



*The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114*

Charles D. Baker
GOVERNOR

Karyn E. Polito
LIEUTENANT GOVERNOR

Matthew A. Beaton
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1181
<http://www.mass.gov/eea>

**Testimony before the
Senate Committee on Commerce, Science and Transportation
Matthew A. Beaton, Secretary of Energy & Environment**

Monday, November 26, 2018

Senator Markey, Senator Warren and members of the Senate Committee on Commerce, Science and Transportation, thank you for the opportunity to provide testimony on behalf of the Baker-Polito Administration regarding pipeline safety in Massachusetts and the response to the Merrimack Valley overpressurization event that occurred the afternoon of September 13, 2018.

In the wake of this incident, which was caused by the release of high-pressure natural gas into a low-pressure gas distribution system, the Baker-Polito Administration immediately began coordinating relief efforts for residents and businesses displaced by the disaster. In addition to these relief efforts we took the following measures to assess and restore the safety and integrity of our pipeline infrastructure:

- declared a State of Emergency;
- directed Eversource to lead gas restoration efforts in Columbia Gas' service territory;
- directed Columbia Gas to hire an independent Chief Recovery Officer;
- issued moratoria on all natural gas work, excluding emergency and compliance work in two natural gas service territories;
- issued an RFP and subsequently contracted with an independent evaluator to conduct a comprehensive safety evaluation of Massachusetts' natural gas infrastructure;
- coordinated efforts to secure a commitment from all local gas distribution companies in the Commonwealth to adhere to industry best practices; and

- filed legislation to implement the November 14, 2018 recommendation of the National Transportation Safety Board (NTSB) to help prevent over-pressurization events in the future.

Before diving into further details regarding the Administration's response in the immediate aftermath of the fires and explosions in Lawrence, Andover, and North Andover, I'd like to first provide a brief overview of the Secretariat of Energy and Environmental Affairs' jurisdiction over intrastate natural gas pipeline safety in the Commonwealth.

During the course of my testimony, I will be unable to discuss the content of the ongoing investigations by both the NTSB and the Massachusetts Department of Public Utilities (DPU) Division of Pipeline Safety (Division), as I do not want to prejudice those investigations.

Overview of EEA Organization & DPU Jurisdiction

As the Massachusetts Secretary of Energy and Environment, I oversee the Commonwealth's six environmental, natural resource and energy regulatory agencies, which include the Departments of Environmental Protection, Public Utilities, Energy Resources, Conservation & Recreation, Agricultural Resources, and Fish and Game. The Massachusetts Department of Public Utilities (DPU) is the Commonwealth agency with jurisdiction over investor-owned electric power, natural gas, and water companies, as well as bus companies, moving companies, and transportation network companies.

Notably, the DPU is the state agency that has assumed the responsibility for intrastate pipeline facilities, pursuant to federal delegation by the Pipeline and Hazardous Material Safety Administration (PHMSA) (49 USC 60105) and State law (MGL Chapter 164 §105A). Under the annual certification provided by PHMSA to delegate its authority, the Department of Public Utilities' Division of Pipeline Safety is responsible for pipeline inspections, compliance and enforcement of federal and state rules, regulations, orders, safety programs, accident investigations, record maintenance and reporting.

The Division's Public Utility Engineers (PUEs) are charged with performing random and scheduled on-site audits and inspections of intrastate natural gas pipeline distribution facilities and pipeline crews, including reviews of crew qualifications, methods of work, and drug and alcohol screening. These PUEs also perform pipeline corrosion inspections and inspections of Liquefied Natural Gas (LNG) facilities, as well as assist with the investigation of accidents involving public utility organizations to determine the cause and origin of the incident.

It should be noted that, except in instances involving the two ongoing moratoria, the Division does not approve routine pipeline work in the Commonwealth; however,

companies are required (per 220 CMR 101.04) to notify the Division 48 hours in advance of the start of construction of pipeline installations projects of 5,000 feet or more.

