

# United States Senate

WASHINGTON, DC 20510

September 17, 2018

Stephen H. Bryant  
President and Chief Operating Officer  
Columbia Gas of Massachusetts  
4 Technology Drive  
Westborough, MA 01581

Joseph Hamrock  
President and Chief Executive Officer  
NiSource  
801 E. 86th Avenue  
Merrillville, IN 46410

Dear Mr. Bryant and Mr. Hamrock,

On September 13, 2018, natural gas explosions in Lawrence, North Andover, and Andover, Massachusetts destroyed as many as 80 homes and buildings, caused upwards of 70 fires, injured at least 25 people, and caused the death of an 18-year-old from Lawrence, Massachusetts. Columbia Gas of Massachusetts (“Columbia Gas”) handles the natural gas distribution in the Merrimack Valley region where these fires occurred, serving around 50,000 customers. We have requested a hearing in the Senate Commerce Committee on this incident and we hope that you will cooperate fully and transparently with federal investigators. We write to request that you provide us with information in order to help the American people understand why this terrible disaster occurred, whether the company was sufficiently prepared to respond to an incident of this magnitude, and how we can prevent any similar tragedy in the future.

Therefore, we request your responses to the following questions by the close of business on September 19, 2018:

According to briefings from federal officials, this catastrophe was likely linked to an over-pressurization of the gas distribution system. Over-pressurization throughout a distribution system can cause gas leaks and explosions. The federal Pipeline and Hazardous Materials Safety Administration (PHMSA) has reported that the pressure in the Columbia Gas system should have been around 0.5 pounds per square inch (PSI), but readings in the area reached at least 6 PSI — twelve times higher than the system was intended to hold. Columbia Gas reported that 8,600 gas customers in the region were affected.<sup>1</sup>

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<sup>1</sup> *Incident in Merrimack Valley*, Columbia Gas of Massachusetts (Sept. 14, 2018), <https://www.columbiagasma.com/en/merrimack-valley-incident/previous-statements>.

1. PHMSA regulations require natural gas pipeline operators to prepare and submit an Integrity Management Plan. These plans contain steps operators will take to ensure the safe and reliable operations of their pipeline networks. Please provide a complete and unredacted copy of Columbia Gas's Integrity Management Plan for the region where this incident occurred, including when regulators most recently reviewed and approved it.

According to the National Transportation Safety Board (NTSB), on Thursday, September 13, a pressure spike registered in a Columbia Gas control room in Columbus, Ohio.

2. At what time was this pressure spike registered in the control room?
3. At what time was this pressure spike recognized by Columbia Gas personnel?
4. Should this pressure spike have triggered alarms or other responses in the control room? Did this occur? Did Columbia Gas personnel disable any alarms or other notification systems before, during, or after this event?
5. What actions did Columbia Gas take in response to this pressure spike and when did those actions occur?
6. Please provide a timeline of Columbia Gas's awareness of the over-pressurization of the distribution system, including how and when each of you were first personally made aware of the situation.<sup>2</sup>

Federal regulations require pipeline operators to immediately report these sorts of pipeline incidents to the National Response Center. These regulations state, in part, that the report must be filed "[a]t the earliest practicable moment following discovery, but no later than one hour after confirmed discovery."<sup>3</sup>

7. At what time did Columbia Gas report this incident to the National Response Center and did it do so within one hour?

According to the Massachusetts Department of Public Utilities (DPU), Columbia Gas filed a proposed emergency plan in May of this year, which was approved on September 7, 2018.<sup>4</sup> However, its response thus far has left its customers questioning the company's ability to handle an emergency like this.

8. Please provide a complete and unredacted copy of Columbia Gas's current emergency response plan for the affected area.
9. Please provide details of Columbia Gas's emergency management response protocol and how it was engaged on September 13.
10. It appears that Columbia Gas did not notify its customers or the public of this event until an update at 9:00 p.m. on September 13, nearly four hours after the explosions were first

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<sup>3</sup> 49 CFR § 191.5.

<sup>4</sup> D.P.U. 18-ERP-01.

reported.<sup>5</sup> Is this timeline accurate, and does it comply with the requirements of Columbia Gas' emergency plan?

Earlier on Thursday, September 13, before the fires and explosions occurred, Columbia Gas announced that it was "upgrading natural gas lines in neighborhoods across the state," with benefits including "enhanced safety features" and "reliability of service for years to come."<sup>6</sup> Some of the neighborhoods listed for improvements are the same areas devastated by the explosions.

