of appropriate PIPA recommended best practices
Promote benefits of R&D funding. Support R&D investment, pilot testing and technology implementation
Support technology development and deployment in critical applications
Collaborate on R&D

AGA's Commitment to Enhancing Safety: AGA Actions

AGA ACTIONS COMPLETED

- ✓ Implement discussion groups to address safety issues including discussion groups for employee technical training and knowledge transfer, material supply chain issues, DIMP implementation, public awareness, work management, GPS/GIS and work management systems, contractor/quality management, odorization, public awareness, and damage prevention.
- ✓ Participate in DOT events on Automatic Shut-off Valve and Remote Control Valves, Pipeline Data, Distribution Integrity Management, Incident Reporting, Public Awareness, Leak Detection System Effectiveness and Understanding the Application of Automatic/Remote Control Shutoff Valves, Integrity Verification Process
- ✓ Develop, with INGAA and API, a public document to explain ratemaking mechanisms used for pipeline infrastructure
- ✓ Create a Safety Information Resources Center for the sharing of safety information
- ✓ Hold regional operations executives' roundtables to discuss safety initiatives: Annually
- ✓ Sponsor workshop with INGAA and National Association of State Fire Marshals (NASFM) on emergency response
- ✓ Develop a technical note on industry considerations for emergency response plans
- ✓ Develop Emergency Response Resource center with a streamlined mutual assistance program
- ✓ Develop a task group comprised of AGA staff and members to work closely with Pipelines and Informed Planning Alliance (PIPA) to ensure AGA member concerns are addressed in joint PIPA initiatives
- ✓ Work with INGAA, research consortiums and other pipeline trade associations to provide the NTSB with a compilation of the progress that has been made in advancing in-line inspection technology
- ✓ Host a roundtable focused on operator experience and lessons learned: Annually at the AGA Operations Conference
- ✓ Work with INGAA, API, AOPL, Canadian Gas Association and Canadian Energy Pipeline Association on a comprehensive safety management study that explores initiatives currently utilized by other sectors and the pipeline industry.
- ✓ With PHMSA, create a Data Quality & Analysis Team to analyze data PHMSA collects, determine what the data is telling us, issue reports, identify missing information and how best to collect that data, and key metrics that indicate safety concerns.

AGA ONGOING ACTIONS

- ➢ Promote the use of innovative rate mechanisms for faster repair, rehabilitation or replacement.
- ➢ Maintain a clearinghouse on effective cost-recovery mechanisms that states have used to fund infrastructure repair, replacement and rehabilitation projects.
- ➢ Support legislation that strengthens enforcement of damage prevention programs and 811
- ➢ Support the Common Ground Alliance, use of 811 and other programs that address excavation damage
- ➢ Continue the work of the AGA Best Practices Programs to identify superior performing companies and innovative work practices that can be shared with others to improve operations and safety.
- ➢ Continue the Plastic Pipe Database Committee's work to collect and analyze plastic material failures
- ➢ Promote the AGA Safety Culture Statement and a positive safety culture throughout the natural gas industry
- ➢ Conduct workshops, teleconferences and other events to share information including pipeline safety reauthorization, DIMP/TIMP, fitness for service, records, in-line inspection, emergency response, and other key safety initiatives
- ➢ Hold an annual executive leadership safety summit.
- ➢ Recognize statistical top safety performers, promote safety performance and encourage knowledge sharing through AGA Safety Awards
- ➢ Support PHMSA and NAPSR workshops and other events
- ➢ Search for new and innovative ways to inform, engage and provide appropriate information to stakeholders, including emergency responders, public officials, excavators, consumers, safety advocates, and the public living near pipelines
- ➢ Participate in the Pipeline Safety Trust's annual conference to provide information on distribution and intrastate transmission pipelines, AGA and industry initiatives, and receive input
- ➢ Build an active coalition of AGA member representatives to work with PHMSA and other stakeholders to implement PIPA recommended practices pertaining to encroachment around existing transmission pipelines
- ➢ Advocate to state commissioners the inclusion of research funding in rate cases in an effort to increase funding for R&D
- ➢ Work with PHMSA and other stakeholders on opportunities to increase R&D funding and deployment of technologies
- ➢ Advocate acceptance of technologies that can improve safety
- ➢ Develop publications dedicated to improving safety and operations

