

**TESTIMONY OF
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EXECUTIVE VICE PRESIDENT AND GROUP CEO
NISOURCE GAS TRANSMISSION & STORAGE**

**ON BEHALF OF THE
INTERSTATE NATURAL GAS ASSOCIATION ON AMERICA**

**BEFORE THE
SUBCOMMITTEE ON ENERGY AND POWER
COMMITTEE ON ENERGY AND COMMERCE
U.S. HOUSE OF REPRESENTATIVES**

**HEARING REGARDING
THE AMERICAN ENERGY INITIATIVE: PIPELINE SAFETY**

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Mr. Chairman and Members of the Subcommittee:

Good morning. My name is Chris Helms, and I am CEO of NiSource Gas Transmission & Storage, and chairman of the INGAA board's task force on pipeline safety. NiSource Gas Transmission & Storage owns and operates more than 15,000 miles of natural gas pipelines that are integrated with one of the largest underground storage systems in North America. From the Gulf Coast to the Midwest, Mid-Atlantic and Northeast, our systems connect natural gas supplies with energy markets in more than 16 states. Approximately 1.3 trillion cubic feet of natural gas flows through our pipeline and storage systems each year.

Today I am testifying on behalf of the Interstate Natural Gas Association of America, or INGAA. Our members operate approximately two-thirds of the nation's natural gas transmission pipelines and 90 percent of the interstate natural gas transmission pipelines in the United States. The pipeline systems operated by INGAA's member companies are analogous to the interstate highway system, transporting natural gas across state and regional boundaries. I want to state at the outset that, while the safety record of the natural gas transmission sector is very strong, we at INGAA recognize that continuous improvement in the safety of our pipelines is an imperative, and we want to work with each of our stakeholders to achieve our primary goal of zero pipeline accidents.

INDUSTRY BACKGROUND

To provide context for addressing specific pipeline safety issues, I first want to provide the subcommittee with some background on the natural gas transmission pipeline industry. There are approximately 300,000 miles of natural gas transmission pipelines¹ in the U.S., delivering one quarter of the nation's energy. Natural gas pipelines transport critical energy needed to heat our homes, cook our food, heat our water, and increasingly, power our electric grid. INGAA represents the interstate portion of the natural gas transmission system, or about 200,000 miles of pipeline (see Figure 1). These interstate systems are regulated at the federal level – by the Federal Energy Regulatory Commission (FERC) for construction approval and economic matters and by the Pipeline and Hazardous Materials Safety Administration (PHMSA) for safety matters. The remaining 100,000 miles are owned by intrastate transmission operators in natural gas-producing states such as Texas and Oklahoma, and by local gas distribution companies throughout America. These intrastate systems are regulated at the state level.

Our nation is currently witnessing significant growth in domestic, onshore natural gas supply thanks to technological improvements that have allowed producers to extract shale gas safely and economically. We also are seeing growth in demand for this clean-burning, abundant and domestic energy resource. As domestic natural gas supplies have grown in recent years, so too has the need for additional pipeline capacity to access and transport these supplies. This means that we are continuing to expand our natural gas

¹ Transmission pipelines can be defined as those which generally have a linear configuration, may be quite large in diameter, operate at high pressures, and traverse long distances.

pipeline infrastructure at an impressive pace, as evidenced by Figure 2. The expansion of the natural gas pipeline network, and the effective maintenance of new and existing systems, will be critical to the success of natural gas in meeting a larger share of America's growing energy needs.

Over time, the safety performance of our pipelines has improved steadily. From the inception of engineering standards in the 1920s, through the passage of the Natural Gas Pipeline Safety Act of 1968 and the adoption of federal regulations in 1970, continuously evolving laws, regulations and standards have ensured that pipelines are engineered, built, operated and maintained to high standards. Our improvement over the years is attributable to a concerted and sustained effort on the part of the industry, its regulators and other key stakeholders. Our safety record, however, is not perfect, and as we have seen recently, even infrequent pipeline accidents can have tragic consequences. One accident is one too many. We recognize that our industry can and must continue to improve.

