

**PIPELINE SAFETY IN THE MERRIMACK VALLEY:  
INCIDENT PREVENTION AND RESPONSE**

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**FIELD HEARING**

BEFORE THE

**COMMITTEE ON COMMERCE,  
SCIENCE, AND TRANSPORTATION  
UNITED STATES SENATE**

**ONE HUNDRED FIFTEENTH CONGRESS**

**SECOND SESSION**

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**NOVEMBER 26, 2018**  
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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED FIFTEENTH CONGRESS

SECOND SESSION

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## CONTENTS

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	Page
Hearing held on November 26, 2018 .....	1
Statement of Senator Markey .....	1
Joint statement of Andrew W. Maylor, North Andover Town Manager and Andrew P. Flanagan, Andover Town Manager .....	73
Letter from Lawrence Fire Chief Brian Moriarty .....	87
Letter from North Andover Fire Chief William McCarthy .....	89
Prepared statements from community members .....	110
Statement of Senator Hassan .....	4

### WITNESSES

Hon. Elizabeth Warren, U.S. Senator from Massachusetts .....	3
Hon. Niki Tsongas, U.S. Representative from Massachusetts .....	5
Hon. Seth Moulton, U.S. Representative from Massachusetts .....	6
Hon. Lori Trahan, U.S. Representative-Elect from Massachusetts .....	7
Lucyannie Rondon, Sister of Leonel Rondon .....	8
Hon. Robert L. Sumwalt III, Chairman, National Transportation Safety Board .....	9
Prepared statement .....	11
Hon. Matthew A. Beaton, Secretary, Massachusetts Executive Office of En- ergy and Environmental Affairs .....	12
Prepared statement .....	15
Steve Bryant, President, Columbia Gas of Massachusetts .....	19
Joe Hamrock, President and Chief Executive Officer, NiSource .....	21
Joint prepared statement .....	22
Richard B. Kuprewicz, President, Accufacts, Incorporated .....	27
Prepared statement .....	29
Paul Roberti, Chief Counsel, Pipeline and Hazardous Materials Safety Admin- istration .....	31
Prepared statement .....	32
Hon. Dan Rivera, Mayor, City of Lawrence .....	78
Prepared statement .....	81
Tina Messina, Owner, Wine Connexion .....	83
Prepared statement .....	85
Michael B. Mansfield, Fire Chief, Andover Fire Rescue .....	94
Prepared statement .....	96

### APPENDIX

Response to written questions submitted by Hon. Edward Markey to:	
Hon. Matthew A. Beaton .....	159
Paul Roberti .....	160



**PIPELINE SAFETY  
IN THE MERRIMACK VALLEY:  
INCIDENT PREVENTION AND RESPONSE**

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**MONDAY, NOVEMBER 26, 2018**

U.S. SENATE,  
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,  
*Lawrence, MA.*

The Committee met, pursuant to notice, at 9:07 a.m. in South Lawrence East Middle School Gymnasium, 165 Crawford Street, Lawrence, Massachusetts 01843, Hon. Edward Markey, Chairman of the Committee, presiding.

Present: Senators Markey [presiding], Warren, and Hassan.

**OPENING STATEMENT OF HON. EDWARD MARKEY,  
U.S. SENATOR FROM MASSACHUSETTS**

Senator MARKEY. Thank you for joining us for today's field hearing of the Senate Committee on Commerce, Science, and Transportation.

I would like to express my appreciation to Commerce Committee Chairman John Thune and Ranking Member Bill Nelson for their support in allowing me to chair this important hearing.

And I'd like to welcome my U.S. Senate colleagues who have joined me here today, my great partner from the state of Massachusetts, Senator Elizabeth Warren, and from the state of New Hampshire and a member of the Senate Commerce Committee, Maggie Hassan.

We also welcome two members of the U.S. House of Representatives, Congresswoman Niki Tsongas of the 3rd Congressional District; Congressman Seth Moulton of the 6th Congressional District; and a warm welcome to Congresswoman-elect Lori Trahan. We look forward to continuing to working with you and continuing to push for answers.

It has been 74 days since Lawrence, Andover, and North Andover suffered a disaster that Andover Fire Chief Michael Mansfield said, "Looked like Armageddon." Explosions and fires ripped through quiet neighborhoods, destroying homes and businesses, a precious life was lost, dozens were injured.

For these communities, the explosions were only the beginning of months of uncertainty and hardship. This was the coldest Thanksgiving in 80 years in Massachusetts, with the wind chill temperatures plunging into the single digits in the Merrimack Valley, and despite its original promise, Columbia Gas has missed its deadline

for restoring gas service, meaning that nearly 1,600 families spent the Thanksgiving holiday enduring the brutal cold without heat.

The explosions happened on a single day but the crisis for families as they try to stay warm and get back to work has gone on for far too long. We have seen unprecedented disruption, doubt, and despair for the Merrimack Valley. Columbia Gas should be ashamed.

Our investigation into this disaster has resulted in one crystal clear conclusion. What happened on September 13 was not inevitable. It was preventable. Columbia Gas never contemplated that a disaster of this magnitude could happen and therefore did not have adequate procedures in place to prevent it or to respond to it.

Not only did this company not prioritize safety, it appears as if safety was simply an afterthought, but the responsibility for safety failures doesn't stop with Columbia Gas and NiSource.

Federal regulations set by the Pipeline and Hazardous Materials Safety Administration or PHMSA are alarmingly deficient. The safety gaps in Federal rules mean that families all across the country cannot be assured that the natural gas pipelines running under their streets and into their homes are safe.

PHMSA's regulations essentially allow the natural gas pipeline industry to regulate itself. When the fox is left to guard the henhouse, we are assured to have a system-wide failure and then an inevitable disaster.

We found failing after failing in Columbia Gas culture and Federal regulatory oversight.

First, the company allowed an unqualified engineer to approve the pipeline construction work plan that led to this disaster.

Second, Columbia Gas officials who had an understanding of the full pipeline system never saw or signed off on the pipeline construction work plan that led to this disaster.

Third, Columbia Gas still has not adopted best practices for safety 3 years after its own industry made these recommendations.

And fourth, the woefully insufficient safety, operations, and response plans that Columbia Gas did institute never adequately contemplated a disaster of this magnitude. So when it occurred, they were not prepared to stop it or to respond to it.

The list of failings at this company is as long as the line for the temporary showers at Pumps Pond and when it comes to Federal regulations, there are clearly key gaps that allow a company like Columbia Gas and NiSource to operate unsafely.

We owe it to the American people to put in place requirements to ensure that no natural gas company is allowed to shortchange safety ever again. Columbia—

[Applause.]

Senator MARKEY. Columbia Gas' deficiencies are more than a litany of shortcomings. They are a roadmap to disaster and that's exactly what we saw on September 13th.

On that day, following scheduled work in Lawrence, gas pressure in the Merrimack Valley's distribution system rose to dangerous levels. It forced harmful combustible gas out of people's stoves, radiators, and hot water heaters. This over-pressurization led to explosions, fires, and the destruction of more than a hundred homes and businesses in this region.

Leo Rondon died. He had just gotten his driver's license only to be killed while celebrating this achievement with his friends. Our community mourns his loss and I'm grateful that his family could be here today to share his story.

More than two dozen others were injured, including nine firefighters as they ran toward the danger and worked to save lives in that chaos.

The National Transportation Safety Board has recently recommended that Columbia Gas and its parent company, NiSource, make urgent changes to how they handle construction and operations. That is the bare minimum of what this company needs to do to improve safety.

But thus far, NiSource has refused to immediately implement these changes and that is not acceptable, and I want to hear directly from the company why our communities are yet again having to wait.

Gas distribution companies need to put safety above speed and the public above politics. If Columbia Gas and NiSource refuse to do that, then they should not be operating in our state or any other state.

This hearing—

[Applause.]

Senator MARKEY. This hearing is personal to me. My father grew up in Lawrence. He graduated from the Vocational Program at Lawrence High School. The day after the explosions, I went up and visited the house he grew up in on Phillips Street, a house where, as a little boy, I celebrated Christmases. I talked to a family member there and they talked about their loss of power and like tens of thousands of residents that day, their power and everyone in their neighborhood's power was out. They had no information, no comfort, no sense of when their lives would return to normal. No family should have to experience that kind of trauma and disruption.

It is time for Columbia Gas and NiSource to answer for this disaster. The people of the Commonwealth have had to wait too long.

So we thank you all for coming here today for this hearing. It will set the table for changes nationally to make sure that no one in Massachusetts or any other state ever has to suffer from such an accident.

Now let me turn to recognize my partner, my great partner in the U.S. Senate from the state of Massachusetts, Senator Elizabeth Warren.

**STATEMENT OF HON. ELIZABETH WARREN,  
U.S. SENATOR FROM MASSACHUSETTS**

Senator WARREN. Thank you. Thank you.

[Applause.]

Senator WARREN. And thank you, Senator Markey, for holding this hearing today.

The Merrimack Valley is still reeling from the horrific series of explosions that occurred more than two months ago. The Rondon family lost their son, many people were injured, dozens of homes were destroyed, and businesses shuttered, and thousands of people

are still without heat and hot water, living in temporary housing and unable to return to their normal lives.

The communities of Lawrence, Andover, and North Andover have suffered immensely. I saw firsthand the destruction that these gas explosions caused across these communities, and I want to start by thanking our local officials and our first responders who acted quickly on September 13 and in the days that followed.

In particular, I want to thank Mayor Dan Rivera who has shown strong leadership throughout this very difficult time.

[Applause.]

Senator WARREN. We're here to say to everyone in the Merrimack Valley we will keep fighting for you. We will not let up until every last home has heat and hot water and until every last person has been compensated for their injuries and the disruption to their lives.

Columbia Gas and NiSource are responsible not only for fixing this mess but also for providing financial support to every resident and every business affected by the explosion.

This disaster, which appears was wholly preventable, is on them. The preliminary and interim NTSB report confirms that a series of mistakes by, and I quote, "a Columbia Gas-contracted work crew, which included a Columbia Gas inspector, executing one of the Columbia Gas-designed and approved pipe replacement projects, caused these explosions."

Our constituents deserve answers from Columbia Gas and NiSource. Two of them, Francisco and Esther Brega, are here in the audience today. The explosions cost them their home. Esther, an early childhood educator, also lost her business. They are still waiting for answers from Columbia Gas 2 months after the explosions, and we expect honest and thorough answers from the company. Our constituents deserve nothing less.

This hearing is only a first step toward accountability for this disaster. The Massachusetts Congressional Delegation has requested that the President issue an emergency declaration for the gas explosions. We're going to make sure that every family and every business is made whole. Then we're going to fight so that this never happens in another community again.

This industry has proven that safety is not its top priority. So if they won't do what is right, then we should make sure that the laws and regulations compel them to do what is right.

So thank you all for being here—

[Applause.]

Senator WARREN.—today. I yield.

Senator MARKEY. Next, we're going to hear from Senator Maggie Hassan from New Hampshire.

**STATEMENT OF HON. MAGGIE HASSAN,  
U.S. SENATOR FROM NEW HAMPSHIRE**

Senator HASSAN. Well, good morning, everybody, and thank you, Senator Markey, for convening this hearing. I also want to thank our Chair and Ranking Member on the Commerce Committee.

I'll just start by also extending my deepest sympathies to the Rondon family and to all of the families and individuals who have been impacted by this tragedy. We lost one precious life and we all

know that several others were hospitalized or injured, families were displaced over Thanksgiving, and while we are grateful that they are safe, going through Thanksgiving without heat or hot water or living somewhere else is not acceptable.

Businesses were disrupted and continue to be disrupted. We all know that we have to not only get to the bottom of what happened but make sure that we take steps to ensure it never happens again in any other community.

I also want to join my colleagues here in expressing our deepest gratitude to the men and women who worked tirelessly to respond to these explosions, to put out fires, to provide medical care to those who needed it. A number of those first responders were members of the New Hampshire first responder family and we are so grateful for the mutual aid system that allows all of us to come together as needed in this region and do the work to keep our citizens safe. So again my deep thanks to all of the first responders.

We know that 131 structures were damaged, including several homes in Lawrence, and these explosions and this destruction was unlike anything any of our first responders or any of us had ever seen. Armageddon indeed, Senator Markey.

I look forward to the discussion today and hope that we can be helpful in finding ways we can prevent this kind of disaster in the future.

To put it briefly, in the year 2018, people should be able to be confident that they can live in a home where their gas lines don't explode. In the year 2018, people should be confident that when there is a problem, that the response by industry will be swift and efficient and effective, and they can get their heat and their hot water back.

What we saw in Lawrence and what we are continuing to see from the industry is unacceptable. I am grateful to all of the members of the community who came forward and who are working so hard to mitigate the damage and mitigate the disruption for families and businesses, but this should never have happened in the first place, and the slow response is unacceptable and that's one of the reasons that I think all members of our Commerce Committee will continue to work together to determine how we can prevent this kind of disaster, this kind of disruption, this kind of heartbreak in the future.

Thank you.

[Applause.]

Senator MARKEY. Thank you. Now we're going to hear from Congresswoman Niki Tsongas.

**STATEMENT OF HON. NIKI TSONGAS,  
U.S. REPRESENTATIVE FROM MASSACHUSETTS**

Ms. TSONGAS. Thank you, Senator Markey, and thank you also for chairing this hearing today. It's so important to have it in the communities that have been impacted so that you all can hear firsthand both from those who are responsible for the accident and the incidents in and of themselves but also for those responsible for oversight. So I thank you so much for that.

And I also want to thank the Senate Committee's leadership, John Thune of South Dakota, Bill Nelson of Florida, for their bipartisan support for holding this field hearing today.

Given the information that we have learned from the gas explosions that devastated the Merrimack Valley in September, it is now clear that this disaster was entirely preventable.

Columbia Gas had a dangerously misguided and tragically incomplete process for pipeline replacement projects and deficient decisionmaking by a field engineer was exacerbated by the company's appallingly weak internal review procedures.

This series of incidents, which Senator Markey has described and appropriately so as roadmap to disaster, resulted in the death of an innocent teenager whose family today will courageously give voice to their terrible loss, dozens of injuries, significant property damage, widespread panic and fear in the hours after the accident and still ongoing, and not to mention the ongoing crisis for families still displaced by these explosions.

We are so fortunate to have the extraordinary first responders, many of you here in the room today, the great leadership, political leadership of the communities impacted, but, nevertheless, that is no substitute for the company's failings.

I believe Columbia Gas has a responsibility to make this community whole and to restore the public trust, to guarantee the safety of their customers, and to prevent another tragic accident like this from ever happening again, and beyond that, we in Congress have a responsibility to look at, seriously examine, and reform the ways in which we oversee this industry.

I look forward to the testimony of those appearing before us today.

Thank you.

[Applause.]

Senator MARKEY. Next, Congressman Seth Moulton.

**STATEMENT OF HON. SETH MOULTON,  
U.S. REPRESENTATIVE FROM MASSACHUSETTS**

Mr. MOULTON. Thank you, Senator Markey, for the time and for putting this important hearing together.

To the witnesses sitting before us, thank you for being here and to my colleagues, Senator Markey, Senator Warren, and Representative Tsongas, I am grateful for your partnership in all things but in particular through the last 3 months as our offices continue to seek answers to this tragedy and help our communities recover.

Representative-elect Trahan, welcome. You have big shoes to fill. We are glad you're here.

Through all of the debates of appliance replacement and Thanksgiving dinners in recent weeks, it can become easy to forget how absurd, how fundamentally absurd this situation is in the first place. No American family should go home in the evening with the fear that their house might blow up.

Okay. Terrorists in some places like Afghanistan should go home in the evening fearing that their house might blow up but not Massachusetts families.

What this gas company allowed to happen through their negligence is preposterous. Too many local families spent the coldest

Thanksgiving in 80 years unable to cook dinner and we must never forget that one innocent promising young man lost his life.

Columbia Gas and NiSource, we appreciate the work you've done in the weeks since this tragedy, though we will question you on the details, but let me be clear. This situation is absurd. Your leadership must be held accountable and it must never happen again.

Thank God for the heroes of this story, the first responders, who responded when the company did not. We will never know how many lives they, you, saved. We're proud to have you here. We're lucky to have you in our community. Thank you.

[Applause.]

Senator MARKEY. And while we're losing the great Congresswoman Tsongas, we have the great replacement for her, who will start in one month.

So we welcome you to this hearing and so I recognize Congresswoman-elect Lori Trahan.

**STATEMENT OF HON. LORI TRAHAN,  
U.S. REPRESENTATIVE-ELECT FROM MASSACHUSETTS**

Ms. TRAHAN. Thank you. Thank you, Senator Markey.

I'd like to thank Senators Markey, Warren, and Hassan for convening this hearing today in the heart of the disaster zone to discuss the gas explosions that rocked Lawrence, North Andover, and Andover on September 13.

I want to thank you for the opportunity to address this panel as the next Congresswoman representing Lawrence and Andover.

I also want to thank Representatives Tsongas and Moulton for their tireless work on behalf of those affected by this accident.

I, too, want to thank the valiant efforts of our first responders and the ongoing leadership of Mayor Rivera and so many others.

I also want to extend my deepest condolences to the family of Leonel Rondon and I thank them for being here bravely to share their story with us today.

It has been 74 days. Today, there are still over 5,000 people who cannot go home and while most of the 680+ businesses affected have been brought back online, too many owners have waited too long to be reimbursed for their lost income, lost wages. These people cannot wait any longer. We need these families, these businesses, these communities to be made whole, but we also need the people across this state to feel safe and secure.

We can replace heat and appliances, but we need to get to the root cause of this disaster, to restore confidence and faith that our pipelines are safe and that this will never happen again.

We need answers from Columbia Gas so that we can bring out every lesson from this disaster. I urge the representatives from Columbia Gas and NiSource to fully cooperate with the hearing, with the NTSB, and with all the investigations so that we can co-produce safety protocols and prescriptions for the future.

I urge Columbia Gas and NiSource at a minimum to adopt API-recommended Practice 1173, the gold standard of safety practices for pipelines. API-1173 was born out of another pipeline disaster where 840,000 gallons of crude oil were dumped into wetlands in the Kalamazoo River in Michigan in 2010.

These standards are strict but they are the equivalent to the same safety standards governing our airlines, our chemical plants, and our nuclear power. Adopting these standards will ensure continuous improvement to increasing safety in the pipeline industry.

I would like to thank the panel for this important work. I look forward to working with you on this issue and helping the people of the Merrimack Valley as we continue to cope with the aftermath, ensure safety and comfort, and restore this community's confidence.

Thank you.

[Applause.]

Senator MARKEY. Now I would like to begin the hearing by inviting up the Rondon family, Lucy, Miguel, and Rosalie, to join us to tell their story about September 13, and the terrible loss which their family experienced when their brother and son, Leonel, was killed.

I know that everyone in this room expresses their condolences, shares their grief, and wants their family to know that we are here for them and we want to, as well, thank them for their strength, thank them for their willingness to speak here today, because their story is a story which must be heard in order to ensure that we do put the laws on the books that ensure that it never happens again.

