TESTIMONY

WITNESS QUARTERMAN

COMMITTEE: ECONOMIC MATTERS

TESTIMONY ON: HB 419

POSITION: OPPOSE

HEARING DATE: FEBRUARY 6, 2025

Washington Gas respectfully submits this statement in **OPPOSITION** to **House Bill 419- Natural Gas- Strategic Infrastructure Development and Enhancement (Ratepayer Protection Act)**

Introduction

My name is Cynthia L. Quarterman, and I am an independent consultant to Washington Gas Light Company ("Washington Gas" or "Company"). I served as the Administrator of the US Department of Transportation's ("DOT") Pipeline and Hazardous Materials Safety Administration ("PHMSA") from November 2009 through October 2014.[1] PHMSA is responsible for oversight of the safe transportation of oil, gas and other hazardous materials by all modes of transportation, including pipelines. During my tenure at PHMSA, I spearheaded DOT's Call to Action, which encouraged state legislatures and public utility commissions to remove high-risk materials expeditiously from natural gas systems around the United States. PHMSA enthusiastically endorsed this legislature's adoption of the Strategic Infrastructure Development and Enhancement Plan Act ("STRIDE") in 2013. A representative of PHMSA's staff testified before the Maryland legislature at the time encouraging STRIDE's adoption. This

[1] Attached as an exhibit is a copy of my Curriculum Vitae.

legislature should be proud of its leadership in improving pipeline safety in Maryland, and I encourage it not to abandon that course.

The purpose of my testimony is to discuss PHMSA's Call-To-Action and the history surrounding that critical safety initiative and to encourage the continued support for the STRIDE Act. Removing vintage and vulnerable materials on an accelerated basis is sound public policy that is imperative to pipeline safety in Maryland. Not only is it prudent to continue STRIDE without any additional roadblocks that could slow pipe replacement, it could be catastrophic if Maryland adopted a "fix it first" strategy that delayed replacement of vulnerable facilities and resulted in a pipeline-related incident.

History of The Call to Action

The first and foremost mission of PHMSA is ensuring pipeline safety. During my tenure as PHMSA Administrator, I witnessed several low probability, high consequence oil and natural gas pipeline incidents that destroyed communities and caused catastrophic injuries and deaths. One of those natural gas incidents occurred on September 10, 2010, when a longitudinal seam on a 1956 era, non-industry standard steel natural gas transmission pipeline operated by PG&E ruptured and devastated an entire neighborhood in San Bruno, California, injuring 51 people, killing 8 and destroying 38 homes. Then on January 18, 2011, a break on a 1942 vintage 12-inch cast iron distribution main caused an explosion and death of a utility worker in Philadelphia, Pennsylvania. Shortly thereafter, on February 9, 2011, there was a catastrophic incident on a 1928 vintage 12-inch cast iron distribution main operated by UGI in Allentown, Pennsylvania, injuring 3

people, killing 5 and destroying 8 homes. The then-Secretary of Transportation, Ray LaHood, and I visited the communities in San Bruno and Allentown, met with those affected and saw first-hand the destruction that can occur from a natural gas incident. Although the authority to oversee those pipelines had been delegated to state oversight agencies, such as the Maryland Public Service Commission,[2] so many harrowing pipeline incidents within a few months span caused the Department of Transportation to lead a nationwide Call to Action to replace, repair and/or rehabilitate the highest risk pipelines in April 2011.[3]

As a part of that Call to Action, PHMSA chaired multiple meetings to listen to stakeholder concerns and encouraged expedited removal of the highest risk pipe. The materials targeted specifically included cast and wrought iron, bare steel, copper, and certain kinds of welded pipe.[4] Secretary LaHood and I also delivered speeches before, and entreaties to, the Federal Energy Regulatory Commission ("FERC"), the National Association of Regulatory Utility Commissioners ("NARUC") and individual state utility commissions to ask for their support in

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[2] In accepting the responsibility to assume pipeline safety authority in Maryland, the Public Service Commission has accepted the responsibility to adopt the federal minimum safety regulations and guidelines issued by PHMSA, as well as the authority to issue additional or more stringent requirements for intrastate pipelines. Maryland has used that authority to issue its own pipeline safety laws and regulations compatible with those of PHMSA. Pub. Util. Art. Annotated Code of MD, Sections 2-113, 2-117(a), 2-121, 5-101, 11-102, 12-101 through 113 & 13-203; COMAR Title 20, Subtitles 55-57. Any interpretation of a regulation must be consistent with PHMSA's. *See* Guidelines for States Participating in the Pipeline Safety Program, revised Jan. 1, 2024 at 17, https://www.PHMSA.dot.gov/sites/PHMSA.dot.gov/Files/2024-State-Guidelines-with-Appendices-2023-12-18.pdf.