INTEGRITY MANAGEMENT CONTINUOUS IMPROVEMENT

As part of the Pipeline Safety Improvement Act of 2002, each natural gas transmission pipeline operator is required to implement a formal Integrity Management Program, or IMP. This program standardized and regulated safety programs and best practices that were in many cases already in existence or under development at the time. IMP is a risk-based approach that focuses on identifying and mitigating risks in populated areas

surrounding pipelines. These populated areas are referred to as High Consequence Areas, or HCAs. The program requires a baseline assessment (or inspection) of all pipelines located in HCAs, and requires the repair and remediation of any potential safety problems found as a result of these assessments. The program also requires ongoing reassessments of pipelines located in HCAs. Since the IMP has created a database of information about the condition of our pipelines, it provides an excellent foundation for growing, expanding and improving our country's pipeline safety programs.

As part of the IMP, a baseline assessment of each pipeline located in an HCA must be completed by December 2012, just 18 months from now. The vast majority of these baseline assessments are already complete. While only 4.5 percent of INGAA member pipeline miles are classified as HCAs, baseline assessments have been performed along more than 50 percent of INGAA member pipeline miles to date. We expect that number to continue to grow.

Given that the "first round" of assessments is almost complete, and that reassessments are underway, now is an ideal time to reflect upon the effectiveness of the Integrity Management Program. Also, in light of the tragic pipeline accidents that occurred last year, INGAA's leadership recognized the need to take a fresh look at current pipeline safety programs. The INGAA board of directors formed a senior-level pipeline safety task force in late 2010. This task force drafted the following five guiding principles, which were formally adopted by the board of directors in March (Figure 3):

- 1) Our goal is zero incidents -- a perfect record of safety and reliability for the national pipeline system. We will continue to work every day towards this goal.
- 2) We are committed to a safety culture as a critical dimension to continuously improving our industry's performance.
- 3) We will be relentless in our pursuit of improving by learning from the past and anticipating the future.
- 4) We are committed to applying integrity management principles on a system-wide basis.
- 5) We will engage our stakeholders – from the local community to the national level – so they understand and can participate in reducing risk.

To translate these guiding principles into concrete actions, the task force has commissioned an initiative that we are calling Integrity Management Continuous Improvement. The goal of this initiative is to assess our performance, identify lessons learned and target areas in need of improvement. The risks that natural gas transmission pipelines face are complex, and no single, one-size-fits solution exists. Moving to a zero incident environment will require a comprehensive approach that tailors specific solutions for each pipeline.

PIPELINE “FITNESS FOR SERVICE”

Much of the recent public discourse on pipeline safety has focused on the age of the pipeline infrastructure. The conclusion seems to be that “old pipelines” are the problem,

and that the solution is replacing old pipelines with new ones. The facts, though, are not so simple.

Age, in and of itself, should not be the focus of our safety efforts. The focus should be on the *fitness for service* of a pipeline. Any pipeline – regardless of age – that is not fit for service should be repaired, replaced or retired. The key to achieving real, sustainable improvement in pipeline safety is to identify and address issues that impact fitness for service.

That is not to say we can ignore the age of a pipeline – age is an issue. But it is not the only issue, and it should not be a controlling issue. Just like homes in older neighborhoods, proper maintenance and timely upgrades can make a decades-old pipeline perfectly fit for service. An older pipeline can remain fit for service if its operating conditions are controlled and the pipe condition is properly monitored and maintained. On the other hand, even the newest and most advanced pipelines can be susceptible to failure due to threats such as excavation damage or weather and outside forces.

Thankfully, our ability to prevent and detect problems, and, if necessary, to repair and replace unfit pipe, has improved with the implementation of integrity management, pipeline testing and advances in technologies.