So let us then turn to the family and ask if you would begin to tell the story of what happened on that day.

**STATEMENT OF LUCYANNIE RONDON,  
SISTER OF LEONEL RONDON**

Ms. RONDON. So for all of you who don't know me, my name is Lucyannie Rondon. I am the sister of Leonel Rondon.

Words cannot describe the pain my family and I feel at the loss of my brother Leonel. Some days I can almost hear him call me looking for my mother, filling up the room with his smile. He had such a warm heart. This senseless tragedy was the beginning of many things that my family and I will never do with Leonel again.

My mother will never make him his favorite meal of shrimp and totonacas again. My daughter Riannie will never dance to her Uncle Leonel's music he created just for her. Our little brother Yunita will never go to the movies with Leonel again.

We will never forget him. We will not let this loss be without meaning. The grief we feel is unbearable but we know Leonel want us to stay strong. We will stand with the community on his behalf.

Even as a young boy, he was so kind to others. He shoveled the snow for our neighbors. He carried groceries for the older people in our neighborhood. We will not have the joy of seeing the wonderful man we know he would have become.

I stand in front of you in his honor. I will never have my brother back. We hope there will be justice for him and the community. Nobody should ever go through what my family has gone through ever again.

Thank you.

[Applause.]

Senator MARKEY. So our thanks to the Rondon family. Your powerful statement is something that we'll always remember and I think it is very important for us to hear your story because that

will now help everyone to understand the importance of the hearing which we are about to have and why we must heed your warning that this should never happen again to any other family. So thank you so much for being here.

Now I would like to ask for the first panel to come up and to be seated in front of your cards and that would be the Honorable Robert Sumwalt, the Chairman of the National Transportation Safety Board; the Honorable Matthew Beaton, Secretary of the Massachusetts Executive Office of Energy and Environmental Affairs; Mr. Steve Bryant, the President of Columbia Gas of Massachusetts; Mr. Joe Hamrock, President and Chief Executive Officer of NiSource from Columbus, Ohio; Mr. Richard Kuprewicz, President of Accufacts, Incorporated; and Mr. Paul Roberti, Chief Counsel of the Pipeline and Hazardous Materials Safety Administration in Washington, D.C.

So if you could all please stand, thank you, please raise your right hand.

[Witnesses sworn.]

Senator MARKEY. Let the record reflect that each answered affirmatively.

Chairman Sumwalt, if you could begin your testimony and outline what you have found about what happened here in Lawrence.

**STATEMENT OF HON. ROBERT L. SUMWALT III, CHAIRMAN,  
NATIONAL TRANSPORTATION SAFETY BOARD**

Mr. SUMWALT. Thank you, Senator Markey. Good morning, Senator Markey and Distinguished Members of Congress, Senator Warren, Senator Hassan, Congresswoman Tsongas, Congressman Moulton.

Thank you for inviting the NTSB to testify this morning about the NTSB's investigation into the September fires and explosion here in the Merrimack Valley.

I'd like to begin by offering our sincerest sympathies to all of those who've been affected by this tragedy.

As you know, the NTSB is an independent Federal agency. We're charged by Congress to investigate transportation accidents, to determine the probable cause, and issue safety recommendations to prevent the reoccurrence of those accidents. We are not in the business of assigning blame or pointing fingers.

Like with you, our goals are to determine what happened, why it happened, and what can be done to keep it from happening in the future?

So based on our investigation so far, we know that the over-pressurization of a low pressure natural gas distribution system is what initiated the accident sequence. Prior to the over-pressurization, crews were replacing the older cast iron distribution line with new plastic lines.

However, the sensing lines that are necessary for detecting and controlling pressure were not relocated to the new pipe. So, of course, once the old pipe was capped off, gas flow and pressure became substantially reduced and because the sensing lines were connected to the old pipes, which now had low flow and low pressure, the pressure regulator commanded for a full flow of high-pressure

gas into the low-pressure distribution system. This led to explosions and fires which were ignited by gas-fueled appliances.

Why did it happen? We know that the tasks required for this work were developed and approved by Columbia Gas and did not account for the location of the sensing lines. Therefore, they did not require their relocation to the new pipes.

We know that not all of Columbia Gas's internal departments were required to review the plans nor were they required to be approved by a professional engineer, also known as a PE.

Further, we know that a practice had been discontinued several years ago by Columbia Gas that required personnel to be in place to monitor work on the gas mains and be available to immediately respond to any abnormalities.

Our investigation will further look into why the placement of the regulator sensing line was not considered in the planning phase and why it was not caught by inspectors.

As Chairman of the NTSB, I want you to know that I've placed a high priority on properly completing this investigation, but as you can imagine, an investigation such as this is very complex and it will take time, but my commitment is we will do a good job and we will come up with recommendations to keep it from happening again.

And as Senator Markey mentioned, two weeks ago, we issued five interim safety recommendations as a result of this investigation, including four recommendations which we classified as urgent recommendations.

Now we only issue urgent safety recommendations when we determine that the course of action requires immediate attention to avoid imminent loss due to a similar situation.

One recommendation was issued to the Commonwealth of Massachusetts where we called for requiring the seal of a professional engineer on all public utility engineering drawings. We issued the four urgent safety recommendations to NiSource, which, of course, is the pipeline owner operating as Columbia Gas of Massachusetts.

First, to NiSource, they should revise the engineering and constructability review process to include all internal documents and require plans to be sealed by a PE prior to construction.

Second, they should ensure that all natural gas system records are complete and readily available.

Third, NiSource should incorporate risk assessment into project development.

And last, while any modifications are being made to gas mains, NiSource should actively monitor pressures and require personnel to be in place to immediately respond to any abnormal changes in the pipeline system.

In the interest of public safety, the NTSB urges expeditious implementation of each of these five interim safety recommendations.

We stand ready to work with you and the Committee to continue improving the safety of our Nation's pipeline system.

Thank you for the opportunity to testify and I look forward to your questions.

[The prepared testimony of Mr. Sumwalt follows:]

PREPARED STATEMENT OF HON. ROBERT L. SUMWALT III, CHAIRMAN,  
NATIONAL TRANSPORTATION SAFETY BOARD

Good morning Senator Markey. Thank you for inviting the National Transportation Safety Board (NTSB) to testify today.

The NTSB is an independent Federal agency charged by Congress with investigating major transportation disasters—including pipelines. We determine the probable cause of accidents and issue safety recommendations aimed at preventing future accidents. We do not assign fault nor place blame.

On September 13, 2018, about 4:00 p.m. eastern daylight time, a series of explosions and fires occurred after high-pressure natural gas was released into a low-pressure gas distribution system in the northeast region of the Merrimack Valley, Massachusetts. The distribution system was owned and operated by Columbia Gas of Massachusetts (Columbia Gas), a subsidiary of NiSource, Inc. The system overpressure damaged 131 structures, including at least 5 homes that were destroyed in the City of Lawrence and the towns of Andover and North Andover. Most of the damage was a result of structure fires ignited by gas-fueled appliances. Several structures were destroyed by natural gas explosions. One person was killed and at least 21 individuals, including 2 firefighters, were transported to the hospital. Seven other firefighters received minor injuries.

On behalf of the entire NTSB, I would like to begin by offering my sincerest sympathies, to all of those in the Merrimack Valley who have been impacted by this tragedy. Our investigation continues, and our commitment is to keep the Commerce Committee informed of any updates, along with all those affected by this tragic event.

Including this tragedy, we are currently investigating seven natural gas pipeline explosions in which lives were lost, homes destroyed, and communities severely affected. Further, we have successfully completed over 120 pipeline investigations and issued more than 1,300 pipeline safety recommendations, with over 80 percent closed favorably, since 1967.

We launched this investigation to answer the very questions that you have raised:

What happened?

Why did it happen?

What can be done to make sure that it never happens again?

**What happened?**

Based on our investigation so far, we know that over-pressurization of a low-pressure natural gas distribution system initiated the accident sequence.

The cast-iron, low-pressure distribution system was installed in the early 1900s and had been partially improved with both steel and plastic pipe upgrades since the 1950s. The low-pressure distribution system in the affected area relied on 14 regulator stations to control gas at the required pressure into structures serviced by the system, unlike high-pressure gas distribution systems that place an individual regulator to reduce pressure at each customer service. Each of the regulator stations reduced the pressure from about 75-pounds per square inch gauge (psig) natural gas main pipeline to 12 inches of water column (about 0.5 psig) for delivery to customers.

Prior to the accident, Columbia Gas had an overarching plan consisting of multiple projects to replace 7,595 feet of low-pressure, existing cast-iron and plastic natural gas main with 4,845 feet of low-pressure and high-pressure plastic gas main on South Union Street and neighboring streets.

On September 13, prior to the overpressure event, a Columbia Gas-contracted work crew, which included a Columbia Gas inspector, executed one of the Columbia Gas-designed and—approved pipe-replacement projects at the intersection of South Union Street and Salem Street in South Lawrence. The project was to install a plastic distribution main and abandon in place a cast-iron distribution main. The distribution main that was abandoned still had the regulator-sensing lines that were used to detect pressure in the distribution system and provide input to the regulators to control the system pressure. Once the contractor crews disconnected the distribution main that was being abandoned, the section containing the regulator-sensing lines began losing pressure.

As the pressure in the abandoned distribution main dropped to about 0.01 psig, the regulators responded by opening further, increasing pressure in the distribution system. The regulators opened completely when they no longer sensed system pressure, allowing the full flow of high-pressure gas to release into the distribution system supplying the neighborhood. As a result, natural gas was delivered to customers

at a pressure well above the maximum-allowable operating pressure which led to the ignition of fires and explosions in homes.

Minutes before the fires and explosions occurred, the Columbia Gas monitoring center in Columbus, Ohio, received two high-pressure alarms for the South Lawrence gas pressure system: one at 4:04 p.m. and the other at 4:05 p.m. The monitoring center had no control capability to close or open valves; its only capability was to monitor pressures on the distribution system and advise field technicians accordingly. Following company protocol, at 4:06 p.m., the Columbia Gas controller reported the high-pressure event to the Meters and Regulations group in Lawrence. A local resident made the first 9-1-1 call to Lawrence Emergency Services at 4:11 p.m.

In response, three technicians were dispatched to perform field checks on 14 regulators. Columbia Gas shut down the regulator at issue by about 4:30 p.m. The critical valves of the natural gas distribution system were closed by 7:24 p.m. Beginning about midnight, crews consisting of two Columbia Gas technicians escorted by two emergency response personnel began shutting off the meters at each house to isolate the homes from the natural gas distribution system. All meters were shut off by the following morning.

#### **Why did this happen?**

We know that the tasks required for this work were developed and approved by the utility and did not account for the location of the sensing lines. Therefore, they did not require their relocation so that the actual system pressure was detected and controlled. We know that not all of the utility's internal departments were required to review the plans nor were they required to be approved by a professional engineer, who then places his/her official seal on the documents (a process known as "sealing"). Further, we know that a practice had been *discontinued* several years ago that required personnel to be in place to monitor work on gas mains and be available to immediately respond to any abnormalities.

Our investigation will further look into why the placement of the regulator sensing lines were not considered in the planning phase and why it was not caught by inspectors. We are also looking at the response by Columbia Gas of Massachusetts once the event started to determine if actions taken were timely and appropriate.

#### **Urgent Safety Recommendations: What can be done to make sure that it never happens again?**

Our investigations are thorough, and it will take some time for us to issue a final report regarding the probable cause and to make recommendations to improve safety. However, as in all of our investigations, if we identify safety issues requiring immediate action, we have the capability to issue interim safety recommendations. In fact, recently, we issued five interim safety recommendations as a result of this investigation, including four which are classified as "urgent." We only issue urgent recommendations when we determine that the course of action requires immediate attention to avoid imminent loss due to a similar accident.

One recommendation calls upon the Commonwealth of Massachusetts to eliminate the existing professional licensure exemptions and require the seal of a professional engineer (PE) on all public utility engineering drawings. The NTSB believes that it is critical that an engineer with appropriate qualifications and experience review engineering plans for a gas company, if not develop them. The Commonwealth of Massachusetts exemption for the requirement of PE licensure to perform "industrial" and public utility work forecloses an opportunity to detect this design oversight. The seal of a PE should be required on all public utility engineering plans to reduce the likelihood of accidents such as this occurring.

We issued the four urgent safety recommendations to NiSource, the pipeline owner, operating as Columbia Gas of Massachusetts.

First, revise the engineering and constructability review process to include all internal departments and require plans to be sealed by a professional engineer prior to construction.

Second, ensure that all natural gas systems records are complete and readily available. Third, incorporate risk assessments into project development. Lastly, while any modifications are being made to gas mains, actively monitor pressures and require personnel to be in place to immediately respond to any abnormal changes in the pipeline system.

#### **Conclusion**

Over the last 51 years, our investigations have found that safe operation of pipelines is a shared responsibility among operators, government oversight agencies, and local communities.

Pipelines remain one of the safest and most efficient means of transporting vital commodities used to power homes and supply businesses. However, as many in this room know all too well, the consequences are tragic when there is insufficient safety planning and oversight. To that end, the NTSB urges expeditious implementation of all five interim safety recommendations.

We recognize the progress that has been made; yet, there will always be room for improvement. The NTSB stands ready to work with you and this Committee to continue improving the safety of our Nation's pipeline systems.

Thank you again for the opportunity to testify today. I am happy to answer your questions.

Senator MARKEY. Secretary Beaton.

**STATEMENT OF HON. MATTHEW A. BEATON, SECRETARY,  
MASSACHUSETTS EXECUTIVE OFFICE OF ENERGY  
AND ENVIRONMENTAL AFFAIRS**

Mr. BEATON. Thank you, Senator. Senator Markey, Senator Warren, Senator Hassan, Congressman Moulton and Congresswoman Tsongas, thank you for the opportunity to provide testimony on behalf of the Baker-Polito Administration.

As Massachusetts Secretary of Energy and Environment, I oversee the Commonwealth's six environmental natural resource and energy regulatory agencies. One of those agencies, the Department of Public Utilities, is the Commonwealth agency with jurisdiction over natural gas infrastructure.

An annual certification provided by PHMSA grants the Department of Public Utilities' Division of Pipeline Safety the authority to oversee intrastate pipeline facilities and gives the division the responsibility of pipeline inspections and the enforcement of operator compliance with Federal and state rules and regulations.

When the division conducts pipeline safety inspections, a company's site work is checked against approved plans and programs for consistency. PHMSA annually evaluates the department's effectiveness and PHMSA's 2017 evaluation of the DPU 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 upward from a score of 89.3 in 2014 to a score of 97.4 percent in 2017.

Turning to the events of September 13, immediately following the fires and explosions in Lawrence, Andover, and North Andover, the Commonwealth mobilized emergency response capabilities through MEMA and the State Police, establishing a mobile incident command center in Lawrence to assist the municipalities.

Within hours of the incident, the Governor, Lt. Governor, myself, and a number of administration staff arrived onsite and immediately began assessing the emergency response capabilities of Columbia Gas, worked with National Grid to cut electric power throughout the impact area, and dispatched the Director of Pipeline Safety and three DPU inspectors.

Given the magnitude of the emergency and the insufficient response from Columbia Gas within the first 24 hours, Governor Baker issued a Declaration of Emergency by 3 p.m. on Friday, September 14. This Declaration ultimately led to an unprecedented DPU order directing EverSource Energy 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 clear and make safe every structure within the impact zone, restore gas service to thousands of unaffected customers, and restore electric power to 18,000 customers.

Another DPU order on September 21 appointed Joe Albanese of Commodore Recovery, LLC, as the Chief Recovery Officer to manage and coordinate the restoration efforts, which included building a command and control organization charged with restoring service to over 8,400 gas meters impacting more than 10,000 dwellings and 680 businesses.

Since September 13, myself and EEA staff have maintained a daily presence to coordinate and oversee the standup, transition, and implementation of recovery operations. The Baker-Polito Administration continues to maintain a daily support function in these operations.

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

After a September 26 announcement to hire an independent evaluator, the DPU selected Dynamic Risk Assessment Systems earlier this month to examine the operation and maintenance policies and practices of the Commonwealth's gas distribution companies as well as the physical integrity of the Commonwealth's gas distribution system.

On October 8 and 12, respectively, the DPU issued moratoria on all work, except emergency and compliance work, in both National Grid and Columbia Gas's service territories.

Last week, in coordination with the Northeast Gas Association, the Baker-Polito Administration made a first in the Nation announcement that all natural gas distribution companies in Massachusetts will adopt a pipeline safety management system, referred to as API-1173 that we already heard about.

Additionally, the Baker-Polito Administration filed legislation last week to ensure that all gas utility work that could pose a material risk to public safety is reviewed and approved by a certified professional engineer.

It is our hope that the actions taken in Massachusetts will initiate a conversation on the national level regarding appropriate industry standards and protocols to prevent such disasters in the future.

In closing, this was undoubtedly a devastating and unfortunate incident that resulted in a tremendous loss for many residents of the Merrimack Valley.

While there were unacceptable oversights that led to the incident and a challenging initial response, I do want to make note of the genuine commitment to restoration that 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 here in the 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 and first responders who have partnered with us throughout this effort.

The leadership and service of these individuals to our communities is commendable and has been an essential element to this restoration effort.

Additionally, I would like to thank PHMSA and NTSB for their support, 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.

And, finally, EverSource Energy is also deserving of our gratitude for their willingness to rise to the 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 issue and I look forward to answering any questions you may have.

[The prepared statement of Mr. Beaton follows:]

PREPARED STATEMENT OF HON. MATTHEW A. BEATON, SECRETARY, MASSACHUSETTS  
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS

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 and 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<sup>®</sup>"), 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 selec-

tion 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 investiga-

tions, program inspection procedures, damage prevention, field inspections, and compliance activities. Massachusetts PHMSA evaluations have trended upwards from a score of 89.3 percent in 2014 to a score of 97.4 percent 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 NTSB's full review of the causes of the over-pressurization 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.

Senator MARKEY. Thank you, Mr. Secretary.

Next, we're going to hear from Steve Bryant, the President of Columbia Gas of Massachusetts.

### **STATEMENT OF STEVE BRYANT, PRESIDENT, COLUMBIA GAS OF MASSACHUSETTS**

Mr. BRYANT. Good morning. Good morning, Senator Markey, other Members of Congress, Merrimack Valley leaders and residents.

Thank you for holding this hearing. We appreciate the opportunity to answer your questions.

We know the tragedy of September 13 will have a lasting impact on the communities of Lawrence, Andover, and North Andover.

As we talk today about steps we are taking to respond, we are deeply aware of the suffering, disruption, and unrest this tragedy has caused. Our company's committed to addressing and remediating the damage that has occurred and to helping the community heal.