AGA's Commitment to Enhancing Safety: AGA Actions Continued

AGA ACTIONS WITH TARGET DATES

- Develop guidance to determine a distribution or transmission pipeline's fitness for service and MAOP, and the critical records needed for that determination. **(5/30/12) - *Completed***
- Create a Safety Alert Notification System that will allow AGA or its members to quickly notify other AGA members of safety issues that require immediate attention. **(5/30/12) - *Completed***
- Develop a more comprehensive technical paper that presents benefits and disadvantages of the installation of ASV/RCV block valves on new, fully replaced and existing transmission pipelines. **(9/30/12) – *Completed***
- Create technical guidance for oversight of new construction tasks to ensure quality. **(12/31/12)** – ***Completed*** (Track progress of industry's implementation of guidelines and summarize results annually)
- Utilize DIMP to evaluate the risks associated with trenchless pipeline techniques and implement, where necessary, initiatives to prevent and mitigate those risks. **(12/31/12) – *Completed. Guidance created for new installations. Multiple events to highlight how different companies are addressing the potential risk associated with historic trenchless pipe installations*.**
- Based on the results of the safety management study, identify and begin to implement initiatives that will enhance the appropriate sharing of safety information. **(12/31/12) – *Safety management study complete. New key initiative: Pilot test of Peer-to-Peer reviews. Reviews began mid-2013 and remaining reviews to be completed by April 2014***
- Include meter protection in 2013 AGA Distribution Best Practices Program. **(9/30/13) – *Completed. Topic included in the 2013 Best Practices Program.***

AGA ACTIONS – TARGET DATES NOT APPLICABLE

- Work with PHMSA and distribution operators on ways to address risk to meters from vehicular damage, natural and other outside forces.
- Engage PHMSA and NAPSR in discussions on whether TIMP should be expanded beyond HCAs and the benefits and challenges of applying integrity management principles to additional areas.
- Highlight in DOT workshops, NAPSR meetings and discussions with Government Accountability Office that: 1) Many AGA members are required to manage DIMP and TIMP programs that overlap. The effectiveness, inefficiencies and duplication of multiple integrity management programs must be explored. 2) Low-stress pipelines operating below 30% SMYS should be treated differently.
- Work with industry and regulators to evaluate how the grandfather clause can be modified to reduce and/or effectively eliminate its use for transmission pipelines.
- Work with industry and regulators on meaningful metrics, including leading indicators, that indicate pipeline safety issues
- Work with other stakeholders to develop potential technological solutions that allow for tracking and traceability of new pipeline components (pipe, valves, fittings and other appurtenances attached to the pipe).
- Develop guidelines that provide for an improved level of engagement between operators and excavators.
- Work with PHMSA to establish time limits for telephonic or electronic notice of reportable incidents to the National Response Center after the time of confirmed discovery by operator that an incident meets PHMSA incident reporting requirements
- Work with other stakeholders to improve pipeline safety data collection and analysis, convert data into meaningful information, determine opportunities to improve safety based on data analysis, identify gaps in the data collected by PHMSA and others, and communicate consistent messages based on the data.
- Pilot application of PIPA guidelines with select member utilities.

AGA's Commitment to Enhancing Safety: Revised February 2016

AGA and its members are dedicated to the continued enhancement of pipeline safety. As such, we are committed to proactively collaborating with federal and state regulators, public officials, emergency responders, excavators, consumers, safety advocates and the public to continue improving the industry's longstanding record of providing natural gas service safely, reliably and efficiently to 177 million Americans. AGA and its members support the development of reasonable regulations to meet federal objectives and National Transportation Safety Board recommendations.

Below are voluntary actions that are being taken by AGA or individual operators to help ensure safe and reliable operation of the nation's 2.5 million miles of natural gas pipeline which span all 50 states with diverse geographic and operating conditions. AGA and its individual operators recognize the significant role that their state regulators or governing bodies play in supporting and funding these actions.