[3] *See* DOT News Release, "US Transportation Secretary Ray LaHood Announces Pipeline Safety Action Plan," https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/dot4111.pdf(hereinafter "DOT Call to Action News Release").

[4] *See* U.S. Department of Transportation Call to Action to Improve the Safety of the Nation's Energy Pipeline System, *https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/Action%20Plan%20Executive%20Version%201%20NOV%2011.pdf*.

identifying high-risk pipelines and accelerating pipeline replacement projects through appropriate rate recovery mechanisms. PHMSA Staff members also provided testimony before state legislatures, including here in Maryland, encouraging them to enact laws to expedite the removal of high-risk pipe.[5] Mechanisms such as STRIDE remove operational and funding barriers to pipe replacement, allowing utilities to do work that is critical to public safety as fast as possible.

PHMSA's outreach to NARUC and state commissioners was deemed critical to the success of the initiative, so critical that Transportation Secretary LaHood addressed the NARUC general assembly personally and I addressed the NARUC Gas Committee and met with the FERC Chair and staff. The reason was because the Department recognized that in order to make the Call to Action succeed, it needed the commitment of states to dedicate themselves to prioritizing safe pipelines for the public. Pipeline operators must have an environment that lowers operating and funding barriers that could delay the replacement of high-risk pipelines. Because of the time delay in recovering costs using traditional ratemaking authority, the Department encouraged alternative expedited funding mechanisms such as the one adopted here in Maryland. Fortunately, some states had already recognized the need for accelerated action and there were several approaches for operators to consider when asking for additional funds to replace aging infrastructure more quickly than previously planned. Maryland joined those

[5] *See* Testimony of Linda Dougherty, PHMSA Pipeline Safety Deputy Administrator for Programs, HTTPS://mgahouse.Maryland.gov/mga/play/36ec44e5420945288e70a25d4641def21d?catalog/03e481c7-8a42-4438-a7da-93ff74bdaa4c&playfrom=2992130.

states in 2013 when it enacted the STRIDE Act.

In my capacity as Administrator, I and members of PHMSA's staff sent letters to every state (including Maryland) with a pipeline safety program asking for the current status of pipeline infrastructure and plans to expedite high-risk pipeline removal. In July 2012, Maryland Public Service Commission then-Chairman Nazarian updated PHMSA on the status of the state's aging distribution infrastructure.[6] At that time, there were 360 miles of bare steel main, 2 miles of ductile iron main and 1,422 miles of cast iron main.[7] The Commission reported that it had been "actively pressing Maryland's gas distribution companies to accelerate the replacement of cast iron, ductile iron and bare steel mains."[8] It further stated that the operators had "triaged these replacements based on risk analysis and the determination that within Maryland bare steel is a greater threat than cast iron. However, that does not mean that they are ignoring their cast iron mains."[9] The reported infrastructure removal programs of Maryland's six operators varied from 5 years to an undetermined date, with the vast majority of the cast iron pipe in the undetermined timeline. The Maryland legislature itself responded strongly by enacting the STRIDE Act in 2013, allowing utilities to accelerate replacement of the state's vintage high-risk pipe. By adopting STRIDE, Maryland was in good company with forty-one states and the District of

[6] *See* Letter from Maryland Public Sevice Commission Chairmand Douglas Nazarian to David Appelbaum, PHMSA Office of Pipeline Safety date July 11, 2012.

[7] *Id.*

[8] *Id.*

[9] *Id.*

Columbia that also established some sort of state infrastructure replacement funding mechanism as of 2019.[10] Maryland natural gas utilities have replaced over 500 miles of distribution infrastructure and more than 100,000 individual services through STRIDE.