I want to take a moment to thank our partners in the effort to help residents who have been impacted by this tragedy, the first responders, Captain Joe Albanese and Rear Admiral Richard C. Long, Governor Baker, Lt. Governor Polito, and Attorney General

Healey, Merrimack Valley community leaders, and other public officials, EverSource, and more than 450 mutual aid workers from utilities across the country. I say thank you.

What this group has done to protect, assist, and restore the Merrimack Valley has been remarkable and we are grateful.

We have submitted a full statement for the record and I will focus here on some of the immediate steps we are taking to support our customers. I also want to speak about the claims process for making our customers whole. I want to be clear up front. We know we have more to do to improve the work that is already underway.

We've worked since the tragedy to address residents' immediate needs and to establish a process to reimburse losses. Within 6 hours of the explosion, we established a dedicated customer service line and within 48 hours, we opened the first claims center in Lawrence. We have since opened two additional claims centers in Andover and North Andover.

Families visiting the claims center can receive direct financial aid to help address immediate needs for food, supplies, and transportation while they begin the work with claims personnel.

We bought temporary cooking equipment and worked with fire officials to make sure residents who received equipment have proper safety information. We inspected thousands of homes to see if they could utilize space heaters and added smoke and carbon monoxide detectors.

We have installed or provided reimbursement for alternate fuel solutions so that residents could have heat and hot water before gas service is restored. We secured temporary housing for affected customers. We also brought in offshore housing for workers leading the effort to restore gas service so our customers could be placed closer to their homes and closer to work.

As of November 24, we have had over 18,000 visits to our claims center. We have added more resources to the center to make sure we are processing claims quickly, accurately, and efficiently. Nearly 400 adjusters support the claims process to date and we have processed over 23,000 claims.

Affected customers who've not yet filed claims should call 1-800-590-5571 and we also have people in the room today, so if we have customers that are impacted, we have claims adjusters. I just ask you put your hands up and indicate where you are, so please.

We've also added information to the Columbia Gas website explaining how customers can escalate concerns with an adjuster and we are listening to feedback from the community and from you to improve our claims process and to make it as easy as possible.

We recognize that the impacted communities will have needs that go beyond this assistance. In the days following the event, we donated \$10 million to the Greater Lawrence Disaster Relief Fund to support the short- and medium-term needs of affected residents.

We recently doubled our commitment, donating another \$10 million to support businesses in the Merrimack Valley.

Joe Hamrock and I have been in the communities for many weeks and what I've seen reaffirmed my love for this region, a place I've long called home.

Coming out of what was for many the scariest days of their lives, so many residents are optimistic and selfless. The responsibility for

restoration is ours, we know, but we are working with strong communities and people who are extraordinary in their ability to do everything in their power to keep moving forward.

I know our work has been far from perfect. I apologize for the hardship and frustration that has certainly caused and give you my commitment that we will continue to work to rebuild and restore the Merrimack Valley.

Thank you for the opportunity to testify here today. I'm ready to answer your questions about the tragic events and about the work we must continue to recover from, and as a last note, I wish to offer my condolences to the family of Leonel Rondon. I will carry that in the heart for the rest of my life.

Thank you.

Senator MARKEY. Next, we're going to hear from Joe Hamrock, the President and Chief Executive Officer of NiSource of Columbus, Ohio.

**STATEMENT OF JOE HAMROCK, PRESIDENT  
AND CHIEF EXECUTIVE OFFICER, NiSOURCE**

Mr. HAMROCK. Thank you, Senator.

If I may, to the Rondon family, you have my deepest sympathy. I'm deeply sorry for the loss of your beloved son and brother. Lucy, thank you for your testimony here today.

Each day, you are in my prayers that our Lord might comfort you and bring you His peace and those prayers will continue.

On behalf of Steve and all of the NiSource and Columbia Gas family, we extend our condolences and sympathies and know that we will be here to support you in any way that we can.

Good morning, Senators Markey, Hassan, and Warren, Representatives Moulton and Tsongas, Representative-elect Trahan, and Members of the Lawrence, Andover, and North Andover communities.

Thank you for the opportunity to be here with you today. As you noted, Senator, I am the CEO of NiSource, the company that owns Columbia Gas of Massachusetts.

On the afternoon of September 13, 2018, a tragic event occurred here in the Merrimack Valley. Columbia Gas was conducting a planned gas pipeline modernization project when things went horribly wrong, leading to multiple fires and explosions, many injuries, and a tragic loss of life.

I am here on behalf of Columbia Gas and NiSource to apologize. We are deeply sorry. I am deeply sorry.

I also want to reaffirm our responsibility to repair the damage safely and as quickly as possible, and I want to express our resolve to improve our gas delivery system and processes so that a tragedy like this never happens again.

To those who were injured or who were caring for injured loved ones and to those whose homes and businesses were damaged or destroyed because of the fires and explosions, we recognize the distress and hardship this has caused in your lives.

To those whose daily routines have been disrupted as a result of the restoration efforts, from elderly residents living alone in Andover with unfamiliar appliances to young families in Lawrence with longer commutes to work and school, to the businesses in North

Andover who were not open and fear their customers may simply move on, I've heard you and we recognize your challenges and struggles. We are working around the clock to make things better.

I want to tell you all personally that I am sorry and that I also know that an apology is simply not enough. We're going to get everyone back in their homes and businesses. We know it's too early to ask any of you to trust us, but we are committed to restoring these communities.

We have completed the replacement of nearly 45 miles of gas pipeline and over 5,000 service lines. That has allowed us as of November 24 to restore service for over 6,000 residential meters and over 600 business customers, and I'm pleased to report that we are on track to restore heat and hot water to remaining facilities in the early part of the December 2 to December 16 date range.

The NTSB is investigating the cause of the September 13 tragedy and we are cooperating with that investigation. NTSB's work continues, but I want to be clear with everyone here today. We are not waiting for the NTSB final report to take steps to make sure that something like this never happens again.

On September 14, we suspended work on all low pressure systems across NiSource, except where necessary for compliance and safety, and as detailed in my written testimony, we have already identified new safety measures for the operation of our low pressure systems, including a \$150 million program to install continuous monitoring and protection against over-pressure situations. We have also focused on additional training across our entire company.

I am humbled by the spirit, optimism, and determination of our customers not to allow this tragedy to disrupt their lives any more than it has, but we know we have to do more and we have to do it faster.

We are focused on that, and I appreciate the leadership of the Massachusetts delegation, and before I close, I also want to offer our deepest gratitude to the first responders who answered the emergency calls on the evening of September 13 and the gas workers who assisted them. What you did was heroic and remarkable and we appreciate your work.

The Merrimack Valley has a long road to recovery ahead. Our companies are committed to working with you and everyone here today to advance that recovery. I know this work is and will be the most important duty of my entire professional career.

We are going to make the Merrimack Valley gas system safer than ever and we're going to be here working with you to meet these commitments.

Thank you and I'm ready to answer your questions.

[The joint prepared statement of Mr. Hamrock and Mr. Bryant follow:]

JOINT PREPARED STATEMENT OF JOE HAMROCK, PRESIDENT AND CHIEF EXECUTIVE OFFICER, NiSOURCE AND STEVE BRYANT, PRESIDENT, COLUMBIA GAS OF MASSACHUSETTS

### **I. Introduction**

Good morning Senators Markey, Hassan, and Warren, Representatives Moulton and Tsongas, Representative-Elect Trahan, and members of the Lawrence, Andover, and North Andover communities. We appreciate the opportunity to testify today on

behalf of Columbia Gas of Massachusetts (“Columbia Gas”) and NiSource. Because we were both called to testify about the events surrounding the September 13th tragedy in the Merrimack Valley, we are providing this joint written statement of Columbia Gas and NiSource for the record.

We know that the tragic events of September 13th will have a lasting impact on the people, businesses, and communities of Lawrence, Andover, and North Andover. As we talk today about the steps we are taking to respond, we are deeply aware of the suffering, disruption, and unrest this tragedy has caused. We want to offer our deepest sympathies and condolences to the family of Leonel Rondon, the young man who died because of an explosion, and our deepest apologies to those who were injured and to all the residents and business owners of the Merrimack Valley who were impacted by the September 13th fires and explosions. In addition, we want to offer our thanks to the first responders who answered the emergency calls on the evening of September 13th and the gas workers who assisted them. We are grateful for your service and your heroism in protecting the residents of the Merrimack Valley. We also want to acknowledge the leadership of the Massachusetts congressional delegation in the recovery efforts.

The entire Columbia Gas and NiSource team is dedicated to addressing and remediating the damage that has occurred and to helping the community heal.

### **II. September 13, 2018 And Its Aftermath: Taking Responsibility**

On September 13, 2018, Columbia Gas of Massachusetts was conducting a planned gas pipeline modernization project when things went horribly wrong. At 4:04 and 4:05 pm, the Columbia Gas monitoring center received two alarms indicating high pressure within the South Lawrence low-pressure gas system. At 4:06 pm, a controller within the monitoring center alerted the appropriate Columbia Gas personnel to dispatch them to the field. At approximately 4:30 pm, the Columbia Gas team shut down the regulator at issue.

Before services were cut off, gas traveled through the system, leading to over-pressurization with terrible consequences—multiple fires and explosions, many injuries, and, most tragically, a loss of life.

We are here on behalf of Columbia Gas and NiSource to apologize for this tragedy and to acknowledge our responsibility to make things right. We are deeply sorry.

To those who were injured, those who cared or are caring for injured loved ones, and those whose homes or businesses were damaged or destroyed because of the fires and explosions, we recognize the distress and hardship this has caused in your lives.

We know that the daily routines of many have been disrupted as a result of the over-pressurization and subsequent restoration efforts—from the elderly resident living alone in Andover with unfamiliar appliances, to young families in Lawrence with longer commutes to work and school, to business owners in North Andover who are not open and fear their customers may simply move on. We have heard from you and recognize your challenges and struggles. And we are working around the clock to make things better.

We also know an apology is not enough. We know it is too early to ask any of you to trust us, but we want to reaffirm our responsibility and commitment to repair the damage safely and as quickly as possible. In the days and months ahead, we hope to prove our commitment to you.

### **III. Broader Safety Measures**

The National Transportation Safety Board (“NTSB”) is investigating the cause of the September 13th tragedy, and we are cooperating with that investigation. The NTSB’s work continues, but we want to be clear—we are not waiting for the NTSB to issue its final report or for new regulations. We are proactively identifying actions we can take now to make sure that something like this never happens again.

After September 13, we suspended construction work on low-pressure systems, only performing work necessary for compliance and safety. Since then, we have identified additional ways to make our low-pressure systems safer and reduce the risk of over-pressurization. We are also taking steps to respond to and execute on the NTSB’s safety recommendations.

As part of this effort, we continue to evaluate opportunities to engineer fail-safe measures in our gas delivery systems. We have already committed to invest approximately \$150 million to achieve the following infrastructure improvements:

- **OVER-PRESSURE PROTECTION DEVICES:** We will be installing automatic pressure control equipment, referred to as “slam-shut” devices, on low-pressure systems across our seven-state operating area. These devices provide an additional level of control and protection. They operate like circuit-breakers; when they sense operating pressure that is too high or too low, they shut down the

flow of gas to the system, regardless of the cause. These devices operate independently of other pressure control devices, so they will automatically shut down the system to prevent over-pressurization.

- **REMOTE MONITORING:** As an additional layer of protection, we will install remote monitoring devices on low-pressure systems so that gas control centers have an ability to receive pressure alarms on a real time basis. In the event a system is shut down by the “slam-shut” devices described above, the remote monitors will enable us to respond more quickly to restore service to customers.

This commitment is in addition to the series of steps we took across our seven-state footprint following the September 13th event in the Merrimack Valley, including:

- **SUSPENDED WORK:** We suspended work on low-pressure systems, only performing work necessary for compliance and safety. We are still operating under these strict work guidelines.
- **FIELD SURVEY:** We initiated and completed a field survey of our low-pressure regulator systems to identify available options to enhance the safe, reliable operation of regulator station equipment.
- **ENGINEERING DESIGN:** We initiated an engineering design review of regulator stations to determine how best to install additional over-pressure protection systems.
- **MAPPING:** We used the information from the field survey we conducted to begin adding new details to our electronic mapping system. Additionally, we are providing maps at the regulator stations themselves.
- **DAMAGE PREVENTION:** We have initiated a process so that when we are notified of work near a regulator station by any company performing excavation, NiSource personnel will be required to be present to observe any excavation.

In addition, we will continue to modernize our system in Massachusetts and elsewhere, replacing cast-iron and bare-steel pipes with more modern materials.

#### **IV. Customer Assistance and Claims**

We have worked diligently since the tragedy to address residents’ immediate needs and to establish a process to reimburse them for their losses. Within six hours of the explosions, we established a dedicated customer service line. Within 48 hours, we opened our first claims center in Lawrence, followed by two additional claims centers in Andover and North Andover. As of November 21, we have had over 18,000 customer visits to these centers and have nearly 400 adjusters supporting the claims process. These figures, and some of the other figures throughout this statement of our companies, are best estimates as we continue our work.

Families visiting the claims centers can receive direct financial aid to help address immediate needs for food and supplies while they begin to work with claims personnel. But, we also recognize that many residents need more than monetary compensation. We bought temporary cooking equipment and worked with fire officials to make sure residents who received the equipment had proper safety information. We inspected thousands of homes to see if they could utilize space heaters. We installed space heaters in the homes that could support them and added smoke and carbon monoxide detectors in the homes we inspected. We have installed (or provided reimbursement for) alternative fuel solutions so that residents could have heat and hot water before the restoration of natural gas service in order to remain in their homes.

We have secured temporary housing for displaced residents, including hotel rooms, apartments, travel trailers, a congregate shelter, and even a pet shelter. We brought in offshore housing for workers leading the effort to restore gas service, so that customers could be placed in temporary housing that is closer to their homes and places of work. We are providing transportation assistance, in the form of either mileage reimbursement or access to our corporate accounts with Uber or Lyft. We are also providing winterization assistance to homes that have not yet had heat restored. We recognize there is no substitute for living in your own home and in your own community, and we continue to seek to identify additional avenues to minimize the burden.

We recognize that the impacted communities will have needs that go beyond this assistance. For that reason, we committed \$10 million to the Greater Lawrence Disaster Relief Fund in the days following the event. This fund is managed by the leadership of Lawrence, Andover, and North Andover. The Fund has helped serve the short and medium term needs of impacted residents, including housing, sustenance and support services. And, as we recently announced, we are providing an addi-

tional \$10 million to support business recovery efforts in the Merrimack Valley. In coordination with state and local officials and community organizations, this includes direct technical support, funds for municipal discretion for business support, and longer-term regional support for economic development.

We know that our customers have been frustrated by the flow of information and by changes to our restoration and claims plans. We recognize we need to do better and are working to improve our communications. We now have a more robust customer communications program to keep affected customers informed and we are sending regular updates through several communication channels. The communications program includes, among other things, direct mail, a weekly customer newsletter, an interactive map of our work schedules on our website, a 24/7 helpline, paid ads, and social media posts. We also have participated in six town hall/open-house sessions in the three affected communities, where we heard directly from customers and provided resources to help resolve their issues.

In addition to the channels mentioned above, we are making personalized phone calls, leaving notices on doors, and have appointed a dedicated spokesperson whose sole role is to communicate with the public through the media. We are also making communications in both English and Spanish.

We are also taking targeted steps, like reaching out proactively to customers in communities that may not receive communications regularly through the other channels discussed above.

We have hosted special events for the affected communities on Halloween and Thanksgiving. On Halloween, we held Operation Trick or Treat, which provided bags and candy to children in Andover and North Andover, and made it possible for over 1,100 children to go trick or treating in their temporary housing locations. For Thanksgiving, we are planning to provide more than 16,000 holiday dinners to customers, their families, and friends.

#### **V. Restoration of Service**

Following September 13th, our first priority has been to assist the communities affected by this tragedy. These efforts were designed with the primary purpose of helping get the Lawrence, Andover, and North Andover communities back on their feet. We have not done this alone. NiSource and Columbia Gas are grateful for the work of retired Navy Captain Joe Albanese, who was appointed by Governor Baker to lead the recovery effort in partnership with Columbia Gas and NiSource. We are also grateful for the work of Rear Admiral Richard Cellon, who is assisting Captain Albanese. We would also like to express our gratitude to Governor Baker, Lieutenant Governor Polito, Attorney General Healey, Adjutant General of the Massachusetts National Guard Keefe, Massachusetts Emergency Management Agency Director Schwartz, Senators Markey and Warren, Representatives Moulton and Tsongas, Representative-Elect Trahan, Lawrence Mayor Rivera, Andover Town Manager Flanagan, North Andover Town Manager Maylor, Eversource, the more than 450 mutual aid workers from utilities across the country, and as noted earlier, the first responders from the Merrimack Valley and surrounding areas.

The over-pressurization created a significant risk of damage to Columbia Gas's facilities as well as customer-owned house-lines and appliances that typically only receive gas at low pressure. As a result, Columbia Gas could not safely just turn the gas back on at low pressure. Potential damage to main lines, services lines, and in-home natural gas systems and appliances all needed to be assessed and addressed.

This restoration work is complex, and we are undertaking it at what is an unprecedented scale. We recently announced the overall cost could exceed \$800 million. That amount includes pipeline and gas service restoration, relief measures, and third-party damages.

Two initial observations about the restoration process. First, we have prioritized restoring gas service to our most vulnerable customers—the elderly, individuals with disabilities or health concerns, and young children—even when that slowed the overall pace of restoration. Our efforts to meet the needs of those vulnerable populations have been valuable, but do not eclipse the fact that much work remains to be done to completely restore the communities of Lawrence, Andover, and North Andover. Second, due to the complexity and scale of this work, we have committed to evaluating and adapting our approach as the restoration program has progressed so that we implement lessons we have learned along the way.

We refer to the first component of the restoration process as “Gas Ready”: The complete replacement of approximately 45 miles of low-pressure bare steel and cast-iron pipeline with state-of-the-art plastic mains and distribution lines. Customers will have noticed the replacement of the gas mains, which run down their streets, as well as the service lines, which connect the gas mains to their homes.

This portion of the project was completed on October 30, 2018, ahead of schedule. Our thanks go out to the individuals who worked tirelessly to install this state-of-the-art infrastructure safely and efficiently and who saw this step of our restoration efforts to completion.

The second component of the project, which we refer to as “House Ready,” involves repairing and replacing appliances and other natural gas infrastructure and equipment in customers’ homes. This process begins with an assessment of each home to determine the condition of all gas appliances and infrastructure, along with issues such as lead paint or non-code configurations that could affect work on the structure. Once necessary repairs and replacements have been made, the house will be inspected for safety.

As part of the “House Ready” process, Columbia Gas has committed to replace essential natural gas appliances and equipment for impacted residential customers. (Other gas appliances will be replaced through the claims process.) Where possible, we are installing energy efficient equipment and appliances. We initially planned to do these replacements as part of the process of restoring gas service to a home. However, in order to restore heat and hot water to customers as quickly as possible, we have recently begun repairing equipment where we can safely do so, and will return later, after winter, to replace it with new, modern equipment.