WORKING WITH STAKEHOLDERS

Another important element of INGAA’s Guiding Principles is our proactive engagement with stakeholders. Pipeline safety is a shared responsibility. Whether it is first responders, excavators, or the general public, an awareness of pipeline infrastructure and involvement in important programs like “Call 811 Before You Dig” is critical to achieving our shared goal of zero pipeline incidents.

Clearly, accident prevention is “job one,” but when a pipeline accident does occur, we must ensure that our partners in emergency response are armed with knowledge they need to respond and protect the public. As part of our emergency response planning, pipeline operators are required to establish and maintain open lines of communication with local fire, police, and related public officials.

At NiSource Gas Transmission & Storage, for example, we recently launched the Columbia Gas Fire School – a first-of-its-kind effort in partnership with Columbia Gas of Pennsylvania to provide first responders across our Pennsylvania and Maryland operating areas with specialized classroom and hands-on training to respond to a natural gas emergency. We recently celebrated the completion of the inaugural Fire School class with more than 50 firefighters representing communities across Western Pennsylvania.

COMMENTS ON SENATE LEGISLATION

As this testimony is being prepared, the only pipeline safety reauthorization bill introduced in this Congress is the Pipeline Transportation Safety Improvement Act of 2011 (S. 275). That legislation was unanimously reported out of the Senate Commerce, Science and Transportation Committee in May. As this Subcommittee looks at drafting its own bill in the coming weeks, we would like to inform your efforts by commenting on specific provisions in the Senate bill.

In general, S. 275 is a good bill. INGAA is urging the full Senate to pass this bill as it was reported by the committee. The bill sets strong aspirational goals for PHMSA and for the pipeline industry, while directing the regulator to develop specific technical standards or requirements. This strikes us as the right balance, and we encourage the same type of approach in the House legislation. Our comments below note both provisions of S. 275 that are particularly constructive as well as other areas in which we suggest relatively minor additions or modifications:

Damage Prevention

The Senate bill continues the decade-long effort to improve state damage prevention laws by setting strong minimum standards and prohibiting exemptions for municipalities, state agencies (such as highway departments) and their contractors. Accidental damage to pipelines by excavators remains a leading cause of deaths and injuries along pipeline systems. Excavation incidents are the most avoidable of pipeline accidents, and the best

method for prevention is through the implementation of comprehensive damage prevention programs. Requiring all excavators to “call before digging” is critical to a successful damage prevention program, and therefore exemptions from participation, especially for large-volume excavators, make little sense. INGAA supports the Senate bill provision.

Automatic and Remotely Controlled Shut off Valves

INGAA believes that this provision is balanced and well written, and therefore supports this provision. We recommend striking existing section 60102(j)(3) of title 49 because it would be superseded by this new provision.

Integrity Management

INGAA generally supports the update of the natural gas transmission Integrity Management Program envisioned in S.275. We suggest that a House bill include the following refinements:

- 1) **Class location requirements** – The pipeline safety regulations for natural gas transmission lines promulgated in 1970 included “class location” requirements intended to ensure that pipeline operators employ an increased margin of safety for pipeline segments located in populated areas. Pursuant to these regulations, pipelines must undertake periodic surveys to identify population increases in close proximity to the pipeline right-of-way. Where applicable, the regulations required that this increased margin of safety be achieved by:

(1) installing replacement pipe with a higher strength relative to operating pressure, (2) reducing the operating pressure of the system, or (3) undertaking periodic hydrostatic testing. In practice, the primary method of complying with this requirement has been through pipe replacement.

When proposed a decade ago, it was assumed that IMP largely would supplant class location requirements, since both programs are designed to reduce risk in populated areas and IMP is a far more sophisticated, data-driven alternative.

In fact, when DOT developed its cost-benefit analysis for the integrity management rule in 2003, the agency assumed that the industry would save \$1 billion over 10 years because class location requirements would be waived for pipe segments covered by IMP.² While PHMSA has granted a number of such waivers, a uniform requirement that avoids redundancy would be a more efficient and cost-effective solution.