Materials Targeted in Call to Action

The 2011 Call to Action came on the heels of seismic change in the views of safety regulators in light of increasingly undeniable evidence. Specifically, while there had historically been a rule of thumb that many pipeline materials had an approximate life span in the 50 to 60 year time frame, the philosophy had changed to suggest that as long as a pipeline asset was well maintained and subject to good operating conditions, its life might be indefinite. Nonetheless, incident data pointed to serious concerns about certain pipeline materials that had been installed during earlier eras of pipeline construction. The Call to Action arose from an assessment of the accumulating evidence. Distribution lines were especially targeted because of their proximity to the public. The closer a pipeline is to a

[10] *See* American Gas Association, "State Infrastructure Replacement Activity" Report, Oct. 21, 2019, https://www.AGA.org/WP-content/uploads/2022/11/agastatereplacementactivity.docx; *see also* National Association of Regulatory Utility Commissioners, "Natural Gas Distribution Infrastructure Replacement and Modernization; A Review of State Programs" report, January 2020, https://pubs.naruc.org/pub/45E90C1E-155D-0A36-31FE-A68E6BF430EE?_gl=1*15x86qv*_ga*NzcwODg5NzI2LjE2ODQ0Mjg0NDI.*_ga_QLH1N3Q1NF*MTY5MjgxNTExOS4yNTguMS4xNjkyODE1Mzg2LjAuMC4w; *see also* examples of local distribution companies' programs to expedite removal of cast iron and unprotected steel pipelines, Department of Energy, Office of Energy Policy and Systems Analysis, "Natural Gas Infrastructure Modernization Programs at Local Distribution Companies: Key Issues and Considerations" January 2017 at 31-2, Table 2, https://www.energy.gov/sites/prod/files/2017/01/f34/natural%20gas%20infrastructure%20modernization%20programs%20at%20local%20distribution%20companies—key%20issues%20and%20considerations.pdf (hereinafter "DOE Modernization Analysis")

residence, business, or gathering place, the more likely an incident is to cause injury or death. In 2011, when the Call to Action was issued, it was apparent that many natural gas distribution pipelines were still relying on pipeline assets that were well beyond their initially forecasted life span.

The Call to Action targeted the highest risk pipelines for repair, replacement or rehabilitation, but there were certain pipeline materials that were deemed inherently unsafe based on past experience and data. Included among that designation was bare steel pipe, cast and wrought iron pipe and certain early vintage plastic pipes. Cast iron pipe has been of particular concern. As a pipeline material, cast iron presents special challenges. It is an alloy of iron and carbon, which may not appear to be damaged when it corrodes, but leaves "a brittle sponge-like structure of graphite flakes."[11] "A completely graphitized buried cast iron pipe may hold gas under pressure but will fracture under a minor impact, such as being hit by a workman's shovel."[12] Such graphitization "allows far more dramatic failure modes such as rapid crack propagation, and circumferential breaks. Such failures are potentially more severe than more ductile failure modes commonly seen in today's pipe materials."[13] To further complicate things, cast iron cannot be welded or cut during repairs. In addition, special measures are required to protect cast iron pipelines that have been disturbed. These measures,

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[11] *See* PHMSA Guidance Manual for Operators of Small Natural Gas Systems, January 2017 at III-5, https://www.PHMSA.dot.gov/sites/phmsa.dot.gov/files/doc/small_natural_gas_operator_guide_%28january_2017%29.pdf.

[12] *Id.*

[13] *See* PHMSA Part 192 Corrosion Enforcement Guidance at 150, https://www.PHMSA.dot.gov/sites/PHMSA.dot.gov/files/docs/corrosion_enforcement_guidance'part192_12_7_2015.pdf.

including an elaborate series of efforts to protect it from damage from vibration, impact, earth movement, outside forces, and future excavations, must be invoked as well as permanent protection from external loads.[14] The mere exposure of cast iron to investigate its condition can lead to leaks that could pose a threat to public safety. The special measures required near cast iron pipe make it a difficult material to work around in the modern underground. Said more simply, cast iron should not be repaired; it must be replaced.

Replacement – not repair – is consistent with long-standing federal safety standards. Dating back to the early 1990's, the National Transportation Safety Board ("NTSB") issued recommendations to PHMSA's predecessor agency, the Research and Special Programs Administration ("RSPA"), to:

> Require each gas operator to implement a program, based on factors such as age, pipe diameter, operating pressure, soil corrosiveness, existing graphite damage, leak history, burial depth, and external loading, to **identify and replace in a planned, timely manner cast-iron piping systems that may threaten public safety**.[15]

RSPA issued twin safety alerts echoing the NTSB's recommendations and reminding operators that "[c]urrent pipeline safety regulations require that cast iron pipe on which general graphitization is found to a degree where a fracture might result **must be**

[14] *See* 49 C.F.R. 192.755.