Columbia Gas brought on a major contractor to complete the “House Ready” process on the original timeline, which aimed to restore gas service to all impacted customers by November 19, 2018. Unfortunately, the “House Ready” process has taken longer than expected. The contractor ran into significantly more issues within the homes than anyone anticipated. Each home is unique and requires a tailored solution, with different heat and hot water systems, hazards, code issues, and layouts. We have also run into a significant number of homes in the restoration area with environmental issues, such as mold or asbestos, which required remediation before any work could be done.

To address the challenges we encountered in the “House Ready” process, we have brought on three additional contractors, one dedicated solely to business customers, the other two to residential homes. Additionally, as we described before, we shifted our focus to repair any heating or hot water equipment where it could be safely repaired. We have also been able to significantly increase the number of plumbers working to restore service. Information about the revised schedule, as well as the appliances we will provide, is available on our website.

Our business contractor leads an effort we refer to as “Back to Business,” in which a project manager is assigned to each affected company. The project manager leads a team, including a claims adjuster who aims to expedite the claims approval process for businesses.

Residential and business customers also have the option to self-mitigate and seek reimbursement through the claims process; advances to fund repairs can also be obtained.

As of November 20, we have completed the replacement of approximately 45 miles of gas pipeline and over 5,000 service lines. That has allowed us to restore service for 5,592 residential meters and 602 business customers—76 percent and 87 percent of the total residential meters and business meters. We deeply regret that we have had to extend the anticipated timeline for gas restoration to between December 2 and December 16. But we are pleased to report that we continue to beat our daily goals of making homes “House Ready,” and we are currently on track to restore heat and hot water in the early part of that date range.

Our commitment to the Merrimack Valley will not end once gas service is fully restored. We will continue to assist customers in filing claims in the wake of this event to address the needs of homes and businesses in the affected communities, including by coming back after the winter season to replace appliances that were initially repaired and completing paving and other work necessitated by the restoration-related construction.

## **VI. Conclusion**

We are humbled by the optimism and determination of our customers not to allow this tragedy to disrupt their lives any more than it has, but we know we have to do more, and we have to do it faster. The Merrimack Valley has a long road to recovery ahead. Our entire company is committed to working with you to advance that recovery. We know this work is, and will be, the most important duty of our professional careers. We are going to get you back in your homes and businesses. We are going to make the Merrimack Valley gas system safer than ever. And we are going to be here, working with you. Thank you.

### **VII. Witness and Columbia Gas of Massachusetts Background**

Joe Hamrock. Since 2015, Joe Hamrock has served as President and CEO of NiSource, Inc., which operates seven subsidiary natural gas and electric utilities, including Columbia Gas of Massachusetts. He earned a bachelor's degree in Electrical Engineering at Youngstown State University and began his career as an electrical engineer. Hamrock later attended business school here in Massachusetts, at MIT, and transitioned into management, which led eventually to his role as President and Chief Operating Officer of American Electric Power of Ohio. From AEP, Hamrock joined NiSource in 2012 as an Executive Vice President and Chief Executive Officer of the Gas Distribution Segment, before being appointed CEO of NiSource in 2015.

Steve Bryant. Steve Bryant is the President of Columbia Gas of Massachusetts. He is a native of Massachusetts, having grown up in Somerville, and has worked in the utility field in the Northeast for his entire adult life. After high school, Steve joined Commonwealth Energy as a mail boy, and later attended UMass Boston, where he earned a bachelor's degree in economics. After college, Steve held a variety of positions at Commonwealth in the rates, customer operations, and sales departments. During that time, he attended Boston University's Graduate School of Management, where he earned a master's degree in business administration. Eventually he became a vice president at Connecticut Natural Gas, and from there, joined Columbia Gas in 2001 and was promoted to his current position in 2003.

Columbia Gas of Massachusetts and its predecessors have been serving the energy needs of New Englanders for more than 160 years. In 1847, the Springfield Gas Light Company was founded to light the city's streets, and it has been supplying gas heating to buildings since 1878, later under the name Bay State Gas, and eventually as Columbia Gas of Massachusetts. The company is proud of its long history serving the people of Massachusetts.

Senator MARKEY. Thank you.

Our next witness is Richard Kuprewicz, who is the President of Accufacts, Incorporated. Welcome.

#### **STATEMENT OF RICHARD B. KUPREWICZ, PRESIDENT, ACCUFACTS, INCORPORATED**

Mr. KUPREWICZ. Thank you. Thank you for the opportunity to comment today on another pipeline event that could have been prevented.

My name is Richard B. Kuprewicz, and I am President of Accufacts, Incorporated, based in Redmond, Washington. I have over 45 years of experience in the field.

After many years of effort, distribution integrity management program or DIMP regulation became effective in August 2011, though prudent gas distribution operators were implementing these critical safety process approaches well before this deadline.

Since promulgation of important transmission and distribution integrity management performance-based regulatory steps and minimum pipeline safety regulations, I have investigated far too many pipeline disasters which speaks volumes for the need for further pipeline safety regulatory clarification and/or improvement.

Given the time limitations, I have focused on two important recommendations for the minimum pipeline safety regulations.

Recommendation 1, add prescriptive requirements for management of change in regulation. Prescriptive requirements define shall and clearly define what an operator must do.

In the important area of management of change or MOC, the gas industry mainly relies on the American Society of Mechanical Engineers or ASME standard Management System Integrity of Gas Pipelines, ASME B31.8S, and that supplements ASME B31.8. Both are performance-based standards.

Parts of both of these industry practices are incorporated by reference in current Federal pipeline safety regulations.

Given the importance of management of change in pipeline safety, I recommend this process shall be prescribed by clear wording in pipeline minimum safety regulation.

Industry practices development does not necessarily undergo the more public review and scrutiny and possible challenge that pipe safety regulation undergoes when reaching the higher obligation of promulgation into law.

Incorporation of the exact wording of MOC protocols into Federal pipeline safety regulation also makes such regulation accessible to the public that could be impacted in the event of a pipeline failure.

Congress made an attempt in the Pipeline Safety Regulatory Certainty and Job Creation Act of 2011 to rectify this difficulty for public access to important reference pipeline safety documents, but this well-meaning effort was circumvented by subsequent lobbying efforts to restrict such easier public access.

Given the complexity of changes within many gas distribution system operations, Congress should require that pipeline safety regulation prescriptively incorporate critical minimum steps required for all management to change procedures that will cover both equipment and procedures.

My second recommendation, Recommendation 2, require the use of computer leak mapping in DIMP. A creative pipeline operator can tamper with the evaluation of important metrics required to be reported annually to PHMSA, the Pipeline and Hazardous Material and Safety Administration.

This is especially true in the area of DIMP regulation calling for the operators to evaluate and rank risk. Risk ranking can generate a wide range of outcomes developed from the same data.

During the evolution of DIMP regulation, considerable discussion occurred related to displaying hazardous leak data by graphic mapping using computers and advanced mapping software in the late 2000s. The mapping approach did not make it into the final DIMP regulation because an argument was presented at the time that many operators, especially the smaller operators, did not have access to computers and simpler-to-use developing mapping software was still evolving.

Many gas distribution operators now recognize the importance, the efficiency, and safety benefits of computer leak mapping by grade, by cause, and by pipe type, such as mains or service lines, in quickly assisting in the evaluation of leak risk on their gas distribution systems.

Such graphic color-coded computer mapping greatly aids the rapid analysis of large volumes of data to assist in quickly recognizing and identifying systemic geographic hot spots that might warrant further attention and resources to prudently control risk on their systems.

Such leak mapping also helps to identify areas of a gas distribution system where One Call may not be effective.

Quite simply, in the important area of leak evaluation and risk ranking, if a gas distribution operation cannot incorporate such a technically advanced and relatively inexpensive computer tool into

helping to improve pipeline safety, they should not be in the gas distribution business.

Congress—

[Applause.]

Mr. KUPREWICZ. Congress should direct development of simple regulations to require the use of computer leak mapping and reporting technologies into gas distribution safety to assist in evaluating and ranking risk.

And I thank you for your time and I'll take any questions later.

[Applause.]

[The prepared statement of Mr. Kuprewicz follows:]

PREPARED STATEMENT OF RICHARD B. KUPREWICZ, PRESIDENT, ACCUFACTS  
INCORPORATED

Thank you for the opportunity to comment today on another pipeline event that could have been prevented. My name is Richard B. Kuprewicz and I am President of Accufacts Inc., a consulting firm based at 8151 164th Avenue, NE, Redmond, WA 98052. I specialize in all aspects of hydrocarbon-based pipelines. I have over forty-five years of investigative experience and trained as a chemical engineer with additional knowledge in process safety management, developed from many years of operational experience. I have consulted for various local, state, and Federal agencies, NGOs, the public, and pipeline industry members on pipeline regulation, operation, and design, with particular emphasis on operation in unusually sensitive areas of high population density or environmental sensitivity.

I serve as a representative of the public advising the Pipeline and Hazardous Materials Safety Administration, or PHMSA, on such areas as liquid and gas transmission integrity management, or TIMP, regulation development in the early 2000s following terrible pipeline tragedies. As a representative of the public I was also involved in the many years of natural gas distribution regulatory advancement wisely driven by the Congressional Pipeline Inspection, Protection, Enforcement, and Safety Act of 2006 (PIPES Act of 2006) that mandated the gas distribution integrity management program, or DIMP, effort in Federal rulemaking. After many years of effort, DIMP regulation became effective in August 2011, though prudent natural gas distribution operators were implementing these critical safety process approaches well before this deadline. At the end of 2017, reports to PHMSA indicated that there are over 1,300 gas distribution operators in the U.S. encompassing a wide range of complexity. I believe most, if not all, gas distribution systems are intrastate pipeline systems operating within a state. The U.S. gas distribution system utilizes over 2.2 million miles of pipeline consisting of networks of mains and service lines, and composed of a wide variety of pipe materials and connections. Much of these materials and connections are sensitive to threats that are age related, such as cast iron and older vintage plastics, and mechanical connections. It is my observation that many gas distribution operators understand the importance and intent of DIMP, while others, sadly, still don't.

Since promulgation of these important TIMP and DIMP regulatory steps in minimum pipeline safety regulation, I have investigated far too many pipeline disasters, which speaks volumes for the need for further pipeline safety regulatory "clarification" and/or improvement. Concerning the failures (and I refer to multiple failures based on my experience and recent observations) the situation affecting the Merrimack Valley in Massachusetts (Lawrence event) on September 13, 2018, while rare for gas distribution operations, raises many questions about the adequacy or clarity of minimum pipeline safety regulations and safety process approaches. My comments are not intended to impede or influence the NTSB investigation concerning the Merrimack Valley failures. In my more than forty-five years of observation, I have nothing but respect for the NTSB pipeline investigation process. To finalize an NTSB report on a specific pipeline incident can take some time, given the need to be thorough, but I have nothing but confidence in this government body. It is a government organization that, well, just works.

I will focus my brief comments and recommendations this morning concerning natural gas distribution system regulations on two important areas that I believe warrant regulatory advancement via prescriptive and clear regulation. Prescriptive regulation can be more efficient and effective than performance based regulations, such as TIMP, which has experienced, at best, mixed success. Prescriptive based safety regulations set basic obligations and tend to be clearer and less prone to mis-

interpretation by using “shall” requirements, for example, that should leave no doubt as to important minimum safety requirements.

I see the need for regulatory improvement in the area of gas distribution: 1) Setting prescriptive minimum requirements in the area of Management of Change, or MOC protocols in this critically important area, and 2) Improving the way DIMP approaches the area of evaluating and risk ranking, mandating the use of computer leak mapping, taking advantage of recent computer/software mapping strides made in this technical area.

**Recommendation 1: Add prescriptive requirements for Management of Change in regulation**

In the important area of Management of Change, or MOC, the gas industry mainly relies on the American Society of Mechanical Engineers (“ASME”) standard, ASME B31.8S–2004, “Managing System Integrity of Gas Pipelines,” revised in 2004 that supplements ASME B31.8. Parts of both of these industry practices are incorporated by reference in Federal pipeline safety regulation (49CFR§ 195.7). Given the importance of MOC in pipeline safety, I recommend this process should be prescribed by clear wording in pipeline minimum safety regulation. While I have great respect for many industry practices, their development does not necessarily undergo the more public review and scrutiny and possible challenge that pipe safety regulation undergoes when reaching the higher obligation of promulgation into law.

Incorporation of the exact wording of MOC protocols into Federal pipeline safety regulation also makes such regulation accessible to not only the industry, but importantly, also to the public that could be impacted in the event of a pipeline failure. Many referenced industry documents in Federal pipeline safety regulations are still not readily available to the public, or can only be obtained at great expense or effort. Congress made an attempt in the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 to rectify this difficulty for the public in gaining access to important referenced pipeline safety documents, but this well-meaning effort was circumvented by subsequent lobbying efforts to restrict such easier public access. Given the complexity of changes within many gas distribution system operations, *Congress should require that pipeline safety regulation prescriptively incorporate critical minimum steps required for all Management of Change procedures that will cover both equipment and procedure changes.*

**Recommendation 2: Require the Use of Leak Mapping in DIMP**

While DIMP regulation is heavily and appropriately reliant on metrics that can be measured, reported, and tracked, there nevertheless can be weakness where a creative pipeline operator can tamper with the evaluation of important metrics required to be reported annually to PHMSA and to many state pipeline regulatory agencies. This is especially true in the area in DIMP regulation calling for operators to “Evaluate and rank risk.” Risk ranking can generate a wide range of outcomes developed from the same data. During the evolution of DIMP regulation, considerable discussion occurred related to displaying hazardous leak data by graphic mapping using computers and advancing mapping software in the late 2000s. The mapping approach did not make it into the final DIMP regulation because an argument was presented at that time that many operators, especially the smaller operators, did not have access to computers, and simpler to use developing mapping software was still evolving.

I have seen many gas distribution operators who now recognize the importance, efficiency, and safety benefits of computer leak mapping by grade, by cause, and by pipe type (mains or service lines) in quickly assisting in the evaluation of leak risks on their gas distribution systems. Such graphic color coded computer mapping greatly aids the rapid analysis of large volumes of data to assist in quickly recognizing and identifying systemic geographic “hot spots” that might warrant further attention and resources to prudently control risk on their systems. On more than one occasion, I have recommended that such simple computer mapping be utilized to aid pipeline operators and state regulators in justifying additional funds for further pipe replacement to efficiently improve gas distribution system safety. Such leak mapping also helps to identify areas of a gas distribution system where one-call may not be effective.

Such computer and software advances have, I believe, reached the proficiency where a gas pipeline operator, even a small operator, should be easily able to incorporate such leak mapping/tracking advances into their operation. Quite simply, in the important area of leak evaluation and risk ranking, if a gas distribution operation cannot incorporate such a technically advanced and relatively inexpensive computer tool into helping to improve pipeline safety, they should not be in the gas distribution business. *Congress should direct development of simple regulations to re-*

*quire the use of computer leak mapping and reporting technologies into gas distribution pipeline safety to assist in evaluating and ranking risk.*

Senator MARKEY. Thank you.

Now we're going to hear from Paul Roberti, Chief Counsel of the Pipeline and Hazardous Materials Safety Administration.

**STATEMENT OF PAUL ROBERTI, CHIEF COUNSEL, PIPELINE  
AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION**

Mr. ROBERTI. Good morning. Senator Markey, Senator Warren, Senator Hassan, Representative Tsongas, and Representative Moulton,——

Senator MARKEY. Please move the microphone in a little closer.

Mr. ROBERTI.—thank you for the opportunity to testify today.

The Merrimack gas explosions on September 13 were indeed tragic and unacceptable. On behalf of Secretary Elaine Chao and Administrator Skip Elliott, I recognize and appreciate your efforts to advance pipeline safety. For our leadership and everyone working at the Department of Transportation, safety is our Number 1 priority.

PHMSA's mission is to protect people and the environment by advancing the safe transportation of energy and hazardous materials that are so essential to our daily lives.

PHMSA oversees the inspection and enforcement of the nation's interstate pipeline system. We advance education, research and development projects, and we administer the State Pipeline Safety Programs in 48 states, including Massachusetts.

The natural gas explosions and fires in the Merrimack Valley were indeed tragic and avoidable. The United States Department of Transportation deeply sympathizes with the Rondon family and all those who suffered injuries or had their homes and property damaged or destroyed.

PHMSA acknowledges and supports all initiatives to replace aging cast iron pipelines to advance public safety.

In my prior role as a public utilities commissioner in Rhode Island, just a few miles south of here, I worked steadfastly to advance programs to accelerate the replacement of aged cast iron and bare steel pipelines for many years, particularly in the aftermath of tragedies like Allentown, Pennsylvania.

Those types of tragedies galvanized the effort to modernize pipeline systems across the nation, yet despite Columbia Gas's effort to replace aging systems, we witnessed an extraordinary failure in the planning, design, and execution of a replacement project.

This accident once again illustrates how critical it is for pipeline operators to thoroughly plan and safely execute all facets related to construction, operation, and maintenance of pipeline networks.

Now the written testimony I submitted discusses PHMSA's Grant Assistance Program to our state partners, the training we provide to Federal and state inspectors, the importance and role of safety management systems, and, lastly, PHMSA's evaluations of the State Pipeline Safety Programs.

On the afternoon of September 13, when the incident occurred, PHMSA made an immediate decision to deploy multiple inspectors to the scene to provide technical assistance to both the Massachu-

setts Department of Public Utilities and the National Transportation Safety Board.

As some of you know, PHMSA's leadership also reached out in the evening of the incident to keep members of the Massachusetts congressional delegation apprised of PHMSA's efforts and role.

Since the time the tragedy unfolded, PHMSA's team of experts have provided hundreds of hours of technical assistance and we will continue to do so until the Massachusetts and the NTSB complete their investigations.

I also want to share some information about the State Pipeline Safety Programs that PHMSA administers.

The Federal-state partnership with the Commonwealth of Massachusetts spans over 35 years. Massachusetts is a certified state partner with inspection and enforcement responsibilities for intrastate natural gas distribution and transmission pipelines.

As a matter of Federal law, the Commonwealth possesses jurisdiction to investigate and make determinations regarding an operator's compliance with Federal and state regulations.

We also recognize the NTSB's jurisdiction and expertise for leading the investigation and determining the probable cause of this tragic accident. While the NTSB's preliminary report identified circumstances that likely contributed to the over-pressurization during the pipeline replacement project, PHMSA eagerly awaits the completion of both investigations so that we will have all requisite information concerning the cause of the incident and the operator's compliance with pertinent regulations.

This terrible accident shows how critical it is for pipeline operators to comprehensively understand their systems, including the design, construction, and operation of all facilities.

Operators and qualified contractors must exercise extreme care and diligence in every aspect of their work. Above all, they need to nurture and maintain a safety culture that promotes the highest level of safety so that the tragic pipeline accident that occurred in Merrimack Valley never happens again.