Section 7(a)(2) of S. 275 suggests that the Secretary evaluate whether the expansion of integrity management “would mitigate the need for class location requirements...” We hope Congress will specifically direct the Secretary to eliminate the duplicative class location requirements for pipeline segments covered by the Integrity Management Program. In addition, INGAA recommends that it be clarified that this section applies only to natural gas transmission facilities.

² RSPA Final Regulatory Evaluation, Pipeline Integrity Management in High Consequence Areas, Docket RSPA-00-7666-356.

2) **Reassessment intervals** – Congress in 2002 mandated a seven-year reassessment interval for all natural gas transmission pipelines, regardless of risk or engineering analysis to the contrary. Congress also charged the Government Accountability Office (GAO) with analyzing this issue and making a recommendation. GAO delivered its recommendation in 2006, stating that the seven-year mandate “appears to be conservative,” and that “Congress should consider amending section 14 of the Pipeline Safety Improvement Act of 2002 to permit pipeline operators to reassess their gas transmission pipeline segments at intervals based on technical data, risk factors, and engineering analysis.”³

INGAA still believes that it would be the best policy for IMP reassessment intervals to be established by regulation, based upon technical analysis, rather than to be specifically prescribed by statute. Since IMP baseline assessments will be complete next year, and reassessments are already underway, perhaps GAO should be directed to update its recommendation to incorporate this experience (for example, by comparing the number of pipeline anomalies found during baseline assessments with anomalies found during reassessments). This would provide an additional measure of confidence should the Congress later choose to amend the statute to authorize a rulemaking on a risk-based approach.

³ GAO-06-945, Natural Gas Pipeline Safety: Risk-Based Standards Should Allow Operators to Better Tailor Reassessments to Pipeline Threats, September 2006.

3) **Seismicity** – The Senate bill was amended during markup to require the Secretary to “consider the seismicity” of an HCA when “identifying” such areas. This language as drafted creates some confusion. It is the pipeline operators, not the Secretary, who identify HCAs, based on the criteria established by PHMSA and subject to review by PHMSA. Should the House elect to address seismicity, INGAA recommends a clarification that would require pipeline operators consider seismic activity as part of their continuing IMP analysis.

Incident Notification

INGAA supports the Senate provision on this issue, but notes that a statutory requirement to notify all state and local government officials within a short time frame could be present significant compliance problems. The National Response Center was created to coordinate notification of an incident and remains the best way to achieve timely notification.

Cost Recovery for Design Reviews

PHMSA now is funded, almost exclusively, through user fees assessed on regulated liquid pipelines, LNG terminal owners, and natural gas transmission pipelines. The proceeds of this user fee fund the operations and staff of PHMSA, as well as the state grants that PHMSA provides annually.

PHMSA contends that a special user fee should be created to recover costs incurred when it reviews proposed new, large pipeline construction projects. PHMSA has indicated that this authority would be used only for exceptionally large projects that require significant PHMSA staff resources. The Senate bill creates a threshold for paying this new user fee that would apply to projects with a total cost of \$3.4 billion or greater, or projects that use “new or novel technologies or designs.”

INGAA generally supports the approach in the Senate bill but suggests that the dollar threshold for a covered project be adjusted for inflation on a periodic basis. Additionally, we would suggest the qualifier “new or novel” be modified to “prototype or unique technologies or designs.” While INGAA agrees with the Senate intent that activities funded via this special user fee not be included in the base budget that is defrayed by the regular user fee, this intent should be made expressly clear.

Special Permits

INGAA generally agrees with the modifications to special permit approval and review that are encompassed in this section. We suggest, however, that there be a predictable process if PHMSA proposes to modify, suspend or revoke a special permit. Such processes might include, for example:

- requiring the Secretary to consider the commercial and/or market implications of a change in pipeline operations that could result from the permit alteration, and
- providing an on-the-record hearing to the operator within a reasonable timeframe.