[15] *See* NTSB Pipeline Accident Brief No. DCA90FP001 (Aug. 6, 1991) (emphasis added)https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/NTSB%20Recommendation%20to%20RSPA%20P91-12.pdf.

replaced."[16] In addition, even if there is no immediate hazard, but the pipe is in unsatisfactory condition, the operator is **required to initiate a program to recondition or phase out the pipe involved**.[17] Finally, it noted, any excavated cast iron pipe must be protected against damage, such as enumerated above.[18]

Those decades old safety alerts remain in effect and are relevant to this day. What they do not address is the practicalities of how to identify and survey effectively long buried cast iron pipe that has not been exposed for another reason. Following the 2011 Philadelphia and Allentown incidents, PHMSA issued a further advisory bulletin regarding cast iron distribution pipe.[19] That advisory bulletin urged a comprehensive review of an operator's cast iron pipeline replacement program "to accelerate pipeline repair, rehabilitation, and replacement of aging and high-risk pipe" and to "develop and continually update and follow their plans[,] and **consider establishment of mandated replacement programs**."[20] Fortunately, most states, including Maryland, rose to the occasion and put in place programs focused on replacing the vintage high-risk materials such as cast iron.

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[16] *See* RSPA Alert Notice, ALN-92-02 (Jun. 26, 1992), https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/RSPA%20Alert%20Notice%2092-02.pdf, *see also* RSPA Alert Notice (Oct.11, 1991)(requiring identification and replacement of cast iron piping systems that may threaten public safety), https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/RSPA%20Alert%20Notice%2091-02.pdf; 49 C.F.R. 192.489.

[17] *Id.*

[18] *Id.*

[19] *See* PHMSA Pipeline Safety: Cast Iron Pipe (Supplementary Advisory Bulletin), 77 Fed. Reg. 57 at 17119 (Mar. 23, 2012), https://www.govinfo.gov/content/pkg/FR-2012-03-23/pdf/2012-7080.pdf.

[20] *Id.* at 17120.

More recently, cast iron incidents have continued to occur, causing fatalities and injuries. The causes include rainfall after drought conditions, earth movement, freeze-thaw cycles, water erosion, improper backfill and compaction causing overload conditions, subsidence (*i.e.*, ground shifting), and leaks at joints.[21] This performance is consistent with what DOT noted in its report on "The State of the National Pipeline Infrastructure" in 2011:

> One material that continues to be the focus of concern is cast iron…the small diameter cast iron pipes have low beam strength and are particularly susceptible to stresses from underground disturbances, such as ground movement, freeze-thaw cycles, soil erosion, undermining due to water main breaks, or nearby excavation activities. Most cast iron problems have been with small diameter, thin wall pipe. Larger, heavier pipe typically performs well, especially if not subject to graphitization…and when they have limited exposure to excavation damage.[22]

These incidents point to the relative fragility of cast iron pipes and the importance of their expedited removal.

Cast iron is not the only material that contributes to the threat to public safety. The Call to Action targeted all high-risk materials in the Nation's pipeline system that had been deemed over time to be obsolete or had a history of poor performance. After construction of cast and wrought iron pipe began to be phased out, bare or uncoated steel pipe became the material of choice on distribution

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[21] *See* PHMSA Cast Iron Inventory.

[22] *See* HTTPS://www.PHMSA.dot.gov/sites/PHMSA.dot.gov/files/docs/secretarys%20infrastructure%20report_revised%20per%20phc_103111.pdf.

pipelines up until around the early 1960s, when plastic pipe became available, and the early 1970s, when regulations required steel pipe to be coated. The absence of any coating on a steel pipe to protect it from corrosion caused by its environment can lead to consequential failures. Certain early vintage plastic pipe, installed from the 1960s to the early 1980s, have also been found to be vulnerable to brittle-like cracking. In addition to particular pipe materials, certain construction practices, such as dated welding and joining techniques, have been found to lead to leaks.

These concerns have only increased since. Although cast iron distribution mains only account for 1% of all distribution mains, they are responsible for 9% of all main-related incidents.[23] Cast and wrought iron main incidents are also twice as likely to cause fatalities and injuries (38% vs 19% on mains made of other materials).[24] Moreover, cast and wrought iron mains account for disproportionate numbers of fatalities and injuries on gas distribution mains (34% vs 16% on other mains).[25] These failure data led to the Call to Action.