Thank you again for the opportunity to testify and I look forward to answering your questions.

[The prepared statement of Mr. Roberti follows:]

PREPARED STATEMENT OF PAUL ROBERTI, CHIEF COUNSEL, PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

## **I. Introduction**

Senator Markey and Senator Warren, thank you for inviting me to testify today as part of the Senate Commerce, Science and Transportation Committee's field hearing to discuss the September 13, 2018 natural gas accident involving Columbia Gas of Massachusetts and the oversight and effectiveness of state pipeline safety programs.

Safety is the number one priority for U.S. Secretary of Transportation Elaine L. Chao and PHMSA Administrator Howard "Skip" Elliott. The recent tragic events in your state can only intensify the Pipeline and Hazardous Materials Safety Administration's (PHMSA) commitment to its goal of zero pipeline incidents.

The mission of the PHMSA is to protect people and the environment by advancing the safe transportation of energy and other hazardous materials that are essential to our daily lives. The natural gas explosions and fires in Lawrence, Andover, and North Andover, Massachusetts, were tragic and all of us at PHMSA sympathize with the family of Leonel Rondon, the young man who lost his life, and all those who suffered injuries, or have property that was adversely impacted.

In response to the accident, PHMSA quickly dispatched multiple inspectors to Massachusetts to provide technical assistance to the National Transportation Safety Board (NTSB) and to the Massachusetts Department of Public Utilities (MA DPU). To date, PHMSA staff have provided more than 600 work-hours of technical engineering expertise, emergency response, and support. PHMSA will continue to assist the NTSB and the MA DPU as long as needed.

In addition, PHMSA Administrator Elliott has made it a priority to make himself available for discussions with the Congressional Delegation and the Governor of Massachusetts. PHMSA will also continue to prioritize answering your questions relating to this incident and working with all Massachusetts officials.

## **II. Roles**

Under PHMSA's oversight, pipelines have continued to remain one of the safest ways to transport hazardous energy products in the U.S. This safety record has been demonstrated with over 99.99 percent barrel equivalent of liquid hydrocarbons reaching their onshore destinations safely and through consistent declines in casualties and major injuries attributed to pipeline incidents. In fact, pipeline incidents resulting in death or major injury have declined 64 percent in the past 20 years, despite increases in risk exposure measures like population, pipeline mileage, aging infrastructure and volume of product delivered.

Pipeline safety is a shared responsibility for all public and private sector stakeholders. Of the nearly 2.8 million miles of pipeline infrastructure in the U.S., more than 80 percent of the lines belong to local distribution companies that transport natural gas to American homes and businesses. PHMSA's state certification program expands the Federal government's capacity to oversee these lines.

### *A. Role of States*

Since 1971, when a national, uniform standard of pipeline safety regulations was implemented, states have had the authority, through PHMSA, to regulate the safety of intrastate pipelines. Sections 60105 and 60106 of title 49 U.S. Code, continue to allow states to assume safety authority through PHMSA for the inspection and enforcement of intrastate pipelines. While states may act as interstate agents for interstate gas transmission and hazardous liquid pipelines, the vast majority of their responsibility is to oversee local distribution gas systems, including the system we are here to discuss today.

PHMSA sets the minimum Federal standards for pipeline safety, which the participating states then adopt into their state code and enforce. States are allowed, under Section 60104(c) of title 49 U.S. Code, to adopt more stringent safety standards than the minimum standards PHMSA sets. This allows states to codify and enforce regulations that deal with specific, regional (or local) risks that might not be feasible or cost-beneficial to regulate on the National level. Many states have established safety regulations that are more stringent than the Federal regulations.

The MA DPU is PHMSA's certified state partner in the Commonwealth of Massachusetts. Under this certification, the MA DPU is responsible for the inspection and enforcement for all intrastate natural gas distribution and transmission pipelines.

Across our country, PHMSA partners with pipeline safety programs in 48 states (in addition to the District of Columbia and Puerto Rico), which employs approximately 380 full-time inspectors, through certification and agreements for the inspection of the Nation's intrastate gas and hazardous liquid pipelines. PHMSA also has interstate agent agreements with nine states to perform interstate pipeline inspections. State pipeline safety agencies are the first line of defense in protecting much of the American public from pipeline risks on lines that exist primarily where people live and work. State pipeline safety agencies have authority over approximately 80 percent of the total pipeline infrastructure under PHMSA's oversight and have always been a critical component of a sound pipeline oversight program.

In addition to working with individual states, PHMSA works closely with the National Association of Pipeline Safety Representatives (NAPSR), an organization representing state government pipeline safety programs, towards our joint safety mission. PHMSA supports annual and regional NAPSR meetings and members of NAPSR frequently serve on PHMSA's Advisory Committees.

PHMSA has worked with the MA DPU for over 35 years as they have overseen pipeline safety in Massachusetts. PHMSA will continue to provide technical support to the MA DPU through this investigation and with any other technical assistance they may need in the future.

### *B. Role of PHMSA*

There is an inherent risk associated with transporting energy. PHMSA's job is to lessen the risk of energy transportation by pipelines by setting and enforcing Federal minimum safety standards for pipeline companies. The agency also promotes

safety through education, research, and our partnerships with 48 states, who inspect and enforce regulations for pipelines and underground natural gas storage facilities.

PHMSA is committed to making sure these organizations have the resources and expertise they need to keep our Nation's pipelines safe. Jointly with our partner states, PHMSA continuously strives to strengthen oversight, inspection, and enforcement of pipeline transportation through technical assistance programs, grants, training, and outreach.

### 1. *Grants*

The financial support that we provide to our state partners through grants is a vital part of our partnerships.

Based on the appropriation level set by Congress, our State Base Grant program<sup>1</sup> reimburses a portion of each of our partner state's program expenses. The grants partially cover the cost of any personnel, equipment, and activities reasonably required for the conduct of the pipeline safety program. Most importantly, PHMSA's grants provide state programs a consistent source of funding to hire and maintain adequate pipeline safety inspectors. PHMSA reviews state performance and conducts grant monitoring to ensure that the funds are used efficiently and effectively.

The statute allows PHMSA to reimburse states at a level set by statute and Congressional appropriation—PHMSA can pay no more than 80 percent of a state's total cost during a given calendar year and we prorate the total appropriation when necessary. For FY 2018, PHMSA awarded \$56 million to participating state programs,<sup>2</sup> including over \$1 million to Massachusetts, which will cover almost 60 percent of their estimated program costs this year.

As the number of miles of pipeline infrastructure continues to grow and as the older pipes age, this grant program is critical to our oversight of our Nation's pipeline systems.

### 2. *Training*

PHMSA also supports state programs by providing essential technical training. Our state-of-the-art Training and Qualifications (T&Q) program has full accreditation from the International Association for Continuing Education and Training (IACET).

The T&Q trains an average of 890 state and Federal inspectors annually, ensuring that all are current on updated regulations, technology, and best practices. PHMSA offers 58 online computer-based training and on-site courses, including classroom training and hands-on labs, that teach Federal and state inspectors how to understand and apply Federal regulations and incorporated industry standards. In addition, the Training Center offers technical assistance and nationwide seminars for companies to educate them on the consistent application of the regulations, inspection techniques, and compliance and enforcement procedures.

The core courses that inspectors must take cover topics including PHMSA regulations, overpressure protection, corrosion control, plastic pipe joining, and welding. Five of the seven inspectors in Massachusetts have completed their core training. The remaining two inspectors are new hires and will also take these core classes. In FY 2018, inspectors in Massachusetts completed 32 courses at the T&Q Center, and PHMSA looks forward to continuing to work with the state.

Training is critical to state inspectors. A significant increase in the total number of state and Federal inspection personnel, along with the many new employees who replace retirees, have led to increased training needs. Our Training Center is working hard to increase capacity in order to handle these needs. PHMSA has begun to hold "boot camps" to train new inspectors with the basic skills that allow them to begin their work quickly.

Looking ahead, PHMSA's T&Q Center is committed to developing innovative ways to be more accessible and effective, including the exploration of long-distance proctored classes, curriculum improvements, and more efficient delivery to ensure relevancy.

### 3. *Program Evaluations*

<sup>1</sup>The State Base Grant is a formula grant that authorizes awards to state pipeline safety programs under the authority of 49 U.S.C. § 60107—State Pipeline Safety Grants.

<sup>2</sup>All states except Alaska and Hawaii participate in PHMSA's pipeline safety program.

Each year, PHMSA evaluates every partner's compliance with our safety program requirements. Our representatives work with the state officials to review their inspection procedures, records, inspection activities, and enforcement actions.<sup>3</sup> These reviews provide an opportunity for dialogue between PHMSA and the states during which we emphasize the imperative to continually improve pipeline safety, public safety, and the protection of the environment.

This evaluation assesses whether the state is maintaining an effective pipeline safety program in line with Federal regulations and provides the basis for determining the state's total point award for the PHMSA pipeline safety grant for the upcoming year.

The assessments consist of two parts. PHMSA first reviews each state's Progress Report to validate that their pipeline safety program is supported by the people, training and other resources necessary to ensure pipeline safety. The progress report also summarizes their annual inspection activities conducted on the regulated companies within each state for the previous year.

Second, PHMSA reviews the annual Progress Report documents submitted by the state for accuracy, reviews the pipeline program inspection procedures and records, and observes an on-site inspection of a pipeline company conducted by state staff.

As part of this annual program evaluation process, PHMSA discusses state metrics developed by PHMSA and the National Association of Pipeline Safety Representatives. These metrics track the state's damage prevention program, inspection activity, inspector qualification, leak management, enforcement, and incident investigation.

These evaluations and the review of metrics are an opportunity for discussion between PHMSA and state pipeline safety program managers about potential safety program improvements. PHMSA also publishes each state's progress on these metrics online<sup>4</sup> so that the state programs can proactively review their metrics and act to ensure positive performance trends.

The strength of state pipeline safety programs directly impacts the integrity of our Nation's pipelines, especially the local distribution systems.

At the recent 2018 NAPS National Meeting, PHMSA senior leadership spoke to all state pipeline safety programs and challenged the states to strive for excellence. Specifically, PHMSA encouraged state leaders to be diligent in their oversight, especially in light of the Massachusetts accident. State pipeline safety authorities, just as we at PHMSA, must vigorously inspect and enforce against the pipeline safety regulations and take prompt action where needed.

### *C. Role of Gas Companies*

While PHMSA and our state partners are dedicated to a goal of zero incidents, a safe pipeline system requires the active participation of all stakeholders. Thus, the onus of maintaining a safe pipeline system is on the companies that own and operate the systems.

PHMSA expects companies to know their systems' risks and needs, including the risks of the systems' design, environment, and operations. Companies must address these risks promptly. Accidents like what occurred here in Massachusetts are unacceptable.

I want to recognize and thank the NTSB for their outstanding professionalism and dedication while leading the tragic Columbia Gas of Massachusetts accident investigation. In its preliminary report, the NTSB<sup>5</sup> noted that the overpressurization that caused the explosions and fires occurred during a pipeline replacement project. While we applaud the company's intent to replace aged and vulnerable cast iron lines, the project's work plan did not account for sensing lines of gas regulators in that part of the system.

This tragedy and its aftermath have demonstrated how critical it is for companies to thoroughly plan and safely execute all their work involving design, construction, operation and maintenance of any replacement activity. Pipeline operators must understand that they have a responsibility to demand excellence from the contractors and subcontractors they hire to work on their systems.

<sup>3</sup> Sections 60105(e) and 60106(d) of title 49 U.S. Code provide for the monitoring of state pipeline safety programs by PHMSA.

<sup>4</sup> <http://primis.phmsa.dot.gov/comm/States.htm>

<sup>5</sup> <https://ntsb.gov/investigations/AccidentReports/Reports/PLD18MR003-preliminary-report.pdf>

We will support the MA DPU and the citizens of Massachusetts as they work to recover from this tragedy. At this point, it also appears that this accident was not caused by a gap in either Federal or state pipeline safety regulations—this was an issue of company quality control. While we might wish it otherwise, regulations alone will not prevent pipeline incidents and accidents. To prevent future accidents like this one, companies must focus on continuous improvement and nurturing a good safety culture. Such aggressiveness is essential if we—all of us, together—hope to create a pervasive culture of safety—one that looks upon even near-misses as unacceptable failures, like air traffic controllers have done for a very long time. And I choose that occupation because they are one of few endeavors with a smaller incident rate than pipeline operations.

### **III. Continuous Improvement/Safety Management and Culture**

Pipeline operators must continue to use risk-informed approaches, such as integrity management, to ensure they are adequately identifying and addressing the greatest risks to their systems. This includes efforts to conduct integrity assessments and apply lessons learned across an entire system. But regulations are not the only resource PHMSA can use to improve pipeline safety.

The common thread that runs throughout every aspect of PHMSA's safety mission is a Safety Management Systems (or SMS) approach. SMS looks to find gaps, address them promptly, and prevent pipeline accidents and incidents from ever occurring as opposed to reacting. To be effective, SMS requires PHMSA to move beyond the role of being just a regulator—to encourage operators to identify and target their system risks, address those risks, and encourage a company-wide culture that makes safety the number one priority, always.

Pipeline operators are only as good as their worst contractor. For SMS to permeate through all levels and areas of the pipeline industry, we need ways to share and analyze data, allowing all of us to see emerging trends and addressing problems before they result in accidents. We all share the same goal of zero pipeline incidents, and I believe that the more we collaborate, the safer our Nation's pipelines will be.

PHMSA's expectation of companies, and the industries that support them, is for them to know their systems' risks and needs. Periodic inspections by PHMSA or its state partners will not yield the kind of intimate knowledge required to anticipate all of a system's vulnerabilities.

PHMSA challenges companies by encouraging them to not wait for inspections, or for new regulations, to make safety improvements. It is folly to think that further improvement will occur if companies are either passive or complacent. Companies work with these systems every day and they must be more aggressive than to wait for PHMSA or states to identify potential problems.

Under a well-designed SMS, companies can address an issue or gap before it becomes a problem, because some problems become accidents, and some accidents become tragedies.

An aggressive approach is essential if we collectively advance to create a pervasive culture of safety—one that looks upon even the smallest issue or near-miss as unacceptable.

Our commitment to SMS goes beyond asking companies to make cultural changes; we are implementing SMS throughout PHMSA as well. PHMSA is incorporating a focus on safety into our everyday operations, refocusing on our communications across the agency, and reexamining how we can do business even better.

An element of the PHMSA SMS is our work with our state partners to improve our training support. As I said before, PHMSA's T&Q Center is working to provide an effective and efficient distance delivery system that does not sacrifice the high quality of our training curricula. PHMSA's goal is to make it easier for state inspectors to access the courses they need quickly and at a lower cost.

PHMSA has an active mentoring program for state inspectors, and we continue to encourage states to participate in the program to improve inspector skillsets and benefit from feedback from experienced inspectors. In addition, last year PHMSA employees spent well over 7,600 hours working directly with state pipeline safety programs supporting pipeline safety.

### **IV. PHMSA Supports Modernization**

Our Nation is growing rapidly. Increases in domestic energy production are placing more demand on all of the Nation's transportation modes and poisoning America to become the world's largest energy producer. Technology advancements quickly change how the industry uses the transportation system. In addition, it is projected that another 70 million more people will live in America in 2050, placing even more demand on the transportation network. All of these changes present new safety

challenges, as well as new opportunities to improve the safety and efficiency of our Nation's hazmat transportation system for today and the future.

PHMSA believes that many of the next steps in safety will come from encouraging new technologies and prioritizing innovative solutions to safety challenges. We support modernization in multiple ways, including funding research and looking at new ways to conduct business.

If done correctly, upgrading our Nation's pipeline infrastructure is one of the surest ways to foster even higher levels of pipeline safety. That is why DOT and PHMSA issued a Call to Action in 2011 to accelerate the repair, rehabilitation, and replacement of the aged and outmoded pipeline that pose the highest risk across the country.

Thanks to increased state and Federal safety initiatives and pipeline companies' replacement efforts, the miles of active cast or wrought iron pipelines has declined significantly in recent years. To date, 21 states and one territory have completely eliminated their inventory of cast or wrought iron natural gas distribution lines.<sup>6</sup> In fact, cast or wrought iron gas distribution pipelines make up only 2 percent of distribution mains in our country today,<sup>7</sup> and 41 states, including the District of Columbia, have specific rate mechanisms that foster accelerated replacement of pipelines no longer fit for service.

PHMSA considers it our responsibility to provide technical support to state and Federal agencies that have siting or route designation authority, to prioritize inspections related to the engineering and construction of major new pipeline projects, and to the support of projects that are designed to repair, rebuild, and expand infrastructure.

We're also committed to undertake the research that will develop new technologies and new solutions to pipeline safety challenges. Our R&D program works to apply research, strengthen consensus standards, and inform regulatory activities. Our research is focused on solving discrete, current problems that have an immediate effect on overall safety.

Since 2002, PHMSA has funded 270 projects designed to prevent excavation damage to pipelines, identify and minimize leaks, and detect defects in pipelines well before they fail. In September, PHMSA awarded more than \$3.8 million to 11 universities via our Competitive Academic Agreement Program (CAAP). The 13 research projects funded by CAAP this year address a number of consensus standards, rulemakings, mandates, and recommendations.

The PIPES Act of 2016<sup>8</sup> required the Secretary to establish a Voluntary Information-sharing System (VIS) Workgroup (WG) to study information-sharing systems for the pipeline industry. This group will provide recommendations to the Secretary regarding whether a sharing system is needed, ways to encourage the exchange of inspection information, and best practices for the protection of proprietary and security-sensitive information. The VIS WG's membership includes representatives from PHMSA, industry stakeholders, safety advocacy groups, research institutions, state public utility commissions, state pipeline safety inspectors, labor representatives, and other entities. The Workgroup is on schedule to present their recommendations to Secretary Chao before the end of the year.

## V. Conclusion

Safety is the highest priority for the U.S. Department of Transportation and for PHMSA and we look forward to continuing to work with Congress to prevent future natural gas distribution pipeline accidents like what recently occurred in Massachusetts. Pipeline companies must apply lessons learned from this accident to their own programs and future operations. PHMSA holds companies accountable for the safe operation of their pipelines, and will continue its efforts to ensure that *all* stakeholders uphold the highest possible safety standards.

As the number of miles of new pipe being buried across the country continues to grow, the need for strong state pipeline safety programs is ever more critical to promote transportation system safety in every corner of our great nation. States' input and experience is critical in this effort as PHMSA sets public policy, strategically allocates resources, and moves forward with effective new regulations.

Thank you again for inviting me to today's field hearing. I look forward to your questions.

<sup>6</sup>Alaska, Arizona, Colorado, Hawaii, Iowa, Idaho, Montana, New Mexico, North Carolina, North Dakota, Nevada, Oklahoma, Oregon, Puerto Rico, South Carolina, South Dakota, Utah, Vermont, Washington, Wisconsin, and Wyoming

<sup>7</sup>[https://opsweb.phmsa.dot.gov/pipeline\\_replacement/cast\\_iron\\_inventory.asp](https://opsweb.phmsa.dot.gov/pipeline_replacement/cast_iron_inventory.asp)

<sup>8</sup>Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2016, Public Law 114-183

Senator MARKEY. OK. Thank you.