It is the consensus of AGA members that the actions listed below enhance safety, gas utility operations, and reduce greenhouse gas emissions when implemented as an integral part of each operator's specific safety programs. However, both the need to implement and the timing of implementation of these actions will vary with each operator. Each operator will need to evaluate the actions in light of system and geographic variables, the operator's independent integrity assessment, risk analysis and mitigation strategy and what has been deemed reasonable and prudent by their state regulators. Therefore, not all of these recommendations will be applicable to all operators.

Building Pipelines for Safety

Construction

- Expand requirements of the Operator Qualification rule to include new pipeline construction.
- Review established pipeline construction oversight procedures to ensure adequacy and compliance with those procedures.
- Implement industry leading practices when installing new pipelines to help prevent damage to other facilities.

Emergency Shutoff Valves

- Support a risk based approach to the installation of automatic and/or remote control isolation valves where technically and operationally feasible on newly constructed or entirely replaced transmission lines.
- Work with regulatory agencies and policy makers to develop guidelines for consideration of automatic and/or remote control isolation valves on transmission lines that are in service.
- Expand the use of excess flow valves (EFVs) to new and fully replaced branch services, small multi-family facilities, and small commercial facilities where technically and operationally feasible.

Operating Pipelines Safely

Integrity Management

- Advance integrity management programs and principles to mitigate system specific risks. This includes operational activities, repair, replacement or rehabilitation of pipelines and associated facilities where it will most improve safety and reliability.
- Collaborate with stakeholders to develop and promote effective cost-recovery mechanisms to support pipeline assessment, repair, rehabilitation, and replacement programs.
- Develop industry guidelines for data management to advance data quality and knowledge related to pipeline integrity.
- Support development of processes and guidelines that enable the tracking and traceability of new pipeline components.

Excavation Damage Prevention

- Support strong enforcement of the 811 – Call Before You Dig program, and advocate for the reduction of excavator exemptions within state damage prevention laws.
- Improve engagement between the operator and excavators on the need to call before digging to reduce excavation damage.

Physical and Cybersecurity/System Controls

- Take actions that help strengthen the physical and cybersecurity of the gas utility industry.
- Enhance system monitoring and control of gas systems.

Enhancing Pipeline Safety

Safety Knowledge Sharing

- Expand the voluntary national Peer Review Program to allow companies to observe their peers, identify what is working well, identify opportunities to improve, and share leading practices.
- Evaluate the work of other industries to improve safety. Identify and implement models that will assist in enhancing safety and encourage knowledge exchange among operators, contractors, government and the public.

Workforce Development

- Collaborate with industry, government, educational institutions and labor groups to develop solutions to address the need for a qualified, diverse workforce.

Public Awareness and Emergency Response

- Evaluate methods to effectively communicate with public officials, excavators, consumers, safety advocates and the public about the presence of pipelines. Implement tested and proven communication methods to enhance those communications.
- Partner with emergency responders to share information and improve emergency response coordination.

Pipeline Planning Engagement

- Work with a coalition of Pipelines and Informed Planning Alliance (PIPA) Guidance stakeholders to increase awareness of risk based land use options and adopt existing PIPA recommended best practices.

Advancing Technology Development

- Increase investment, continue participation, and support research, development and deployment of technologies to improve safety.

AGA's Commitment to Enhancing Safety: **Industry Actions That Exceed 49 CFR Part 192**

Building Pipelines for Safety

Construction

- Maintain a clearinghouse on effective cost-recovery mechanisms that states have used to fund infrastructure repair, replacement and rehabilitation projects.

Emergency Shutoff Valves

- Install EFVs on new and fully replaced branch services, small multi-family facilities, and small commercial facilities where technically and operationally feasible.

Operating Pipelines Safely

Integrity Management

- Advocate programs to accelerate the risk-based repair, rehabilitation and replacement of pipelines.
- Support development of processes and guidelines that enable tracking and traceability of pipeline components.
- Continue the Plastic Pipe Database Committee's work to collect and analyze plastic material failures.
- Incorporate systems and/or processes to reduce human error.
- Promote the use of API RP 1171, *Functional Integrity of Natural Gas Storage in Depleted Hydrocarbon Reservoirs and Aquifer Reservoirs*, and API RP 1170, *Design and Operation of Solution-mined Salt Caverns Used for Natural Gas Storage. This includes teleconferences, workshops and roundtables to share lessons learned from companies voluntarily adopting the recommended practices,*

Excavation Damage Prevention

- Use a risk-based approach to improve excavation monitoring.
- Support the Common Ground Alliance, the use of 811 and other damage prevention initiatives through outreach, education, intervention and enforcement.
- Influence and/or support state legislation to strengthen damage prevention programs.
- Encourage participation in One-Call by all underground operators and excavators.