Achievements of the Call to Actio and the STRIDE Act

In the US, pipelines were first installed in the 19th Century to transport

[23] *See* PHMSA Cast and Wrought Iron Inventory, https://www.PHMSA.dot.gov/data-and-statistics/pipeline-replacement/cast-and-wrought-iron-inventory., (hereinafter "PHMSA Cast Iron Inventory").

[24] *Id.*

[25] *Id.*

manufactured gas to fuel gas streetlights in Baltimore, Maryland. Eventually, natural gas was produced and used for heating, and pipelines proliferated in the early 1900s. Prior to the 1940s, those early systems – such as the systems constructed in Maryland and Washington, D.C. – and the initial pipes were made of cast or wrought iron and, later, bare steel pipe. At the time of the Call to Action, in 2011, more than 50% of the nation's active pipelines were constructed before the 1970's in response to the post-World War II building boom. The first pipeline safety standards were not adopted until 1968, meaning any pipelines constructed before then were not subject to any standardized safety requirements. Not surprisingly, the earliest heavily populated cities and states are home to some of the oldest and highest number of pipeline miles made of high-risk material. As a first adopter, Maryland is one of those places, and today it currently relies on the 6th largest percentage (6.1% cast iron) of the highest-risk distribution main pipeline materials in the nation to serve its energy needs.

At the end of 2011, there were 33,669 miles of cast/wrought iron gas distribution main and 15,408 service pipelines, or approximately 3% of the national gas distribution system.[26] Since the Call to Action, as of the end of 2023, there remained 15,872 miles of cast/wrought iron main and 6,694 services, or approximately 1% of the gas distribution system. In other words, more than 50% of cast and wrought iron mains and services in the United States have been retired since the Call to Action.[27] There

[26] *See* https://portal.PHMSA.dot.gov/analytics/sawdll?portalpages&portalpath=%2fshared%2fpdm%20public%20website%fci%20miles%2fgd_cast_iron (hereinafter "PHMSA Cast Iron Analytics").

[27] *Id.*

are now 24 states and one territory that have completely eliminated cast and wrought iron gas distribution pipelines.[28] If one looks back to the three states specifically cited by PHMSA as having excessively long cast iron replacement programs, one finds that in the twelve years between 2011 and 2023, Pennsylvania (with formerly a 100 year program), New York (with a former 80 year program), and Connecticut (with a former 79 year program) managed to retire 41, 47 and 38 percent of their cast iron main, respectively, which, if they continue the pace, will have them complete removal in less than 32 years. That is an astounding achievement for pipeline safety.

The eight states with more miles of cast iron mains than Maryland in 2011 (accounting for 24,290 miles or 72% of all the nation's cast iron mains), have since successfully reduced their cast iron mileage by 53.5% (to 12,994 miles), which is above the national average.[29] By comparison, Maryland has 67% of its cast or wrought iron mains from 2011 remaining, leaving it somewhat behind the average of other states, including those with the most mileage in 2011, in removing cast iron pipes.[30] Maryland must continue to pursue the expedited removal of cast iron, including eliminating barriers that slow the pace of removal of cast iron where they exist.

Similar to cast and wrought iron, at the time of the Call to Action, 63,019 miles of bare steel distribution main pipe and 2,859,197 services were in use. As of the end of 2023, there were 35,126 miles of bare steel distribution main and 1,390,774

[28] *See* PHMSA Cast Iron Inventory.

[29] *See* PHMSA Cast Iron Analytics.

[30] *Id.*

bare steel services remaining. That amounts to a decrease of 44% in bare steel mains and 51% in services.

Compared to other jurisdictions, Maryland had a relatively small inventory of bare steel pipe with 106.56 (0.7%) miles of mains and 51,392 (4.7%) services as of the end of 2023. That is down from 361 main miles and 97,448 services in 2011, approximately a 70.5% and 47.2% decrease of bare steel main miles and services, respectively. So, great progress has been made in removing bare steel pipelines, especially with respect to mains, from the Maryland systems compared to the remainder of the country. This legislature should be proud of that achievement and stay the course.