The Division is also responsible for reviewing, every 5 years per PHMSA guidelines, programs and plans of the natural gas distribution companies, to ensure consistency with federal and state rules and regulations, such as:

- Operations & Maintenance Plan;
- Operator Qualification Program;
- Public Awareness Program;
- Distribution Integrity Management Program (DIMP); and
- Transmission Integrity Management Program (TIMP).

In addition to the Division's review of these plans and programs, the Commission of the DPU annually reviews and approves Emergency Response Plans of natural gas distribution companies in the Commonwealth.

When the Division conducts onsite pipeline safety inspections, a company's site work is checked against these plans and programs for consistency. If the Division finds deficiencies in either these plans and programs or the site work conducted by a company, they initiate an investigation which may lead to the issuance of fines, penalties and corrective actions. In response to violations of Federal and State regulations, the Department of Public Utilities can issue a \$200,000 fine for each violation and a maximum civil penalty of up to \$2,000,000(49 USC 60122; 220 CMR 59).

Since 2016, the DPU has undertaken a number of proactive actions to increase pipeline safety in the Commonwealth, which notably includes the Division annually developing a risk-based inspection plan to ensure the targeted deployment of inspection resources on the activities, plans, programs and infrastructure that pose the greatest safety risk. In 2016, the Division also initiated an investigation of all district pressure regulation stations to ensure compliance with federal regulations (49 CFR Part 192.619). When the Division discovered that some district regulator stations were set at the Maximum Allowable Operating Pressure ("MAOP"), they advised all companies of the risks associated with this. Setting pressure at the MAOP is not a violation of federal regulations; however, Columbia voluntarily agreed to lower the operating pressure.

Timeline of the Immediate Response to Events of September 13, 2018

On the afternoon of September 13, 2018, immediately following the fires and explosions in the cities of Lawrence, Andover and North Andover, the Commonwealth mobilized emergency response capabilities through the Massachusetts Emergency Management Agency (MEMA) and the State Police, establishing a mobile State Police Incident Command Center in Lawrence, MA.

Within hours of the incident, the Governor, Lieutenant Governor, myself and a number of administration officials arrived on-site. Our primary goal was to stabilize the situation and ensure local officials had the resources and information necessary to extinguish fires, clear and secure buildings and set-up shelters for displaced residents.

We simultaneously began assessing the emergency response capabilities of Columbia Gas, worked with National Grid to cut electric power throughout the impacted area and through the Department of Public Utilities, dispatched the Director of Pipeline Safety and three DPU inspectors to the Merrimack Valley region. Given the unprecedented emergency circumstances coupled with the insufficient response from Columbia Gas within the first 24 hours of emergency response, Governor Baker issued a Declaration of Emergency by 3PM on Friday September 14, 2018.

This declaration authorized DPU Chairman Angela O'Connor, pursuant to section 4B of MGL Chapter 25, to take any action "necessary to assure public safety and welfare through the priority restoration or continuing availability of gas, electric, and water utility services." Under this authorization and in response to the need for experienced management capable of advanced resource coordination and effective communication, Chairman O'Connor promptly directed Eversource to take management control over the effort to safely restore utility services. Subsequently, Eversource, with the oversight and support of the Administration, led an effort with over 1,000 mutual aid resources, to shut off gas service, clear and make safe every structure within the impact zone, restore gas service to over 10,000 customers outside the impact zone and restore electric power to 18,000 customers.

Shortly thereafter, on September 21, 2018, DPU Chairman O'Connor appointed, Joe Albanese, Commodore Recovery LLC, as the Chief Recovery Officer, to manage and coordinate the restoration efforts. Joe is the Founder, President and CEO of Commodore Builders.