Now we'll go to a round of questions from the members of Congress.

Mr. Hamrock, will you commit under oath today that you will guarantee that every family, every business is made 100 percent financially whole for the disaster which occurred on the property of Columbia Gas?

Mr. HAMROCK. Senator, yes, we take responsibility for the incident and the consequences of the incident and from the very beginning, we're committed to working with each of the affected individuals, families, and businesses to ensure that we fully understand the impact on them and that we work with them closely to fully compensate them for their losses.

Senator MARKEY. So you will make them 100 percent financially whole?

Mr. HAMROCK. We will work with them to fully understand not just financially—

Senator MARKEY. Will you make them 100 percent financially whole?

Mr. HAMROCK. Yes, we will, and—

Senator MARKEY. OK.

Mr. HAMROCK.—we'll work with them for all other effects that they may have experienced.

Senator MARKEY. OK. The families and businesses need to hear that.

Mr. Hamrock, the National Transportation Safety Board, Chairman Sumwalt, he testified to this, issued an urgent set of recommendations two weeks ago in an interim report which I have here. It's an urgent report and it said that the company should take all of these additional safety measures immediately.

Do you commit to adopting every one of these urgent safety measures now?

Mr. HAMROCK. Senator, the NTSB's recommendations are aligned with our objectives. We are already implementing some of those. We began—

Senator MARKEY. No. I asked you if you would implement all of the recommendations—

Mr. HAMROCK. We will work—

Senator MARKEY.—of the NTSB?

Mr. HAMROCK.—with the NTSB to fully understand and implement the recommendations they've made.

Senator MARKEY. It has been two weeks since they issued these urgent recommendations. Why can you not commit to implementing urgent recommendations from the NTSB right now, all of them?

Mr. HAMROCK. Senator, we are committing to implement those recommendations.

Senator MARKEY. All of them?

Mr. HAMROCK. Yes, all of them, and in fact we have already implemented a number of them in the weeks subsequent to the tragedy occurring, and in some cases, we've gone above and beyond those recommendations already.

Senator MARKEY. It's critical that all of them be implemented now. In the immediate aftermath, you said that you would review them, but in reviewing, you said you will now implement.

Next, the NTSB found that a single unqualified engineer was allowed to approve the construction job that caused the disaster with no oversight from experienced technicians that would have understood the implications for the entire pipeline system. It's unacceptable and shows a culture of complacency that Columbia Gas would allow someone so unqualified to make unilateral decisions about pipeline construction projects.

Mr. Hamrock, were you aware that this was a practice occurring at Columbia Gas?

Mr. HAMROCK. Senator, we are reviewing the NTSB's findings in this regard, looking at all of the underlying factors that would have contributed to that situation, committed to getting to the bottom of it, and we'll not stop until we—

Senator MARKEY. Were you aware that there was an unqualified engineer doing the review of the project? Were you aware?

Mr. HAMROCK. I was not personally aware.

Senator MARKEY. Mr. Bryant, were you aware?

Mr. BRYANT. Senator, I am aware of the fact that engineers who work on our system are not always professional engineers. That's somewhat standard in the industry.

Senator MARKEY. It is a standard that is too low. To have a safety decision made by an unqualified engineer is unacceptable.

Will you commit right now to having all future pipeline construction plans signed off on by a qualified engineer and that Columbia Gas officials who know the entire pipeline system as the NTSB has recommended? Will you commit to that?

Mr. HAMROCK. Senator, yes, we have already begun to implement that. Where we do not have professional engineers in place, we will work with outside firms to ensure that we do in fact bring professional engineers to oversee the work, and we'll work with the NTSB to make sure that we fully understand and clarify the intent of that recommendation.

Senator MARKEY. All right. Well, that was a catastrophic mistake. The entire company failed. The buck does stop with you. Your company gave too much power to a low-level engineer with too little information.

Next, up until four years ago, Mr. Hamrock, it was company policy to have a trained technician present in the pressure monitoring station when construction work was being done. If a technician had been onsite here in Lawrence on September 13, they likely would have seen the pressure spike, immediately turned off the gas, and potentially avoided this whole disaster, but according again to the NTSB, your company abandoned that requirement four years ago for that common sense safety measure.

It took 26 minutes after the Columbia Gas Control Room received the high pressure alarms for someone to shut down the gas at the regulator. Four years ago, you would have had someone there to shut down immediately during that critical 26-minute gap. That did not happen because you abandoned that policy and the result was disaster.

Saving money as a way of increasing profits but at the expense of safety leads to disaster, Mr. Hamrock.

Do you commit to having someone there onsite from now on to make sure it never happens again?

Mr. HAMROCK. Senator, safety is a core value for us, the core driver of everything that we do. We've reviewed that recommendation and that finding. Further review is required to fully understand it. We do commit to putting automatic shutoff capabilities in all of our systems, not just with somebody stationed at the regulator during construction work but on a continuous basis—

Senator MARKEY. Again, will you commit to changing the policy?

Mr. HAMROCK. We do commit to putting automatic shutoff capabilities across all of our low pressure regulator systems, which goes above and beyond the NTSB recommendation, because it will be continuous automatic shutoff, not just—

Senator MARKEY. Will that satisfy you, Chairman Sumwalt?

Mr. SUMWALT. I cannot commit on behalf of the entire Board, I'm one of five members of the Board, but I like what I hear there. The automatic shutoff valve, we've called for that in other accidents.

Senator MARKEY. OK. And down to you, Mr. Kuprewicz. The fine that can be levied is \$2 million. This disaster could cost upwards of a billion dollars. Is that fine too low, Mr. Kuprewicz? What should the fine be? It seems to me for Columbia Gas, it's like paying a parking ticket for something that created a catastrophic accident. Where should these fines be set?

Mr. KUPREWICZ. Well, you ask a valid question. I've investigated too many multibillion dollar disasters from pipelines and that's multi-B, with a billion. The fines, you could argue, and there has been a lot of debate on this over the decades, what's the purpose of the penalty?

I can't give you a dollar answer, but what I can tell you is it should be high enough to change the culture so that they don't repeat the mistakes that are obviously going to be investigated and reported on and so penalties aren't necessarily to be punitive. They should be trying to modify the culture. If they can't do that, then they're not high enough and I'm sorry to be giving you a glib answer, but I'm giving you an honest, truthful answer.

Senator MARKEY. Well, it's not a glib answer. You're saying they're not high enough. They have to be much higher. It has to discourage Columbia or any other company from ever turning a blind eye to the safety problems in their company because they know that the fine is the equivalent of a parking ticket.

Mr. KUPREWICZ. It gets even worse because the actual penalty that is assessed is very seldom actually collected. It's a very small percentage, even less than that. So we're on the same wavelength here, Senator.

Senator MARKEY. Well, again, boosterism leads to complacency and complacency leads to disaster. When you assume that there can be no accident and the fine is so low, if there is one, then it creates the condition of complacency that does result in disaster.

So these Federal fines have to be dramatically increased if we're going to discourage this activity from ever occurring again in the future, and I would say to you, Mr. Hamrock, that my question to you is given what's happened, given this catastrophic event, do you

think that you should be any longer allowed to run this company, given the catastrophe which has occurred?

Mr. HAMROCK. Senator, the consequences alone of this tragedy motivate me to dedicate the remainder of my professional career to ensuring that nothing like this ever happens again. That becomes the sole driver.

I take responsibility on behalf of NiSource and on behalf of Columbia Gas and as CEO, I'm accountable to be sure that this never happens again and that we restore these communities to where they were. We won't stop. We're here for the long run. We won't stop until we're committed to that and that's what I pledge.

Senator MARKEY. Well, Mr. Hamrock, I'm not sure that you should be allowed to continue to be the CEO of this company given what happened.

[Applause.]

Senator MARKEY. I think that it is absolutely imperative that there be some price which is paid for what has happened.

Let me turn now and recognize my colleague, Senator from Massachusetts, Elizabeth Warren.

Senator WARREN. Thank you, Senator Markey.

So what happened in the Merrimack Valley is horrible, plain and simple. It is even more infuriating that this is not the first time that Columbia Gas and NiSource have failed to provide safe gas service to its customers.

In 2012, a Columbia Gas worker punctured a mislabeled steel service line in Springfield, Massachusetts, resulting in an explosion that injured 17 people and caused an estimated \$1.3 million in property damage.

Mr. Hamrock, following the Springfield explosions, was your company pressed to improve your pipeline safety processes?

Mr. HAMROCK. Senator, in that instance, as you noted, one of our employees was investigating the call on a leak and in the course of that investigation punctured the service line during a process called bar holding, looking for the gas under the pavement.

After that, as we always do in any sort of incident, whether it occurs on our system or others, we take actions that are designed to prevent something like that from ever happening again, and we did in fact change procedures and change bar holding procedures.

Senator WARREN. So that's a yes?

Mr. HAMROCK. It's a yes. Yes, we did.

Senator WARREN. OK. Columbia Gas leaks also occurred across the Commonwealth, in Walpole in 2004 and 2007, in Easton in 2007 and West Barnstable in 2009, and West Springfield in 2011, and in Skaugen in 2012.

Following those leaks, did you take action to improve safety?

Mr. HAMROCK. In every case, when there's an incident, whether it's caused by damage from an outside party, weather-related, any sort of asset-related condition, we always look for an opportunity to learn and make changes and take actions as a result of what we learned from those, so yes.

Senator WARREN. Well, here, we're here not because—and I think this is what you're saying—not because one individual engineer or one mislabeled engineering plan, but because of a series of problems, and I'm concerned that these events culminating in the

deadly explosion three months ago expose a corporate culture that isn't adequately focused on safety.

Mr. Bryant, Mr. Hamrock, corporate culture is on you. Corporate priorities are on you and that's why I want to ask about personal responsibility here.

On October 11, the National Transportation Safety Board, the Federal body charged with determining what caused this tragedy, released an interim report on the Merrimack Valley explosions which clearly identified a series of failures by Columbia Gas.

So, Mr. Bryant, you're the President of Columbia Gas. That means the buck stops with you. The NTSB reports reveal unambiguous failures by the company that you run that contributed to this tragedy.

I just want to know. Do you take personal responsibility for the breakdowns that led to these explosions?

Mr. BRYANT. Senator, I take responsibility for the actions in the company and I'm responsible at this point to make sure that we thoroughly understand what happened and why.

Senator WARREN. So you take personal responsibility here?

Can I ask you the same question, Mr. Hamrock? You're the CEO of NiSource, the company that owns Columbia Gas. The NTSB reports also clearly identify failures by NiSource that contributed to this tragedy.

Do you take personal responsibility for this tragedy?

Mr. HAMROCK. Senator, yes, I take responsibility for the culture as well as you noted and safety is our core value. It drives everything we do.

Senator WARREN. So let me ask you what personal responsibility means to you.

Mr. Hamrock, how much were you paid last year?

Mr. HAMROCK. My compensation is a matter of public record and it's in the range of \$5 million.

Senator WARREN. Five million. OK. And, Mr. Bryant, how much were you paid last year?

Mr. BRYANT. My compensation was approximately \$550,000.

Senator WARREN. OK. Little over half a million. Mr. Hamrock, has your pay been reduced as a result of this disaster?

Mr. HAMROCK. Senator, again, I take full responsibility—

Senator WARREN. That's a yes or no question. How your pay been reduced as a result of this disaster?

Mr. HAMROCK. I fully expect to be held accountable with compensation being an important part of that and in fact have recommended to our Board that my bonus be withheld.

Senator WARREN. So your bonus may be withheld in the future?

And, Mr. Bryant, was your pay reduced as a result of this action?

Mr. BRYANT. Senator, a significant portion of my compensation above \$230,000 is incentive compensation. I have suggested to Mr. Hamrock that any payment of any incentive in this year would be inappropriate.

Senator WARREN. So you're going to reduce—so you will lose your—people died in this explosion and you're going to lose your incentive bonus this year, is that right?

Mr. BRYANT. Senator, first conversation I had with Joe Hamrock and that is the conversation that we had is that something on the order of \$300,000 would be inappropriate.

Senator WARREN. OK. So you may lose your incentive bonus or you may not?

Mr. BRYANT. I'd like to clarify that. I think I was more specific with Mr. Hamrock. I said that I did not think that it should be paid and, if offered, I would not accept.

Senator WARREN. OK. You hope you will lose your incentive bonus. Is that what you just said?

Mr. BRYANT. No. I'm sorry, Senator. I said that I told Mr. Hamrock that I did not think that the payment of an incentive this year would be appropriate.

Senator WARREN. OK. Who's going to be responsible for determining whether or not you get your incentive bonus? Is it Mr. Hamrock?

Mr. HAMROCK. Senator,—

Senator WARREN. I just want to figure out what personal responsibility means to you two?

Mr. HAMROCK.—personal responsibility goes beyond compensation. It's—

Senator WARREN. Well, let's start with compensation. I'm fine with beyond compensation, but I just want to know. You kept your jobs and you're still getting paid what sounds like a lot of money, and I want to know what personal responsibility means here.

Let me ask you another question. You said, Mr. Bryant, right after the explosion, "I see no cause to fire anybody with what I know so far." So who exactly at Columbia Gas has been held responsible for the shortcomings that were identified in the NTSB report? Have you fired anyone?

Mr. HAMROCK. Senator, the review is underway. We will take all appropriate actions, based on the final findings, the ultimate understanding of what happened here, personal accountability, including organizational responsibilities, and compensation will all be a part of that.

The most important thing is that we get to the core set of facts and understand what happened, who's accountable, make sure we make a consistent—

Senator WARREN. No.

Mr. HAMROCK.—and complete set of recommendations.

Senator WARREN. Let me stop you there. The most important thing is not just that we find out what happens. The most important thing is that we make changes so that it doesn't happen again.

Mr. HAMROCK. I agree.

Senator WARREN. And I started my line of questions with how many times you have stood up and said in effect publicly this will not happen again. Yes, there has been an accident, there has been a mistake, but we're going to improve safety and this will not happen again, and we can go through the list a second time or third time and that's just right here in Massachusetts and yet now that we've had a huge tragedy, now that someone has died, now that people have been injured, now that people have lost their homes, you're saying exactly the same thing you said every time in the past and you sit here and say I apologize and I'm glad to hear that

and I hope that it's sincere and you say I take personal responsibility but I'm just not seeing any impact from that.

I'm not seeing a company that takes safety seriously and I'm not seeing people at the head of the company who take any personal accountability for the kind of tragedy that a culture that is not focused on safety causes to the public.

The people in this room have been injured. You have not. You continue to keep your jobs, to collect your big paychecks, and to go on about your business. Personal responsibility means you step up in this, not simply that you back away and say you'll figure out how other people can deal with this problem.

[Applause.]

Senator MARKEY. The Chair recognizes Senator Hassan.

Senator HASSAN. Well, thank you, Mr. Chair. Thank you to the witnesses for being here.

Let me just start by saying you can count me in with my colleagues, Senator Markey and Senator Warren, in questioning why it is that the people of Lawrence and Andover and North Andover or the people in New Hampshire or any American you all serve should have to rely on your culture because I will add my concern to that. You just heard from Senator Warren that there have been safety incident after safety incident after safety incident just here in Massachusetts and it does not seem to have changed your culture and that is a grave concern because this can't happen again and I'm sitting here saying that and, of course, others have said that after other accidents with your companies and others.

It's 2018 in the United States of America and nobody should be worried when they come home at night that their house is going to explode, nobody.

So let me now turn to you, Mr. Sumwalt, because I want to figure out what we now do so that we're not just relying on the culture of private enterprise and we are, in fact, doing what we should do as Americans to require and implement standards that will keep us safe.

I understand that one of the recommendations issued in the NTSB's preliminary report is to require that a professional engineer issue a seal of approval for public utility engineering drawings.

Now I have to say when I read that, I was astounded that we don't require that. It's my understanding that neither Massachusetts nor New Hampshire nor many other states require such a seal of approval, although I understand from the Secretary that that is changing in Massachusetts.

It seems to me that if this change requiring such a seal of approval could have prevented death and injury in the Merrimack Valley explosions, it would be worth alerting state governments so that they can respond accordingly, and I think you touched on this in your testimony, but can you help me understand what the NTSB is going to do to issue guidance to states that make sure that they take the steps they need to require professional engineer seal on these types of drawings?

Mr. SUMWALT. Thank you for your question, Senator Hassan, and, of course, our immediate focus is on this particular——

Senator HASSAN. Right.

Mr. SUMWALT.—tragedy here in the Merrimack Valley.

I would envision that part of our total package, our total investigation, we would want to look and see what the requirements are from various states. As you pointed out, about 29 states do not require this professional engineer signoff.

So I can envision that that would be something that we would ultimately recommend.

Senator HASSAN. Is there any reason you shouldn't be recommending it right now? So that state legislatures will come back next month to state houses across the country. Why shouldn't the top of their agenda be, not to mention the top of Congress's agenda be, to implement this requirement as a matter of state regulation or state law? Why shouldn't the NTSB be out front saying this is something you could do right now, this legislative session, to make sure that gas pipelines are safer?

Mr. SUMWALT. Well, I certainly hear what you're saying and I appreciate what you're saying. Again, our immediate focus is on this particular event, so we've scoped the recommendations to address this event, but, as I mentioned, I suspect this investigation will have many, many recommendations that are broad-reaching.

Senator HASSAN. Well, I appreciate that. What I would urge you all to do is when a recommendation, even if you haven't finished the complete review, seems like there's an obvious recommendation out there, that state legislators could act on immediately, get that recommendation out there and there are lots of us who want to work with you to do that.

Mr. Kuprewicz, I want to touch a little bit on your testimony. You say in your testimony that using computer leak mapping and reporting technologies could help guard against incidents like the one in Merrimack Valley.

Can you please discuss the role of technology in providing a backstop against human error and whether or not you think state and Federal Governments have the resources to implement that kind of technology?

Mr. KUPREWICZ. Well, actually, there are a couple states, and I won't name them because of nondisclosure agreements, who have required as a matter in their PUCs, in their settlements for pipe replacement that to have the company present annually their leak detection results in computer maps and then they can sort them and filter them and so when you see in some of these areas the numerous leaks, even hazardous leaks, the Grade 1s, and it fills up the page, well, that doesn't really do you a lot of good.

So you've got to use the computer to filter it and so I guess the example I'd use is I used Apple Maps to find Lawrence today when I drove from Connecticut this morning visiting my daughter and it works. It's not a real complicated system. You can do the same thing with—not with the complications of leak map—with Google mapping or Apple mapping, but there are very easy tools out there. They've been around for, you know, 10 years. They're getting more sophisticated and so a simple little portable computer can do exactly that.