Physical and Cybersecurity/System Controls

- Participate in a Downstream Natural Gas Information Sharing & Analysis Center (DNG ISAC).
- Conduct cybersecurity vulnerability assessments.
- Collaborate with government to develop and implement guidance, such as *DOE ONG-C2M2, DOE Energy Sector & TSA Transportation Sector Framework Implementation Guidance* and NIST *Energy Sector Cybersecurity Framework Implementation Guidance*
- Create industry guidance and hold events to strengthen the physical and cybersecurity of the natural gas infrastructure, including the *Natural Gas Utility Threat Analysis Elements & Mitigations Guidance, Cybersecurity Procurement Language Guidance*, an AGA Energy Delivery Cybersecurity Executive Summit, cyber threat analysis workshops, insider threat workshops, workshops on the Oil and Natural Gas Cybersecurity Capability Maturity Model (ONG C2M2), and an annual AGA/EEI Security Conference.

Enhancing Pipeline Safety

Pipeline Safety Management Systems

- Promote the use of API RP 1173, Pipeline Safety Management System (PSMS) Recommended Practice, including piloting of the PSMS, teleconferences and workshops to share lessons learned, and tools that can help the industry implement the PSMS.
- Promote the AGA Safety Culture Statement and a positive safety culture throughout the natural gas industry.

Safety Knowledge Sharing

- Continue AGA Board Safety Committee initiatives, such as sharing lessons learned through the Safety Information Resource Center, safety alerts through the AGA Safety Alert System, safety communications with customers, supporting AGA's Safety Culture Statement, and holding an annual Executive Leadership Safety Summit.
- Recognize statistical top safety performers, promote safety performance and encourage knowledge sharing through AGA Safety Awards.
- Continue the work of the AGA Best Practices Programs to identify superior performing companies and innovative work practices that can be shared with others to improve operations and safety.
- Conduct workshops, teleconferences, discussion groups, and other events to share information including pipeline safety reauthorization, DIMP/TIMP, fitness for service, records, in-line inspection, emergency response, and other key safety initiatives

Workforce Development

- Support of the efforts of the Center for Energy Workforce Development, Energetic Women, natural gas boot camps, regional gas associations, and educational institutes on solutions to address the need for a qualified, diverse workforce.

Public Awareness and Emergency Response

- Explore ways to educate, engage and provide appropriate information to stakeholders to increase pipeline public awareness and the need to call if you smell gas.
- Support public awareness programs targeted at damage prevention and pipeline safety awareness
- Use industry training facilities and evaluate opportunities to expand outreach/education programs to external stakeholders.
- Reach out to emergency responder community in order to enhance emergency response capabilities.
- Collaborate with stakeholders near existing transmission lines to increase awareness/adoption of appropriate PIPA recommended best practices.
- Conduct organizational response drills to improve emergency preparedness.
- Participate in state, regional and national multi-agency emergency response training exercises.
- Support industry participation in a mutual assistance program.
- Search for new and innovative ways to inform, engage and provide appropriate information to stakeholders, including emergency responders, public officials, excavators, consumers, safety advocates, and the public living near pipelines.
- Educate the Pipeline Safety Trust and other public stakeholders on distribution and intrastate transmission pipelines, AGA and industry initiatives to improve pipeline safety, and receive input.
- Develop publications dedicated to improving safety and operations.

Pipeline Planning Engagement

- Build an active coalition of AGA member representatives to work with PHMSA and other stakeholders to implement PIPA recommended practices pertaining to encroachment around existing transmission pipelines.

Advancing Technology Development

- Support R&D investment, pilot testing and technology implementation.
- Work with PHMSA and other stakeholders on opportunities to increase R&D funding and deployment of technologies.
- Advocate to state commissions the inclusion of research funding in rate cases.