Joe leveraged his 28 years of military service, including 20 years with the Naval Construction Forces, to build a command and control organization, consisting of over 14 divisions, supporting the mission to safely restore services to over 8,400 gas meters impacting more than 10,000 dwellings and 680 businesses. In coordination with Baker-Polito Administration and NiSource, the restoration effort has been effective in:

- mobilizing over 4,500 plumbers, electricians, mutual aid workers, contractors, linguists and staff;
- replacing 43.3 miles of main pipeline and 5,086 service lines;
- sourcing and distributing 14,000 hot plates and thousands of space heaters;
- arranging for alternative housing options (Hotels, RVs, Apartments) to accommodate over 6,000 families;

- maintain a shelter & warming center to accommodate an additional 1,000 individuals;
- installing over 25,000 smoke and carbon monoxide detectors; and
- launching 3 claims and business centers in Andover, Lawrence and North Andover to provide in-person assistance.

Since September 13, 2018, I maintained a constant presence, 7-days a week, with staff from my Secretariat and the Governor's office to assist in the building and implementation of recovery operations. To date, the Baker-Polito Administration continues to maintain a daily support function in these operations.

Notably, the Administration has been committed to deploying energy efficient products during all phases of the restoration. That effort will not end when the natural gas service is restored to the Merrimack Valley and we are pleased that Columbia Gas has announced the launch of a targeted weatherization and energy efficiency campaign in the three affected communities. We have been in discussions with the company regarding the components of the program, but will certainly focus on deployment of insulation, as well as air source heat pumps and anticipate launching the program with the new 3-year energy efficiency plan that will commence on January 1st.

Ongoing Reviews of Natural Gas Safety

Simultaneous with the mobilization of restoration and recovery efforts, the Baker-Polito Administration quickly turned to ensuring both the continued safety and integrity of natural gas infrastructure in the Commonwealth.

On September 26, 2018, after considering other states' actions in the aftermath of significant gas incidents and in consultation with PHMSA, the DPU announced the intent to hire an independent evaluator to assess, out of an abundance of caution, the safety of pipeline infrastructure throughout the Commonwealth. The selection of Dynamic Risk Assessment Systems, Inc., a Texas based firm with industry-leading technical expertise in pipeline risk and asset integrity management, was recently publicized on November 1, 2018.

Dynamic Risk will examine the operation and maintenance policies and practices of the Commonwealth's gas distribution companies, including municipal gas companies. The independent evaluator will also examine the physical integrity of the Commonwealth's gas distribution system. A preliminary report, which will complement the NTSB's ongoing review, is expected within 120 days. We anticipate that the independent evaluator's report will provide concrete recommendations regarding improving the integrity and safe operation of the Commonwealth's aged natural gas infrastructure.

Following another natural gas overpressurization event in Woburn, on October 8, 2018, Chairman O'Connor issued a moratorium on all work, except emergency and required compliance work, in National Grid's service territory, citing a "persistent disregard for federal and state pipeline safety regulations." This moratorium came on the heels of a September 26, 2018 letter to National Grid, detailing 29 possible violations of pipeline safety regulations by the company and a September 28, 2018 request to the company for additional information regarding pipeline activities in the company's territory. National Grid has responded to these allegations and the Division has issued additional discovery to the company and is continuing to investigate these possible violations.

On October 12, 2018, following the issuance of the National Transportation Safety Board's preliminary report, the DPU also issued a moratorium on all non-emergency or compliance work in Columbia Gas' service territory.

Last week, in coordination with the Northeast Gas Association (NGA), the Baker-Polito Administration announced that all natural gas distribution companies in Massachusetts committed to adopting industry best practices – a Pipeline Safety Management System: [American Petroleum Institute's \(API\) Recommended Practice 1173](#). This marks the first time an entire state has committed to Recommend Practices 1173, which was developed in the aftermath of high-profile natural gas incidents like the 2010 San Bruno disaster.

Finally, in response to the NTSB's November 14 recommendations, the Baker-Polito Administration also filed legislation last week to ensure that gas utility work that could pose a material risk to public safety is reviewed and approved by a certified professional engineer. Currently, Massachusetts is one of many states that exempt public utility companies' work from needing the approval of certified professional engineers.