Senator HASSAN. OK. So what you're telling us is that there are models out there that could be used that could help prevent this kind of incident from occurring?

Mr. KUPREWICZ. Well, it'll help indicate, you know, are you doing pipe replacement where it really needs to be, first,—

Senator HASSAN. Right.

Mr. KUPREWICZ.—and then if you're doing pipe replacement and it didn't really need to be the first one to be done and it exposed you to a catastrophic over-pressure event for other reasons,—

Senator HASSAN. Right.

Mr. KUPREWICZ.—that could have been avoided.

Senator HASSAN. OK. Thank you.

Mr. Roberti, does PHMSA have the necessary cyber security framework to rely on new technologies for safety like the ones we just heard about?

Mr. ROBERTI. Senator, did you say cyber?

Senator HASSAN. Yes. So we're talking about computer programs. We're talking about new technology to help prevent this kind of incident and, of course, the new technology has to be protected by strong cybersecurity. So does PHMSA have that kind of capacity?

Mr. ROBERTI. Certainly. We invest a lot in R&D research with universities on that front. Cybersecurity on the pipeline side is within the Department of Homeland Security, the Transportation Safety Administration. We work with them very closely. In fact, we're about to execute an Addendum to an existing Memorandum of Understanding on how to bolster that area.

In terms of this area about leak mapping, the distribution integrity management protocols within the regulations envision that pipeline operators will know their systems, prioritize where the risks are, and then prioritize investments.

This type of technology should be employed if it's available and can be employed and I think that's something we'll continue to look at, as well, how we can harness technology.

Senator HASSAN. Thank you. And just in the interest of time, I'll end my line of questioning, but I do want to follow up with you because I think your agency has been slow in responding to GAO recommendations about ways to improve and obviously that needs to change.

Thank you.

Senator MARKEY. Congresswoman Tsongas.

Ms. TSONGAS. Thank you, Senator Markey, and I think you can hear from all our questions up here the deep concern obviously about the impact on the residents of the Merrimack Valley, but also the culture and processes and procedures in place within the company that led to this.

So a lot of work to be done, and I think we're grateful for the NTSB, who's bringing some clarity, some objective clarity to just why this happened and what steps should be taken to prevent it from happening again.

So I want to go to you, Chairman Sumwalt, and ask you, can you talk about the additional steps that you will be taking to conduct the investigation? You've issued a detailed preliminary report, I think, which was very concerning to all of us up here, showing, I think, in fact that this could have been prevented.

But what will be the focus of your investigation moving forward?

Mr. SUMWALT. Well, thank you. Of course, we did want to get out these interim safety recommendations because we felt that they were very important to get those out early.

So, in addition, I believe we've certainly identified the proximate cause of the accident. Of course, that's an over-pressurization. We understand why the system over-pressured and so you could say, well, we figured the accident out.

Our investigations are very thorough. So, in addition to identifying really the proximate cause, we want to look at the organizational culture of NiSource and Columbia Gas. That's not as easy as going out and finding a sensor that is attached to the wrong line.

Ms. TSONGAS. How do you do that? How do you look at the organizational culture?

Mr. SUMWALT. Well, and that's very tricky and that's why it takes time, but we do that by looking at prior practices. We've heard about prior events that they've had. We will look at their—by interviewing their senior management, by not only the senior leadership but we want to interview the people that are in the rank and file.

Oftentimes we find there's a difference between what the people at the top of the organization are saying and what people on the front line are actually perceiving. So we will continue to look at that.

We will also look at the regulatory oversight not only from the Federal oversight but from the state oversight, as well. So that's what our entire investigation will look at.

Additionally, we will be looking at the emergency response. So that's really the plan at this point.

Ms. TSONGAS. Have you found everybody to be cooperative in providing the documents, the people that you feel you've needed to talk with at NiSource and Columbia Gas have been cooperative?

Ms. TSONGAS. Yes, ma'am, we've found them to be very cooperative with the NTSB.

Ms. TSONGAS. So you've had no incidents with them?

Mr. SUMWALT. I'm sorry?

Ms. TSONGAS. So you've had no incidents having to insist on being able to talk with someone, any people sort of trying to avoid their conversations with you?

Mr. SUMWALT. The truth is I feel like we've had a very open dialogue with NiSource and Columbia Gas.

Ms. TSONGAS. And how long do you think it's going to take to get to your final report? I know you said it's complicated.

Mr. SUMWALT. It is indeed a priority. Usually our investigations, our pipeline investigations are running between 12 and 24 months. As I mentioned in my testimony, I've placed a priority on this to make sure that it is done in a timely fashion. Meanwhile, if we do see the need for urgent recommendations or interim recommendations, we will certainly come out with those.

Ms. TSONGAS. So whatever recommendations you make will be specific to the company or will it be—could they also include recommendations around the regulatory framework, either a state or Federal level?

Mr. SUMWALT. Yes, ma'am. I'm sorry. I couldn't clearly hear that, but our recommendations, if they're interim recommendations,

could be broad-reaching. As you know in our last recommendation package that came out 11 days ago, they were not only to NiSource but they were to the State of Massachusetts, as well.

Ms. TSONGAS. And in terms of all the accidents you've investigated, where does this fall along the trajectory of seriousness?

Mr. SUMWALT. Well, all of the accidents the NTSB investigates are very tragic in their own right. This one, of course, is devastating to not only the families involved but to the entire community.

Ms. TSONGAS. And so you're hesitant to put it in somewhere in the—

Mr. SUMWALT. Well, that's always tricky because even if one person loses their life, that in itself is tragic. So I think that they're all tragic and our thoughts and prayers are with the people of this community.

Ms. TSONGAS. Mr. Hamrock, do you dispute any of the NTSB's findings to date?

Mr. HAMROCK. No.

Ms. TSONGAS. So you accept their findings?

Mr. HAMROCK. We accept their findings and are working with them.

Ms. TSONGAS. Whatever it may say about the company?

Mr. HAMROCK. Yes.

Ms. TSONGAS. Mr. Hamrock, I wanted to ask a couple of other questions.

There have been significant costs that your company's incurred, rightfully so, and those will, I'm sure, be ongoing and we won't know the final number, but can you make a commitment that the costs that you have incurred will not be passed along to the ratepayers?

Mr. HAMROCK. We have approached this with no regard for anything but taking care of our customers and understanding the need, their needs, and have not focused on recovery or any other—

Ms. TSONGAS. Well, you may not be focused on it to date, but in the future, when you come to grips with the total impact on your bottom line, can you make the commitment that you will not pass the costs along to the ratepayers?

Mr. HAMROCK. I'm not in a position today to make such a commitment. We've not spent any time focusing on that question.

Ms. TSONGAS. Well, I think I take great exception to that statement.

Thank you, and I yield back.

Senator MARKEY. Congressman Moulton.

Mr. MOULTON. Thank you, Senator.

Mr. Bryant, my job description as a Marine infantry officer is very simple. You're responsible for everything your platoon does or fails to do. One sentence.

You said in your statement initially that you take responsibility for recovery. Why did you not include in your statement that you take responsibility for the disaster?

Mr. BRYANT. Congressman, I apologize. That was not an intentional omission. I take responsibility for the actions that took place that led to that and that responsibility is now to understand how

that happened and my further responsibility is to work with the rest of the NiSource team to make sure that something like that never happens again and Columbia Gas or NiSource or any other gas distribution company in the United States.

Mr. MOULTON. Mr. Bryant, Mr. Hamrock talked about his responsibility for the safety culture of your company. Mr. Hamrock said that safety is a core value. Now it's one thing to have a value and quite another to actually live up to it.

Do you think that your company, Columbia Gas, lives up to having safety as a core value?

Mr. BRYANT. I absolutely believe that NiSource has safety as a core value.

Mr. MOULTON. And we know they have it as a core value. They've stated that. I'm asking you if you live up to that value?

Mr. BRYANT. Yes, we do. I'll give you the best example that I have is that any Columbia Gas employee can stop any activity at any time if they believe that act is unsafe.

Mr. MOULTON. So then let's go to the afternoon this tragedy occurred. There were two alarms at 4:04 and 4:05 p.m. received at your monitoring station, I believe in Ohio. What action did your company employees take when those alarms went off?

Mr. BRYANT. They notified resources in Massachusetts that there was an over-pressurization and dispatched resources to the regulated station.

Mr. MOULTON. What resources, Mr. Bryant? What resources were dispatched?

Mr. BRYANT. Management regulation resources, the on-the-ground resources.

Mr. MOULTON. Mr. Bryant, are you aware that or were you aware in the past that over-pressurization of a gas pipeline can cause explosions that could lead to the loss of life?

Mr. BRYANT. Yes, I'm aware of that.

Mr. MOULTON. Were you aware of that before this tragedy occurred?

Mr. BRYANT. Yes.

Mr. MOULTON. So it seems to me that if you're aware that over-pressurization of a gas pipeline could cause loss of life among your customers and if you receive two alarms at your facilities that simply notifying some regulators that there's an over-pressurization incident doesn't do much to help your customers. That doesn't seem much like a culture of safety.

At what time did you notify customers of the problem so that they could take action to secure their homes and save their own lives?

Mr. BRYANT. Congressman, public safety officials took those actions immediately.

Mr. MOULTON. I'm well aware of that. We're lucky they're here because otherwise a lot more people would have died.

But if you're taking responsibility for this,—

[Applause.]

Mr. MOULTON.—when did you notify your customers?

Mr. BRYANT. Congressman, first and foremost, I have to acknowledge and thank the public safety officials. They were on the ground. This was a widespread event and they took the actions

necessary to keep the public safe and we will be forever grateful to them for that.

Mr. MOULTON. Thank you very much. Now you can answer my question.

At what time did you notify customers that their homes could start blowing up?

Mr. BRYANT. Again, Congressman, we did not need to do that. Public safety officials would do that.

Mr. MOULTON. Well, let me help a little bit, Mr. Bryant, because on your website, you posted a notice at about 9 o'clock that evening, five hours, five hours after the two alarms were received by your facility that there is "an incident in the area and that customers should make themselves safe." Five hours. That does not strike me as a culture of safety among your employees or at your organization.

Mr. BRYANT. Congressman, I will readily admit that one of the weakest areas we had in the earliest hours of this event was communication and we intend to take that experience and learn from that.

Mr. MOULTON. And how are you going to learn from that, Mr. Bryant?

Mr. BRYANT. We will review the actions and the circumstances that took place on that evening and determine what we can do to make sure, God forbid, anything like this ever happens again we have the—

Mr. MOULTON. OK. But here's something that's very simple. If your company culture cares about safety and if you and your employees care about the lives of the customers you serve, then you should let them know that their houses might explode and not wait 5 hours to do so. Do you agree with that?

Mr. BRYANT. I just might—I might suggest that I see this in a different way. In those hours immediately after the explosions and fires, all of our employees were focused on making the systems safe, getting to all of the regulator stations that fed into that distribution system, making sure that all 14 points of gas flow were shut off, and that customers were out of their—in that—

Mr. MOULTON. So, Mr. Bryant, several reports and constituents of mine have stated numerous instances where Columbia Gas reps simply ran away from residents who were bombarding them with questions they didn't know the answers to. That's not a culture of safety.

We're going to hear later from Mayor Rivera of Lawrence and in his testimony, he will say, "It appeared to many of us that Columbia Gas did not have an actual plan for dealing with the disaster of this magnitude as if it never crossed their minds that this could occur." To me, Mr. Bryant, that's not a culture of safety.

Mr. Hamrock, what was the profit margin for NiSource last fiscal year?

Mr. HAMROCK. In 2017?

Mr. MOULTON. 2017.

Mr. HAMROCK. \$1.20 per share, earnings per share.

Mr. MOULTON. And do the math. What's the overall profit? How many shares out there?

Mr. HAMROCK. Well, on the order of 300 some million.

Mr. MOULTON. 300 million? 300 million. What is the cost of this tragedy, the latest estimate?

Mr. HAMROCK. We've disclosed this tragedy, full cost, looks like it'll cost about \$800 million.

Mr. MOULTON. \$800 million? So what do you expect the profit margin for NiSource to be in the next three years?

Mr. HAMROCK. Well, without accounting for this tragedy, it'll continue to—

Mr. MOULTON. My question is whether you will account for it and whether the cost of this tragedy, the estimated \$800 million, which I suspect will rise even further, will actually come out of your profit margin for the company.

Mr. HAMROCK. We have approached this tragedy by bringing every resource available in without regard for the profit margin. Our first duty is to take care of our customers and ensure—

Mr. MOULTON. So what can we expect in your next quarterly report?

Mr. HAMROCK. I don't know. It's too early to know that.

Mr. MOULTON. You're the CEO of the company, sir. You should know what shareholders should expect in their next report.

Mr. HAMROCK. In the fourth quarter,—

Mr. MOULTON. Do you expect to report a profit?

Mr. HAMROCK. We're still in the fourth quarter and I don't have clarity on what that'll look like at this point.

Mr. MOULTON. Well, if you took responsibility for this, you would have clarity because you would say right now that you will cover the \$800 million and you will not see a profit at your company because otherwise, as Representative Tsongas suggested, it seems like you're going to take the money out of your customers to make the company whole, to make your shareholders whole. That's not responsibility.

Mr. Bryant, one last question for you. Do you plan to resign?

Mr. BRYANT. At this point, Congressman, I do not. My job, my focus, my effort every day is the restoration of service to our customers.

Mr. MOULTON. So do you think you're the best-qualified person to do that?

Mr. BRYANT. I think I am the best-qualified person to do that.

Mr. MOULTON. Well, Mr. Bryant, I beg to differ. Based on your response that evening, when it took five hours to notify your customers that there was a problem, it's hard for me to imagine that you're the best person to take responsibility of this company, and I suggest you resign.

[Applause.]

Senator MARKEY. So now we're going to move to a second round of questions. Any of the members who have questions will be recognized for that purpose.

I'm going to move down to PHMSA, which is our Federal pipeline safety agency, which has responsibility for issuing regulations to ensure that communities in Merrimack Valley and communities all across the United States are safe, but, unfortunately, our pipeline safety agency has failed to do its job when it comes to natural gas pipelines.

Federal rules contain critical safety gaps. This agency often takes many years to issue required regulations, dragging its feet while our communities remain in danger. The agency is the poster child for an agency which has been captured by the industry which it is supposed to regulate. Rather than being a watch dog, PHMSA has become a lap dog for this industry in discharging its responsibility to make sure that pipelines are safe in Merrimack Valley but that pipelines are safe in every community across the country.

Mr. Roberti, you say in your testimony, "The onus of maintaining a safe pipeline system is on the companies that own and operate the system." That is a shocking statement, Mr. Roberti. That is like saying it is the responsibility of the fox to make sure that the hen house is safe.

The onus, Mr. Roberti, is on your agency to ensure that the pipeline companies are operating safely, but your agency has abdicated that responsibility to the industry which it regulates. You leave it to the individual companies to determine whether or not they are going to put safety measures in place.

So here we have a situation where four years ago, Columbia Gas just decided that they wouldn't have someone there on duty in Lawrence to be able to respond immediately and that then created a huge time gap which then allowed for this accident to occur where it perhaps could have been stopped right at the beginning.

So let me turn to you, Mr. Kuprewicz. Talk about PHMSA, talk about their delegation of responsibility down to the company level, and what needs to happen in order to make sure that we in Congress take action, which is necessary, and that there is a uniform set of guidelines which are put in place that are mandatory to be abided by so it's not left in the discretion of Columbia Gas or any other company to determine whether or not safety standards, which will cost money, are put in place. Mr. Kuprewicz.

Mr. KUPREWICZ. I'd say, first of all, technically, PHMSA has excellent technical people. I don't want to take that away from them. I interact with them all the time.

The biggest problem I observed in the last 20 years is the movement away from prescriptive regulation that has certain things that they must do—

Senator MARKEY. Can you pull in the microphone, Mr. Kuprewicz?

Mr. KUPREWICZ. I'm sorry. I thought my voice would carry.

The biggest problem I see is the shift away from prescriptive where there were certain things the operators must do that PHMSA could get in and say you're doing this or you're not doing this to what we call the more risk-based performance movements and the performance gives a lot of wiggle room and it's tough for a regulator to enforce. That's probably the biggest frustration.

The second one I'd see, an example would be the integrity management regulations for gas transmission interstate pipelines as well as intrastate pipelines.

We started with a performance. We agreed to go with performance-based. We'd rather have had a little more prescriptive. We said it's the first time we're going to do this. OK. You've talked us into performance-based and that has not been very successful.

Senator MARKEY. So you say that the standard which is applied right now is inadequate. There should be a more prescriptive, a more detailed set of regulations put on the books to make sure that no company, no natural gas company in the United States is in any way questioning what the standard should be, and that if they violate it, they're going to pay a penalty, that the Federal agency's going to come down on them for not abiding by what the national standard is for safety. Is that what you're saying?

Mr. KUPREWICZ. Yes, and especially if you want a rank in terms of where you want to put your effort in getting back toward the prescriptive regulations, OK, you can have a discussion on it.

Senator MARKEY. So, in other words, we don't let nuclear power plant operators, we don't let the Seabrook Nuclear Power Plant or the Pilgrim Nuclear Power Plant determine what the level of safety is at a nuclear power plant. There are Federal regulations that the Nuclear Regulatory Commission puts on the books and then implements, is that correct?

Mr. KUPREWICZ. That's correct.

Senator MARKEY. And you're saying that the same thing should be true for PHMSA and it is not today?

Mr. KUPREWICZ. That's correct. Shift them back. They're capable of doing that.

[Applause.]

Mr. KUPREWICZ. But it's a major shift.

Senator MARKEY. Well, it's a common sense shift. The people up here don't want to live questioning whether or not there are safety standards for the Seabrook Nuclear Power Plant. They don't want to wonder whether or not it's just left up to a single unqualified engineer to determine what happens in a particular situation. They want to make sure that their families are safe. They want to make sure that there is a plan in place that has been put together by the top people in the United States to ensure that there is in fact protection which is put on the books.

Chairman Sumwalt, do you agree with that?

Mr. SUMWALT. Well, generally, I do believe that the idea of performance-based standards is acceptable. The trick is how do you enforce the performance-based standards.

Senator MARKEY. And if I may, because we talked about the \$2 million fine on an \$800 million accident, and I think that's conservative because the \$800 million is what the insurance covers. There could be a much higher number ultimately, which is in fact imposed upon the citizens of Merrimack Valley, and this \$2 million fine just seems absolutely pathetic as a discouragement so that real safety standards are adopted.

Secretary Beaton, what is the state looking at in terms of imposition of fines upon this company?

Mr. BEATON. Sorry, Senator, there was a noise. Did you say relative to the fines?

Primarily up to this moment in time, our sole focus has been on the restoration of and the stabilization of the situation and the restoration as close, as best we can to back to normal here in the Merrimack Valley.

We have an ongoing investigation at the Department of Public Utilities that will ultimately take us to that answer. I wouldn't

want to put the cart before the horse and predetermine the outcome of that. So I think that is yet to be determined but I'm sure we will most certainly be looking into that. It's too early to say what that would look like at this point in time.