***AGA's Commitment to Enhancing Safety:* Actions Completed**

Building Pipelines for Safety

Construction

- ✓ Review and revise established construction procedures to provide for appropriate (risk-based) oversight of contractor installed pipeline facilities.
- ✓ Extend Operator Qualification to include tasks related to new main & service construction.
- ✓ Implement applicable portions of AGA's technical guidance document, "Oversight of new construction tasks to ensure quality."

Emergency Shutoff Valves

- ✓ Expand EFV installation beyond single family residential homes to small commercial and multi-family residential services.
- ✓ Begin risk-based evaluation on the use of automatic shutoff valves, remotely controlled valves or equivalent technology in HCAs.

Operating Pipelines Safely

Integrity Management

- ✓ Confirm the established Maximum Allowable Operating Pressure (MAOP) of transmission pipelines.
- ✓ Under DIMP, evaluate risk associated with trenchless pipeline techniques and implement initiatives to mitigate risks.
- ✓ Under DIMP, identify distribution assets where increased leak surveys may be appropriate.
- ✓ With PHMSA, create a Data Quality & Analysis Team to analyze data PHMSA collects, determine what the data is telling us, issue reports, identify missing information and how best to collect that data, and key metrics that indicate safety concerns.
- ✓ Implement appropriate meter set protection practices identified through AGA Gas Utility Best Practices Program.

Excavation Damage Prevention

- ✓ Implement applicable portions of AGA's technical guidance, "Ways to improve engagement between operators & excavators."

Physical and Cybersecurity/System Controls

- ✓ Create a DNG ISAC.
- ✓ Create a Cybersecurity Task Force to develop products and programs that strengthen cybersecurity.
- ✓ Conduct an all hazard threat analysis and physical security benchmarking survey.
- ✓ Work with TSA to develop and implement Pipeline Security Guidelines.
- ✓ Create a Cybersecurity Assessment Program, including workshops that will allow industry to address their cybersecurity risks.
- ✓ Hold workshops and events: Workplace Violence Prevention & Insider Threats, SCADA, Control Room Management.

Enhancing Pipeline Safety

Safety Knowledge Sharing

- ✓ Create a voluntary AGA Peer Review Program that allows subject matter experts from gas utilities to review peer companies, identify areas that are working well and areas for potential improvement.
- ✓ Work with INGAA, API, AOPL, Canadian Gas Association and Canadian Energy Pipeline Association on a comprehensive safety management study that explores initiatives currently utilized by other sectors and the pipeline industry.
- ✓ Create a Safety Information Resources Center for the sharing of safety information.
- ✓ Hold regional operations executives' roundtables annually to discuss safety initiatives.
- ✓ Annually host roundtables focused on operator experience and lessons learned during the AGA Operations Conference.
- ✓ Develop guidance: To determine a distribution or transmission pipeline's fitness for service and MAOP, and the critical records needed for that determination; For oversight of new construction tasks to ensure quality; For trenchless pipeline installations; That presents benefits and disadvantages of the installation of ASV/RCV block valves on new, fully replaced and existing transmission pipelines; On intergenerational transfer of knowledge for Field Supervisors; Emergency response; Natural gas infrastructure physical security.

Workforce Development

- ✓ Annual AGA Executive Leadership Development Program.
- ✓ Annual Center for Energy Workforce Development (CEWD) Summits.
- ✓ Create an AGA Diversity & Inclusion Task Force.
- ✓ Participate in government/industry initiatives to foster workforce development, such as the Utility Workforce Advisory Council composed of the Departments of Energy, Defense, Labor, Veterans Affairs; AGA, Edison Electric Institute, Nuclear Energy Institute, National Rural Electric Cooperative Association, American Public Power Association, International Brotherhood of Electrical Workers, Utility Workers Union of America, and CEWD.

Public Awareness and Emergency Response

- ✓ Incorporate an Incident Command System (ICS) type of structure into emergency response protocols.
- ✓ Integrate applicable provisions of AGA's emergency response white paper and checklist into emergency response procedures.
- ✓ Create a Safety Alert Notification System that will allow AGA or its members to quickly notify other AGA members of safety issues that require immediate attention.
- ✓ Develop an Emergency Planning Resource Center and a Mutual Assistance Database.
- ✓ Implement AGA discussion groups to address safety issues including technical training and knowledge transfer, material supply chain issues, DIMP implementation, TIMP risk models, Pipeline Safety Management Systems, pipeline safety/compliance/oversight, GPS/GIS and work management systems, contractor/quality management, management of company standards, odorization, compressor operations, public awareness, and damage prevention.