Maximum Allowable Operating Pressure

The Senate bill directs the Secretary to establish procedures for verifying maximum allowable operating pressure (MAOP) in populated areas. This is being done to confirm that the material strength of pipelines located in these areas is sufficient (with a margin of safety) to support those pipelines' MAOP.

INGAA can support this provision with one important modification – that the provision apply to pipelines that entered service prior to promulgation of the 1970 pipeline safety regulations. Pipelines that entered service after this date already were (and are) required to perform a hydrostatic test confirming the material strength of the pipeline. Once such a test has been completed successfully, there is no need for additional material strength tests. (This should not be confused with testing for corrosion, a time-dependent anomaly that requires periodic testing.) Since hydrostatic tests require a pipeline segment to be taken out of service for several weeks, and because this can be disruptive to pipeline customers, INGAA believes that such a requirement should be limited to instances only where the tests *truly are needed from an engineering standpoint*.

Administrative Enforcement Process

While Congress has granted PHMSA considerable enforcement authority in recent years, and now proposes to enhance that authority in the pending reauthorization bill, the “due process” required in PHMSA enforcement actions has not kept pace. PHMSA does not have the same procedures utilized by many other federal and state agencies – procedures that ensure a predictable and fair enforcement process.

S. 275 contains an important provision that directs PHMSA to develop regulations designed to ensure that pipeline operators receive a fair hearing in enforcement proceedings. The legislation instructs the agency to establish a process to assure impartiality through the designation of a neutral “presiding official” to oversee penalty assessments, corrective action orders, and related proceedings. The right to obtain a written transcript of enforcement hearings also is required to ensure transparency.

These are constructive and positive steps forward toward a common goal of impartial and timely enforcement. INGAA supports this Senate provision and commends PHMSA for opening a dialogue with us on how best to improve this aspect of its enforcement proceedings through the regulatory process. We look forward to continuing our discussion with PHMSA and hope to work with you and other interested stakeholders on refining this important provision.

Pipeline Safety User Fees

As mentioned previously, PHMSA is funded primarily through user fees assessed annually on jurisdictional liquid pipeline operators, liquefied natural gas terminal operators, and natural gas transmission pipeline operators. The statute that created the user fees in 1986⁴ specifically limits the collection of user fees from the natural gas sector to “each person operating a gas pipeline transmission facility,” with the exception of LNG terminal operators who have their own user fees. As a result, natural gas

⁴ 49 USC 60301

transmission pipeline operators are now being assessed user fees on a variety of regulatory activities that are outside the scope of transmission pipeline regulation, particularly with respect to natural gas distribution programs and state grants. These gas distribution program costs were once small. Now they are considerably larger than the costs for gas transmission activities – in fact, twice as large according to recent data from the PHMSA. This means that the natural gas transmission user fee now paid to PHMSA is three times larger than it would be if it were a genuine user fee program in which all users contributed according to cost causation.

While interstate pipelines are authorized by FERC to charge cost-based maximum rates that include the recovery of such user fees, pipelines in practice often must discount rates in order to retain business in a competitive environment. Such competition places pipelines at risk of not fully recovering the costs included in their rates, including the cost of PHMSA user fees. Given that the aforementioned PHMSA fees associated with gas distribution are not related to the transmission of natural gas, such costs should not be borne by transmission pipelines and/or their customers.

INGAA intends to engage stakeholders in developing a legislative solution for recovery of these non-transmission costs.

CONCLUSION

Mr. Chairman and Members of the Subcommittee, INGAA supports reauthorization of the Pipeline Safety Act this year. The progress being made in both chambers is encouraging. We know that pipeline safety legislation is only one part of an overall pipeline safety effort, but it is an important part. INGAA is embracing our responsibility to be safe and reliable transporters of natural gas, and we are working every day toward a goal of zero pipeline incidents. Thank you for your invitation today, and I am pleased to answer your questions.