Leak Repairs of High-Risk Pipe Are Not Long-Term or Cost-Effective Solutions

As mentioned above, these high-risk pipeline materials have been in use well beyond their intended life span and may require extraordinary measures once they are disturbed. Allowing such safety conditions to persist until a leak occurs would be imprudent and could be catastrophic as indicated by past fatalities and injuries related to cast iron pipelines. PHMSA has two separate safety programs that gas utilities must comply with: one is for repair of leaking facilities; the other require the proactive identification and replacement of pipes. For the first program, PHMSA requires that pipeline operators survey their distribution pipelines periodically, identify leaks and repair them based on the urgency of the leak. The repair of those leaks is within the operator's regular operating and maintenance requirements. By contrast, accelerating the replacement or rehabilitation of the highest-risk pipe addressed in PHMSA's Call

to Action requires operators to take extraordinary action beyond the wait-and-see approach of merely plugging leaks. Wise safety management mandates a more proactive replacement-focused approach. Solely repairing vintage facilities does not accomplish PHMSA's pipeline safety objectives.

There is no question that replacing high-risk pipeline materials in Maryland has been and will be expensive. However, when it comes to pipelines, safety must be Maryland's top priority. I understand the desire to focus on the cost of replacing pipelines and how that might affect rates. But there are also costs associated with ignoring safety needs that could lead to catastrophic pipeline incident-related injuries and fatalities. The choice is simple. Maryland should not gamble that high-risk, aged pipelines will continue to provide reliable service until electrification occurs. Federal pipeline safety standards demand replacement action. As recently as January 2024, PHMSA reported to Congress that "[r]eplacement is the long-term solution to ensure [cast iron] pipeline integrity."[31] Any proposed "alternatives to replacement" are simply inadequate and would leave Maryland natural gas pipelines non-compliant with federal guidelines.

Climate Change Has Not Diminished Pipeline Replacement's High Priority

The Call to Action remains an ongoing national concern. Congress enacted the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, requiring the Secretary of

[31]Letter to Senator Cantwell from Deputy PHMSA Administrator Tristan Brown dated August 30, 2024, attaching Report on "Integrity Assessment of Distribution Pipelines" at App. D dated January 2024. Https://www.PHMSA.dot.gov/sites/PHMSA.dot.gov/files/2024-09/Report%20to%20Congress%20-%20Integrity%20Assessments%20of%20Distribution%20Pipelines.pdf.

Transportation to conduct a survey to measure the progress that operators were making in replacing cast iron gas pipelines, which PHMSA keeps current on its website.[32] Although it has been more than a decade since the Department of Transportation's initial Call to Action, the Department appears to remain laser focused on ensuring that high risk pipe is removed from the natural gas distribution system as soon as possible. The initial Call to Action, follow up reports, Safety Alerts and Advisories all remain in effect.

Moreover**,** the recently enacted Bipartisan Infrastructure Law of 2021 authorized a new Natural Gas Distribution Infrastructure Safety and Modernization Grant Program to repair, rehabilitate or replace municipal or community-owned distribution pipeline systems to reduce safety incidents and avoid economic loss. The law appropriated $1 billion to that cause for fiscal years 2022 through 2026, and PHMSA has issued more than $500 million in grants to communities and municipalities. It has granted funding to the City of Richmond and Philadelphia Gas Works ("PGW"), that have systems that are similar in age and composition to parts of Maryland. As shown by Congress' action and the PHMSA grants, replacement of high-risk pipe is an ongoing concern and focus of federal safety activity.

In recent years, PHMSA has seen its authority expand to include minimizing greenhouse gas ("GHG") emissions. Congress passed the Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2020 ("PIPES Act 2020") to strengthen

[32] Public Law 112-90, 125 stat 1904 (Jan. 3, 2012).

PHMSA's jurisdiction to minimize methane emissions to improve public safety and the environment. This expansion of authority was in response to the national goal to address climate change in keeping with its aggressive climate-related timelines. One important mechanism to reach that goal is to reduce the GHG emissions associated with the transportation of natural gas by pipeline. PHMSA has issued regulations that expedite actions to address leaks on natural gas distribution facilities to reduce methane emissions. The need to replace high risk pipelines is consistent with these guidelines. In its June 2021 Advisory Bulletin addressing methane leaks, PHMSA reiterated that, in addition to addressing emissions, the PIPES Act of 2020 also "requires [operator's plans] to address the replacement or remediation of pipelines that are known to leak due to their material (including cast iron, unprotected steel, wrought iron, and historic plastics with known issues…49 U.S.C. 60108(a)2)(E))."[33]