Pipeline Planning Engagement

- ✓ Develop a task group comprised of AGA staff and members to work closely with Pipelines and Informed Planning Alliance (PIPA) to ensure AGA member concerns are addressed in joint PIPA initiatives.

Advancing Technology Development

- ✓ Work with INGAA, research consortiums and other pipeline trade associations to provide the NTSB with a compilation of the progress that has been made in advancing in-line inspection technology.

Commitment to Enhancing Safety, Environmental Stewardship and Security

May 2021

AGA's Commitment to Enhancing Safety, Environmental Stewardship and Security

AGA and its members are committed to enhancing safety, improving the environment, and increasing the security of all pipeline facilities. As part of this commitment, below is a list of new and existing voluntary actions to help ensure safe and reliable operation of the nation's 2.5 million miles of energy pipelines that span all 50 states with diverse geography and varying operating conditions. The actions listed below enhance safety, reduce greenhouse gas emissions, and improve security when implemented as part of an operator's specific safety program and are a continuation of commitments first adopted in 2012.

By proactively collaborating with all stakeholders to drive improvements, AGA and its members safely and effectively deliver clean energy to more than 177 million Americans, while advocating for reasonable regulations that meet federal objectives and National Transportation Safety Board recommendations. Both the need to implement and the timing of implementation of these actions will vary with each operator considering system integrity, geography, risk analysis and what has been deemed reasonable and prudent by state regulators. Not all listed actions are applicable to all operators.

- Advance a Safety Culture that places a high priority on employee, customer, public and pipeline safety as well as system and process safety.

- Implement Pipeline Safety Management Systems (PSMS)
  - Follow API 1173 standard
  - Measure PSMS maturity using free tools on PIpelineSMS.org
  - Create a plan to improve PSMS maturity and work the plan to continuously improve
  - Participate in AGA's PSMS Virtual Assessment Program, once available, for external observations of PSMS elements to help identify leading practices and improvement opportunities to advance implementation of API 1173 (*Review covers specific PSMS elements plus PSMS Element 6: Safety Assurance & Element 7: Continuous Improvement*).
  - Participate in AGA's Peer Review Program (*Covers most of the ten PSMS Elements*)

- Leverage industry best practices and actively share safety information (*PSMS Element 3: Risk Management, Element 7: Continuous Improvement*)
  - Implement and share best practices through AGA's Best Practices Program, Committees, Discussion Groups, and by utilizing technical papers and publications
  - Provide material failure data such as plastic pipe performance to the Plastic Pipe Database or PPDC
  - Share safety events and near misses to the Safety Information Resource Center Lessons Learned Portal

- Enlist in National Mutual Aid Programs to advance emergency preparedness via AGA national mutual assistance. (*PSMS Element 8: Emergency Preparedness and Response*)

- Implement self-executing mandate in 2020 PIPES Act Section 114 Inspection and Maintenance

- Execute AGA's 10 commitments for reducing emissions to address climate change and accelerate initiatives to advance energy efficiency

- Incorporate TSA Pipeline Security Guidelines into company security plans and apply National Institute of Standards and Technology or NIST Framework for Improving Critical Infrastructure Cybersecurity, including Identify, Protect, Detect, Respond/Recover in accordance with AGA's Commitment to Cyber & Physical Security

DATA INFRASTRUCTURE IMPROVEMENT PROJECTS

TRANSMISSION / GATHERING SYSTEMS TRACEABLE, VERIFIABLE AND COMPLETE ("TVC") RECORDS

This project involves gathering, scanning and storing original transmission and gathering construction records in a document management system and linking to the GIS (Geographic Information System) asset record. The documents will be used to verify MAOP (Maximum Allowable Operating Pressure) and MAOP attributes and update any missing pipeline attributes and features in GIS. For each transmission pipeline and station, a detailed GIS build will be performed using all available information collected from the digitized records. Relevant data will be extracted and used to perform MAOP calculations and verification. Data generated from the calculations will then be repopulated into the GIS creating a more robust database.