SUMMARY OF INGAA TESTIMONY

The Interstate Natural Gas Association of America (INGAA) represents interstate natural gas transmission pipelines in the United States. Our members operate a 200,000 mile network of large-diameter pipelines that transport natural gas supplies throughout the nation. Due to the development of new domestic natural gas supplies, and an increasing demand for the clean-burning fuel, the pipeline infrastructure for natural gas has expanded significantly in the past decade, and will continue to grow.

While engineering standards have existing for natural gas transmission pipelines since the 1920s, Congress brought these pipelines under federal regulation with the enactment of the Natural Gas Pipeline Safety Act of 1968. Federal regulation and engineering standards ensure that these pipelines are designed, built, operated and maintained to a high level. Nonetheless, we recognize that our industry safety record is not perfect, and that even infrequent accidents can have tragic consequences.

Late last year, the INGAA Board of Directors decided that a fresh look at safety programs was needed. The first step was outlining aggressive goals for member companies, which include working toward a zero-incident performance level. Our five-point principles are outlined in the testimony.

While there has been much discussion in recent months about pipeline age, and whether older pipelines should be replaced simply because they are older, INGAA instead believes that the focus should be on pipeline fitness for service. Any pipeline not fit for service – regardless of age – should be repaired, replaced or retired. Age is one factor in considering whether a pipeline is fit for service, but it is not a controlling factor.

One of the INGAA guiding principles for pipeline safety is our proactive engagement with stakeholders. For example, we are actively engaged in local/state damage prevention (or “Call-Before-You-Dig”) programs. Another critical set of stakeholders are local first responders; the INGAA membership is engaged in, for example, training for first responders on handling natural gas pipeline emergencies.

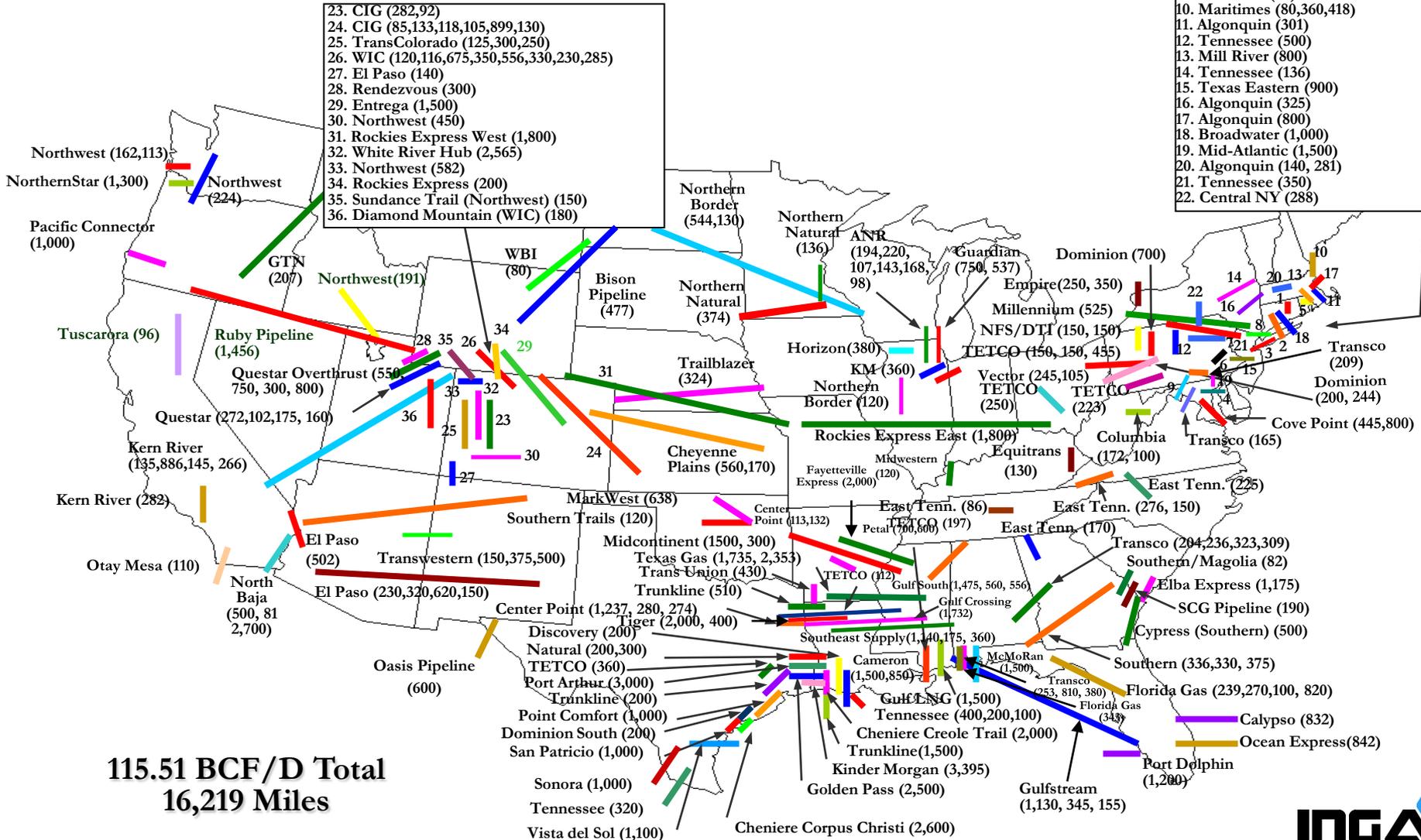
Legislation introduced in the Senate (S. 275) provides a good model as the House looks to draft its own pipeline safety reauthorization bill. INGAA generally supports S. 275, and we are urging its adoption in the Senate. The INGAA testimony includes some relatively minor additions or modifications to the Senate legislation for the House to consider.