11. Please provide a detailed description of the nature of the planned upgrades in the area, including any work underway or completed before the fires and explosions in the afternoon of September 13, 2018.
12. Please identify the companies with which Columbia Gas contracted to perform the upgrades in these neighborhoods.
13. Please detail whether any of these upgrades entailed the conversion of pipeline networks from low to higher pressure, or the replacement of older pipelines. If they did, please describe how Columbia Gas and any contractor carries out the conversion process.
14. Were state or federal regulators aware of these planned upgrades in these neighborhoods? If so, when were they notified?
15. Please detail how this work was being done in compliance with PHMSA regulations relating to uprating — increasing the operating pressure of a pipeline system — or pipe replacement without the immediate intention of increasing the operating pressure of the pipeline system.

On April 13, 2018, Columbia Gas filed a rate increase petition (D.P.U. 18-45) with the Massachusetts DPU under which rates on consumers would rise by 3.6 percent and company revenues would increase by \$24.1 million.<sup>7</sup>

16. Please describe, in as much detail as possible, how much of the requested rate increase would be dedicated to enhanced safety of operations, along with inspections and upgrades in the impacted neighborhoods of Lawrence, North Andover and Andover

Columbia Gas does not have a spotless operating history in Massachusetts. In 2012, a Columbia Gas worker punctured a mislabeled steel service line, resulting in an explosion that injured 17

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<sup>5</sup> *Original 9/13 at 9PM*, Columbia Gas of Massachusetts (Sep. 13, 2018), <https://www.columbiagasma.com/en/merrimack-valley-incident/previous-statements>.

<sup>6</sup> *Improving natural gas service across Massachusetts*, Columbia Gas of Massachusetts (Sept. 13, 2018), <https://www.columbiagasma.com/en/about-us/newsroom/news/2018/09/13/improving-natural-gas-service-across-massachusetts>.

<sup>7</sup> *Columbia Gas of Massachusetts files new rates with the DPU*, Columbia Gas of Massachusetts (Apr. 13, 2018), <https://www.columbiagasma.com/en/about-us/newsroom/news/2018/04/13/columbia-gas-of-massachusetts-files-new-rates-with-the-dpu>.



people and caused \$1.3 million in property damage.<sup>8</sup> Columbia Gas leaks also occurred in Walpole in 2004 and 2007, Easton in 2007, West Barnstable in 2009, West Springfield in 2011, and Seekonk in 2012. No injuries were reported in any of those incidents.<sup>9</sup>

17. Following these previous incidents, what actions, if any, has Columbia Gas taken to improve its operating and response procedures in order to avoid or minimize future accidents?

In 2016, PHMSA issued a final rule that expanded the mandatory installation of excess flow valves in new homes.<sup>10</sup> These valves are safety devices installed on distribution pipelines, which can be closed if the flow of gas through the line increases significantly. Use of these valves can avoid over-pressurization in some circumstances and minimize the risk of accidents.

18. Please detail whether new residential buildings in the Merrimack Valley area had been outfitted with excess flow valves.
19. Does your company believe that excess flow valves should be installed on all homes serviced by these sorts of pipeline networks? If not, why not? If so, what steps does Columbia Gas intend to take to retrofit existing homes with excess flow valves?

We look forward to receiving your responses to these questions and to your complete cooperation with federal and state investigations. It is imperative that the people of the Commonwealth are provided understand what caused this disaster and how you responded to it, in order to ensure that we never again face a similar tragedy. Should you have any questions about these requests, please contact Morgan Gray in Senator Markey's office at 202-224-2742.

Sincerely,

  
Edward J. Markey  
United States Senator

  
Elizabeth Warren  
United States Senator

<sup>8</sup> 453 Worthington Street, Springfield MA Incident Report, Pipeline Engineering and Safety Division of the Massachusetts Department of Public Utilities (Sept. 19, 2014), [https://www.mass.gov/files/9-18-14-springfield\\_pipeline\\_incident\\_report\\_redacted.pdf](https://www.mass.gov/files/9-18-14-springfield_pipeline_incident_report_redacted.pdf).

<sup>9</sup> Pipeline Incident 20 Year Trends, Pipeline and Hazardous Materials Safety Administration, <https://www.phmsa.dot.gov/data-and-statistics/pipeline/pipeline-incident-20-year-trends>.

<sup>10</sup> Pipeline Safety: Expanding the Use of Excess Flow Valves in Gas Distribution Systems to Applications Other Than Single-Family Residences, Federal Register (Oct. 14, 2016), <https://www.federalregister.gov/documents/2016/10/14/2016-24817/pipeline-safety-expanding-the-use-of-excess-flow-valves-in-gas-distribution-systems-to-applications>.