In addition to DOT, other federal agencies, too, have remained committed to natural gas pipeline modernization. In 2014, for example, DOE launched a Natural Gas Infrastructure Modernization Initiative to improve safety and reduce methane emissions by, among other ways, accelerating pipeline replacement. In 2016, NARUC and DOE initiated a 3-year technical partnership on accelerating infrastructure modernization and repair to gas distribution pipelines. From 2016 until 2024, the Environmental Protection Agency ("EPA") oversaw a Voluntary Methane Challenge Partnership with local distribution companies ("LDCs") many of which committed to

[33] *See* PHMSA Advisory Notice, Pipeline Safety: Statutory Mandate to Update Inspection and Maintenance Plans to Address Eliminating Hazardous Leaks and Minimizing Releases of Natural Gas from Pipeline Facilities (Jun. 3, 2021), https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2021-06/PHMSA%20Advisory%20Bulletin%20-%20PIPES%202020%20Section-114_0.pdf.

pipeline replacement projects to decrease methane emissions. While reducing methane emissions has become an important federal policy, this has not meant a move away from accelerating pipeline replacements. Indeed, pipeline replacements play a key role in reaching that goal, as acknowledged by many federal agencies and Maryland (*e.g.*, by enacting its 2022 Climate Solutions Now Act). Accelerated pipeline replacement through STRIDE already provides a double win – improving public safety and addressing GHG emissions. The modifications proposed at this time, however, would erode the ability of gas utilities to achieve the same pace of emissions reductions going forward.

It is in the best interest of Maryland and all states to keep all alternative energy options open and to maintain energy diverse sources as the new energy future develops. The reliable and safe provision of natural gas service, in particular for purposes of heating, is an energy security issue. Other states that do not maintain a robust natural gas distribution system have faced severe and significant consequences during extreme cold weather events in recent years. In particular, states such as Texas are struggling to bring power to their electric grid and maintain service reliability during winter months. A pointed, close-to-home reminder of the importance of energy diversity and the challenges to electrification occurred during Winter Storm Elliott over the 2022 Christmas holiday weekend. During this event, PJM Interconnection, LLC was barely able to maintain service in its 13-state Mid-Atlantic service area. Relatedly, the North American Electric Reliability Corporation recently reported in its annual long-term reliability assessment that half of the United States is at a high risk of an electric power

shortfall in the next decade.[34] The need for Maryland to continue to maintain safe and reliable gas distribution infrastructure into the future is further supported by these realities.

Maryland may ultimately need to meet its climate goals through a combination of approaches beyond its current focus on electrification, given the challenges the state is experiencing with generation availability and affordability, and natural gas distribution companies across the Nation and the world are piloting projects to use existing natural gas infrastructure to transport hydrogen and renewable natural gas as part of a lower carbon future. The United States' extensive existing natural gas pipeline infrastructure makes it an ideal candidate for those energy alternatives should they prove technologically and financially feasible. It is important for Maryland to prepare itself for that future by replacing vintage materials.

Conclusion

I urge this Committee to continue to support the STRIDE Act and not back away from continuing accelerated removal of high-risk natural gas pipe as Maryland advances its climate goals. In addition, I suggest that the state ensures that all affected agencies

[34] Https://www.nerc.com/news/Pages/Urgent-Need-for-Resources-over-10-Year-Horizon-as-Electricity-Demand-Growth-Accelerates,-2024-LTRA-Finds.aspx

prioritize removal of high-risk pipe in the fastest, safest, most environmentally responsible, and least costly manner possible for Maryland residents.

It is of the utmost importance that all pipes be operationally safe and reliable when customers require service. Replacement of high-risk pipelines are clearly necessary to ensure their safety and reliability in Maryland. Since the Call to Action was issued, Maryland's cast iron replacement has lagged somewhat behind that of the average state. It is not time to turn back now, but instead for Maryland to continue its efforts. In addition to cast iron, the Maryland pipeline system contains other high-risk pipeline that PHMSA has targeted for removal, including bare steel, vintage mechanically coupled wrapped steel pipe, wrapped steel pipe without cathodic protection, copper pipe and pre-1975 vintage plastic pipe. It is imperative for public safety that the Maryland legislature continue the STRIDE Act to fund removal of vintage pipe in Maryland, and that it seek to remove barriers that would reduce the effectiveness of this regulatory tool that is so critical to public safety.