Figure 2

Major Pipeline Projects Certificated (MMcf/d) January 2000 to May 2011

1. Algonquin (285, 131)
2. Islander East (285)
3. Iroquois (230,85, 100, 200)
4. Columbia (135,270)
5. Algonquin (140)
6. Transcontinental (105)
7. Transcontinental (130)
8. Transcontinental (100,142, 250)
9. Columbia (94)
10. Maritimes (80,360,418)
11. Algonquin (301)
12. Tennessee (500)
13. Mill River (800)
14. Tennessee (136)
15. Texas Eastern (900)
16. Algonquin (325)
17. Algonquin (800)
18. Broadwater (1,000)
19. Mid-Atlantic (1,500)
20. Algonquin (140, 281)
21. Tennessee (350)
22. Central NY (288)

23. CIG (282,92)
24. CIG (85,133,118,105,899,130)
25. TransColorado (125,300,250)
26. WIC (120,116,675,350,556,330,230,285)
27. El Paso (140)
28. Rendezvous (300)
29. Entrega (1,500)
30. Northwest (450)
31. Rockies Express West (1,800)
32. White River Hub (2,565)
33. Northwest (582)
34. Rockies Express (200)
35. Sundance Trail (Northwest) (150)
36. Diamond Mountain (WIC) (180)



INGAA Guiding Principles of Pipeline Safety

IMCI

Integrity Management Continuous Improvement

1

Our goal is zero incidents
a perfect record of safety and reliability for the national pipeline system.
We will work toward this goal every day.

2

We are committed to a safety culture as a critical dimension to **continuously improve** our industry's performance.

3

We will be relentless in our pursuit of **improving by learning** from the past and anticipating the future.

4

We are committed to **apply integrity management principles** on a **system-wide** basis.

5

We will engage our stakeholders, *the local community to the national level* - so they understand and can **participate in reducing risk.**