GATHERING CENTERLINE SURVEY

This project involves a high accuracy GPS (Global Position System) survey of gathering lines to correct the spatial accuracy issues on the system. High accuracy GPS data and above grade data will be collected in the field. This data will then be used to correct the existing data within the BHEA GIS system. There are known issues with the spatial accuracy of the gathering lines within BHEA and similar projects in other states have gained improvements by hundreds of feet in some cases. The inaccuracies in the GIS data are due to historical as-built practices and historic conversions from paper to digital that took part across the industry over decades and in many forms.

HIGH-PRESSURE DISTRIBUTION CENTERLINE SURVEY CORRECTIONS

This project involves utilizing high accuracy GPS survey data of high-pressure distribution pipelines to correct the spatial accuracy of these pipelines. High accuracy GPS data and above grade data was previously collected during the transmission centerline survey. The data will then be used to correct the existing data within the BHEA GIS system. The inaccuracies in the GIS data are due to historical as-built practices and historic conversions from paper to digital that took part across the industry over decades and in many forms.

REJECTED DISTRIBUTION AS-BUILT CLEANUP

This project involves the cleanup of historic distribution as-builts that were rejected due to various reasons where there was not enough information to map within the GIS system. There are about 600 as-builts that are included in scope. After coordination with subject matter experts these as-builts will be updated in the GIS system to the best level possible with the information available.

DISTRIBUTION MAIN AND SERVICE CENTERLINE SURVEY

This is a high accuracy GPS survey of distribution mains, service lines and meter locations. This project includes adding unmapped service lines to GIS, updating the spatial location of mains and service lines in GIS and correcting the location of service points and meters in GIS. Data examples that will also be gathered in the field include meter structure location, above grade

facility data, and unlocatable pipeline information. Prioritization for pipeline assets will be aligned with the DIMP (Distribution Integrity Management Plan) risk scores which considers unknown data in the analysis.

DISTRIBUTION DATA ATTRIBUTE IMPROVEMENT

This project focuses on updating high priority pipeline attributes and features in GIS that are gathered from historic data, records and GPS survey data. This project will include the review of legacy data sets including original construction records. The process to review construction records will include the record digitization, linking to GIS the original construction documents and records. GIS updates and spatial corrections to pipelines and pipeline features will also be included in this project. Prioritization will follow the same method as the centerline survey project.

PRESSURE SYSTEMS

This project will create unique pressure systems in GIS that will align with our Gas Valve[1] program that is used to manage pressure regulating stations. These pressure systems will be updated with data attributes needed to manage these systems, examples of which include system MAOP and Operating Pressure. The correction of any connectivity issues with the GIS data will also be included in the scope of this project.

EMERGENCY RESPONSE ZONES

This project focuses on the standardization of Emergency Response Zones per BHEA's Operations and Maintenance Manual to support identification of Emergency Valves in GIS. Emergency Response Zones allow the Company to isolate gas systems during an emergency event. This project allows BHEA to manage Emergency Response Zones in GIS instead of the paper systems managed by each office. This project also includes the digitization of the emergency response plans for each system and linking to these zones. This project creates consistency across the Company by providing personnel with virtual access to the plans and ensuring emergency valves align with our valve maintenance database.

CATHODIC PROTECTION (CP) ZONES

This project involves the creation and standardization of CP zones in GIS and ensures consistency between GIS and the CP Databases. CP assets will be included in the GIS data updates and may include features such as CP test stations, isolation joints, anodes and rectifiers.

BURIED PIPE INSPECTION (BPI) AND SME PIPELINE ATTRIBUTE ASSESSMENT

This project would use electronically available BPI information and Operations SME (Subject Matter Expert) knowledge to analyze and identify data issues. The data collected from these efforts will be used to make attribute corrections and fill data gaps in the GIS. The project would include a process to verify the quality of this data before any updates are made in the GIS.

[1] The Company has developed a program to track and design a pressure regulating station.

DOCUMENT MANAGEMENT MIGRATION

This project involves the migration of digital asset records from multiple locations to a single location within the company's document management system. The document management system will allow easier access to the documents by enabling searches via the Metadata tags associated with each record. It will make the record lifecycle and version control more manageable.