Lessons Learned and Recommendations

While I've provided an overview of Massachusetts' response to the events of September 13, 2018, both the NTSB report and the recommendations of the Independent Evaluator hired by the DPU will provide further insight into additional changes in protocols, regulation, and statute to ensure gas pipeline safety in the Commonwealth.

The Baker-Polito Administration looks forward to working with the Massachusetts Legislature to pass the legislation we filed last week to implement the first NTSB statutory recommendation and we are encouraged by the Commonwealth's natural gas system operator's national leading agreement to adhere to best practices. We hope both of these efforts will initiate a conversation at the national level regarding appropriate industry standards and protocols to prevent such disasters in the future.

The issue of pipeline inspectors has also been an area of public scrutiny in the wake of the Merrimack Valley overpressurization event; however, based on the information made

publicly available to date, we believe that no additional number of inspectors could have prevented this incident. PHMSA recommends a total of 10 Public Utility Engineers (PUEs), which includes both the certified inspectors and those PUEs undergoing federally mandated pipeline inspector certification.

Since 2014, the number of PUEs in the Division has annually averaged at between 10-12 positions. The Pipeline Safety Division currently employs 8 natural gas public utility engineers (PUEs) - which includes 6 certified inspectors and 2 PUEs undergoing the federal certification process. In addition to these 8 PUEs, three (3) new PUEs are expected to begin employment in mid-December, and the Division is in the process of hiring two (2) additional PUEs and one (1) Assistant Director of Pipeline Safety.

In 2017, the Division's pipeline inspectors conducted 1,177 inspections, up from 880 in 2016. Additionally, PHMSA annually evaluates the Commonwealth's effectiveness and [PHMSA's 2017 Evaluation of the Department of Public Utilities](#) gave the Commonwealth's Pipeline Safety program a perfect score for incident investigations, program inspection procedures, damage prevention, field inspections, and compliance activities. Massachusetts PHMSA evaluations have trended upwards from a score of 89.3% in 2014 to a score of 97.4% in 2017.

The focus on pipeline inspector numbers has, however, highlighted the issue of retaining qualified pipeline inspectors, which we understand is a challenge not unique to Massachusetts and is a topic worth further exploration.

Conclusion

The Baker-Polito Administration, the Executive Office of Energy and Environmental Affairs and the Department of Public Utilities look forward to a continued dialogue with the Committee regarding all of these issues to ensure the safety of Massachusetts' natural gas infrastructure.

We look forward to the results of the NTSBs full review of the causes of the overpressurization event that occurred on September 13, 2018 and stand ready to implement both the recommendations of the NTSB and the Commonwealth's independent evaluator.

In closing, I would like to note that this was a devastating and unfortunate incident that resulted in tremendous loss for many residents of the Merrimack Valley. While there were unacceptable oversights that led to the incident and a slow initial response, I do want to make note of the genuine commitment and dedication I have observed from NiSource, particularly from their hundreds of dedicated employees who have left their families and relocated themselves in an effort to restore the quality of life, as best possible, for the residents of Merrimack Valley. I would also like to thank the Mayor of Lawrence, the town

managers of Andover and North Andover and the countless local, state, and federal officials who have partnered with us throughout this effort to break down barriers and collaborate on solutions to a number of complex situations throughout the restoration. The leadership and service of these individuals to our communities is commendable and has been an essential element of this restoration. Additionally, I would like to thank the multiple companies and utilities, along with the 4,500 plumbers, electricians, mutual aid workers, contractors, linguists and staff who united under the common mission of restoration of the region.

Finally, Eversource is also deserving of our gratitude for their willingness to rise to the immediate challenge associated with securing homes and businesses in the immediate aftermath of events and restoring utility services to impacted residents and businesses. Their leadership and ability to quickly mobilize resources was invaluable to the Commonwealth.

Thank you again to the Committee for the opportunity to provide testimony on this important issue.