Senator MARKEY. Thank you, Mr. Secretary.

Senator Warren.

Senator WARREN. Thank you, Mr. Chairman.

So after the disaster in the Merrimack Valley, you committed to replacing over 50 miles of pipeline, replacing all in-home gas appliances, and providing temporary appliance heating and housing sources for residents. You set the timeline yourself for this, Mr. Bryant. What was the date that all that was to be done by?

Mr. BRYANT. The original date that we committed to was November 19.

Senator WARREN. November 19, and did you make that date?

Mr. BRYANT. We did not, Senator.

Senator WARREN. So now you have another date that you have set. What's that date?

Mr. BRYANT. No later than December 16.

Senator WARREN. December 16, and can you guarantee that no family will have to wait beyond December 16 in order to return to their home, that they'll have full service by then?

Mr. BRYANT. Everything that I see what we have accomplished to date, up to and including yesterday, indicates to me that we will beat that date.

Senator WARREN. So is that a guarantee?

Mr. BRYANT. Senator, for me to guarantee would suggest that we're in control of everything in life. May I just—

Senator WARREN. Well, let me stop you right there. You are in control. You are the guys who have all of the information. You're the ones who have the money. You're the ones who have the resources. You're the ones who determine how many people you hire and who you hire and how you go about this and you're the ones who set the date.

Mayor Rivera didn't set the date. Senator Markey didn't set the date. I didn't set the date. You set it. You said we can meet this. Now you've already proven you're not very good at this because you've already missed by a month.

All I want to know is can you really tell the folks here who don't get to live in their houses, who don't have hot water, who can't cook, who don't have heat, can you tell them for sure that the date you've picked is a real date and on December 16, they can all plan to move back home?

Mr. BRYANT. I apologize for the comment about not being in control. All I meant was that there are customers who are making their own arrangements and their own arrangements to put heat and hot water in their home may not be fulfilled perhaps by their own desire.

Senator WARREN. OK. So let's—

Mr. BRYANT. For those—

Senator WARREN. For anyone who's trying to do it on their own, I get that, but for everyone that you're picking up, which is everyone, if they want—if they trust you to do this, you'll have everyone back in their homes on December 16?

Mr. BRYANT. Yes, Senator, we will have everybody back in their homes by December 16.

Senator WARREN. By December 16, okay, and that's guaranteed?

Mr. BRYANT. Senator, that's my best statement. We will have people back in their homes before December 16.

Senator WARREN. That's guaranteed. OK. So look. Let me ask you a question about how we got to this mess to begin with when people thought they'd be back in on October 17—November 17.

People need heat and I understand this. We just had the coldest Thanksgiving in 80 years and you said what you'd do is you'd put space heaters in for everybody. That would get people back into their homes quickly and be able to get heat. You purchased 24,000 space heaters to provide to residents.

So Senator Markey and I asked for some more details about the risk assessments you conducted before distributing these appliances and whether you'd chosen the safest possible options. So I just want to unpack a little how we got to where we are now.

In your response, you acknowledge that about "90 percent of homes do not meet the recommended electrical configuration for space heaters." When you announced the plan to provide space heaters, did you know that almost none of the homes in the region could handle them?

Mr. BRYANT. No, we did not. One of the most difficult things in this process was learning the assessment of what we were facing and our intent was to give every customer possible——

Senator WARREN. So——

Mr. BRYANT—a space heater.

Senator WARREN.—did you not take any input from the local fire chiefs on this when you put together your plan to buy 24,000 space heaters and distribute them? The fire chiefs didn't talk to you about it or you didn't talk to the fire chiefs about this?

Mr. BRYANT. What we relied on with the fire chiefs is the determination of what electrical requirements in the home would be appropriate to put in a space heater.

Senator WARREN. So when did you realize that you had a problem doing this with space heaters and consider making alternative housing and heating options available?

Mr. BRYANT. As we began to intensively do house-by-house assessments.

Senator WARREN. So how deep were you into this before you realized—I mean, I can do the math here, that 90 percent of these homes you're not going to be able to fix this problem with space heaters.

So how far did you get in this before you started making alternative arrangements?

Mr. BRYANT. Senator, we were working to make alternative housing arrangements immediately, at the same time that we were looking to put space heaters into homes. We came to the conclusion that some customers may have wanted alternative housing and some customers may have wanted to stay in their homes. So we worked on two paths.

Senator WARREN. So I'm just having trouble putting this together. So your workers had trouble bringing housing up to code. You said you'd give everyone space heaters. Then you realized the

houses can't handle them, so you're going to bring in electricians and you're going to bring the houses up to code.

So why did it take 13 days from the day that you announced the November 19 deadline, you announced that on October 9 to October 22 before you announced the delayed date for restoration?

Mr. BRYANT. Generally, we made the announcement about the delayed date for restoration once we made the determination that it would take us longer than we originally expected in most houses to be able to mitigate to allow the house to become ready for natural gas.

Senator WARREN. And so you're saying that you didn't realize that you were going to blow your deadline until October 22? That's when you made the announcement?

Mr. BRYANT. Senator, when we made the announcement is when we came to the firm conclusion that we were not going to make that date.

Senator WARREN. And you didn't make it before then? You didn't make it back sometime around October 9th when you were in the houses, going house-by-house, and finding out that 90 percent don't have the power structure to do this?

Mr. BRYANT. I'm sorry, Senator. The electric space heater issue really didn't play into the issue. It was really a case of our making a determination of what it would take to be able to turn natural gas service back on in a home.

Senator WARREN. OK. And so now you've got the appliances issue, though, whether or not you can get the appliances in, right, new appliances because you've finished the main part of the pipeline?

Mr. BRYANT. Certainly, Senator, we completed the natural gas distribution build-out earlier than expected but the—what we call house-ready, the work necessary to be able to turn gas back on turned out to be much more labor-intensive than we originally estimated.

Senator WARREN. OK. So here's the problem I've got and I'm just trying to work through this. It starts with where Congressman Moulton started and that is, why did it take 5 hours in order to tell customers that there was a problem? I mean, you could see much more information on the news than you could get from the company that was responsible both for the explosion and for the safety of every single resident in the region.

Now I'm going to the next part and so you announced a deadline by which you'd have everyone back in their homes. You gathered more information as you went along. You waited until late in that process. Now you've announced a new deadline and I'm asking the question in effect, how much confidence can you have in the new deadline?

Part of the question is, are you taking the information in as it comes, and I want to ask one more related to this. On my way in, I met outside with the National Grid Workers, trained workers who are ready to go, who are willing to help, who want to help, and most of them idle for the last two and a half months.

You know, you have a mutual aid pact with National Grid. You could have put their workers to work if they had been back at work at National Grid. So let me ask you. Have you urged National Grid

to reach an agreement with its workers so that you could call on mutual aid and get those people to work here in Lawrence and Andover and North Andover?

Mr. BRYANT. I have not had such a conversation with National Grid.

Senator WARREN. Why not?

Mr. BRYANT. Senator, because I believe that those employees could have worked for our contractors and helped in the house mitigation if they so choose.

Senator WARREN. So you didn't think it was important to do it through National Grid. You said you had another way to hire all those employees, is that right? So you didn't ask National Grid to do this? So did you—have you hired those National Grid employees through contractors indirectly or directly?

Mr. BRYANT. Senator, I don't know how many National Grid workers worked for our contractors. I don't have any way of knowing that specifically.

Senator WARREN. So I guess here's the problem. We talked about a culture of inattention to safety, putting profits ahead of safety that led to the explosion.

Now the people here are trying to deal with the impact of that, with the aftermath. Some families will never be made whole. A family lost a son, people who've been injured, people who've been moved out of their houses, little children who can't go to their neighborhood schools, elderly people whose lives have been disrupted.

But at a minimum, what we're asking for is some accountability in the recovery efforts and that means the one thing you ought to be able to do—you have all the information. You are a very wealthy company. You could bring resources to bear. You could put a timeline out and you could get these people back in their homes and what we're hearing is that there's more information. You don't know who's been hired. You don't know if there are other people who would have been available.

But somehow it all turned out to be a bigger project than you had in mind back when you blew up a bunch of people's houses and that you're still not on top of this and that people can't count on getting back in their homes, and is there anything you can say that's going to give people some confidence that they really are going to be there before Christmas?

Mr. BRYANT. Senator, I will say that they will be there before Christmas.

Senator WARREN. All of them?

Mr. BRYANT. Senator, all of them that we can complete. Again, if a customer makes the determination that they don't—

Senator WARREN. It's not all of them that we can complete. What they want to hear is that they're all going to be completed.

Mr. BRYANT. Senator, we'll be effectively completed with all customers in their homes before Christmas.

Senator WARREN. All right. We're going to hold you to it.

Senator MARKEY. Senator Hassan.

Senator HASSAN. Thank you, Mr. Chair, and—

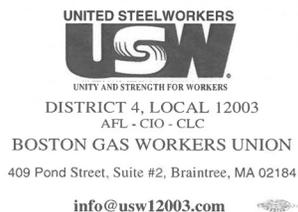
Senator MARKEY. May I just?

Senator HASSAN. Yes.

Senator MARKEY. Just to follow up, I ask unanimous consent to submit into the record testimony from United Steelworker Local 12003 President Joe Kirylo and testimony from United Steelworker Local 12012 President John Buonopane describing their concerns about Massachusetts pipeline safety.

Without objection, their testimony will be included in the record.  
[The information referred to follows:]

JOE KIRYLO  
President  
DAN O'CONNELL  
Vice President  
CANDY CHAPMAN  
Recording Secretary  
MARTY HERNON  
Financial Secretary  
STEVE HUGHES  
Treasurer



Negotiating Committee  
JAMIE LONG  
RYAN MADDEN  
PHIL POWELL  
CHRIS WORLEY

November 20, 2018

The Honorable John Thune, Chairman  
The Honorable Bill Nelson, Ranking Minority Member  
United States Senate Committee on Commerce, Science and Transportation  
512 Dirksen Senate Building  
Washington DC, 20510

Dear Chairman Thune and Ranking Minority Member Nelson,

Thank you for considering my testimony. I would like to thank U.S. Senator Ed Markey for giving me the opportunity to submit testimony to the United States Senate Committee on Commerce, Science and Transportation's special hearing on Pipeline Safety in the Merrimack Valley, Incident Prevention and Response.

My name is Joe Kirylo I have worked just shy of forty years in the gas industry. I currently hold the position of President of Local 12003 USW better known as the Boston Gas Workers Union. Local 12003 USW is the largest gas local in New England with close to 900 members. During my career in the gas industry I have worked for Boston Gas, KeySpan and currently National Grid. I also hold the position of Vice President of NEGWA, the New England Gas Workers' Association.

My goal in submitting this written testimony is to point out problems and unsafe conditions in the gas industry with the hope that it will stir debate that will, in turn, lead to making the gas industry safer.

To begin with, I strongly believe that the critical gas infrastructure of the United States of America needs to be owned by U.S. companies. I have witnessed firsthand the difference between how US gas companies and National Grid, a multi-national corporation, treats safety and the well-being of their employees. I wish to go on record as stating that National Grid puts profits before public safety and its employees. I say this because National Grid has locked out its employees and hired contractors to perform all gas work, to pressure the workers to give up their fight to improve safety and maintain their standard of living for future generations. 1250 American workers and their families, in the Greater Boston area, have suffered for over five months by having their health care end, their pay stopped and being left with an uncertainty of what the future holds.

National Grid's horrendous actions have left no one untouched. Real estate developers, home buyers, the Department of Public Utilities, local Police departments, tax payers, the Unemployment agency, Health connectors, politicians, BCBS officers along with all the citizens of the Commonwealth who worry about gas safety have been dragged into this lockout. It is my belief that if this were a US company, we would be in the Merrimack Valley doing what Americans do best: working together and helping each other.

I could fill these pages with countless problems of the way that National Grid runs its business and the safety violations that have occurred, at least in part, as a result. I will highlight just a few:

**STAFFING** has always been a problem in the gas industry. In recent years I have witnessed a total disregard for proper staffing across numerous departments. I will describe what has taken place at National Grid.

- \*When National Grid's gas leak backlog fell behind, members from other locals were brought in to work the gas leaks. This in turn left their areas understaffed.
- \*When the meter shop was short of workers, workers from the Customer Meter Service Department were taken from their jobs as first responders and sent to the meter shop. This left their positions understaffed.
- \*When gate box and paving inspections fell behind on 25,000 jobs, the work was outsourced.
- \*When the Maps and Records Department was decimated by the retirements of numerous individuals with invaluable institutional knowledge, 55,000 pieces of work was sent offshore.

This work, in many cases, involved the critical infrastructure of the United States. After spotlighting the danger of allowing critical U.S. infrastructure information to be placed into foreign hands, the work was returned to the U.S. Instead of this work going back to the world class mapping department in Boston, however, it was outsourced to Colorado. We were told this outsourcing would never happen again. Last fall the work backed up and was once again outsourced.

- \*Even the mechanics who maintain a fleet of a thousand vehicles, all older than three years, had only nine workers for over a year.

- \*The movement of gas workers to the electric side during storms leaves the gas side dangerously understaffed. For example, during tropical Storm Irene gas workers were given four hours training and told to set electric poles rather than be available to handle their normal jobs.

- \*The Company has too few Pipeline inspectors (14) to cover 100 contractor crews or more.

- \*National Grid has no Pipeline inspectors to cover single gas services. This has led to dangerous situations such as low-pressure fittings being placed on a high-pressure service in Whitman, MA, which led to an explosion. This error would have been avoided had a pipeline inspector been present.

**COMMUNICATION.** Dangerous incidents have been hidden from workers who could only learn from the mistakes of others, if the information was shared. Many of these incidents are either not brought forward by National Grid or are not brought forward soon enough.

#### **UNSAFE CONDITIONS**

- \*Area A-1 Boston Police Station had every window blown out by an air test. The end cap was not strapped properly and there was no Pipeline inspector on the job.
- \*At 499 Commercial Street in Weymouth, MA, a water contractor almost tapped a 137 PSI gas main. No Foreign Opening Inspector on site due to no mark-out ticket generated.
- \*On Hyde Park Ave, a gas line fire burned for three days. The Company improperly directed employees to dump sand on the fire to attempt to put it out. This approach was extremely dangerous as it could have caused a reignition. Only controlled measures must be used.
- \*On Galen Street, Watertown a gas main remained on fire from Friday till Monday under the steel roadplates, ignited by a tack welding of the road plates.
- \*Failure to replace INSIDE PIPING. Inside piping runs from the foundation to the meter in the basement, usually at a distance of about ten feet. National Grid places a new main on the street

and new service to the house, at the ratepayers' expense, but in most cases leave 50, 60, 70 year old pipe in place in the homes. This pipe is often undersized. This work needs to be inspected due to the quality of the work when contractors tie into existing piping. The pipe is frequently pulled and shoved into inverted cocks stressing a lot of the pipe downstream which may in time cause a gas leak.

**LNG security** needs to be held to a higher standard. In the past, perimeter checks were missed, guards were found sleeping and the gates have been left open. As recently as Labor Day, replacement workers were seen cooking with open flames and barbecuing against the structure. Violations of the rules must be reported. Communication skills both in writing and speaking must be a prerequisite. Low pay makes for higher turnover.

**COMPUTERS** are used in all the field vehicles. This is a major problem at National Grid due to the computers crashing for a few hours or even days. In some cases, we must call out of the country to report down computers. All the computers have gone down at the same time across many locals. Mark-out personnel are sent to mark gas mains at 4:00 a.m. and find themselves in the dark. With the computers down, it becomes impossible to mark the gas facilities.

\*Field crews cannot investigate gas leaks due to the fact there are no ties to the gas mains.

\*Critical gas valves or gas shut offs will be extremely difficult to locate when the computers are down.

**ENCROACHMENTS** can be deadly as we saw on Ashton Street in Dorchester. With excavations taking place in over one hundred cities and towns since the lockout on June 25, 2018 who is standing by to determine if 3", 4", 6" and 8" cast iron gas mains are being encroached upon? Who is surveying these encroachments every day until they are cut out and replaced? If there are no inspections to determine if the gas mains are encroached, we could be dealing with more broken gas mains once the frost sets in.

**GRADE ONE GAS LEAKS:** Why is it that the union turned in over 50 grade one gas leaks, if National Grid is surveying the system? Why are the grade one leaks being vented and, in many cases, not repaired?

\*Regulators and monitors found in larger buildings need to be inspected more often.  
\*Farm Taps training needs to be increased with hands on training.

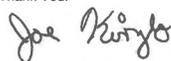
In addition, the DPU is woefully understaffed with only two pipeline inspectors for the whole state. Training takes 18 months to do every aspect of the job. Furthermore, DPU inspectors come from gas companies and return to gas companies. I believe this may conflict with their duties. A waiting period should take place before changing jobs.

Why is the DPU failing to respond to the 100s of gas safety violations that have been brought to their attention, over the last four months? It is critical that the DPU's deliberations be transparent and that it act quickly to hold the gas companies accountable and keep the citizens of the Commonwealth safe.

In closing please read the 101 pages of safety letters that I sent to the DPU, by certified mail, five weeks before the Merrimack Valley Disaster. What I wrote here is just the tip of the iceberg.

Hopefully these hearings will begin to change the gas industry in the future. If I can be of further help do not hesitate to contact me.

Thank You.



President, Local 12003 USW

USW LOCAL 12012



November 26, 2018

The Honorable John Thune, Chairman  
The Honorable Bill Nelson, Ranking Minority Member  
United States Senate Committee on Commerce, Science and Transportation  
512 Dirksen Senate Building  
Washington DC, 20510

Dear Chairman Thune and Ranking Minority Member Nelson,

Thank you, and to your fellow committee member U.S. Senator Ed Markey for the opportunity to submit testimony to the United States Senate Committee on Commerce, Science and Transportation special hearing on *Pipeline Safety in the Merrimack Valley: Incident Prevention and Response*.

As the President of United Steelworkers Locals 12012, I represent over 380 National Grid natural gas workers servicing an area extending from Greater Boston to the Merrimack Valley, immediately adjacent to Columbia Gas' service territory. Our membership, along with over 900 members of USW Local 12003 have been locked out by National Grid, since June 25, 2018. Our members had their healthcare terminated and are living off unemployment insurance and our strike fund. Members and their families are dealing with sick children, cancer, and loved ones that need treatment for opioid use had their care interrupted or postponed because National Grid wants a stronger negotiating position at the bargaining table.

For those that are eligible, we are on MassHealth, being paid for by the taxpayers of the Commonwealth of Massachusetts. It's not lost on us that in the UK they have national healthcare but in the United States, they use healthcare as a bargaining chip.

National Grid made a despicable decision to lock us out, they doubled down after the tragedy in the Merrimack Valley. National Grid had the option to bring our workforce back, for the

purpose of providing mutual aid to the Merrimack Valley and allow our 1,250 workers to help with the restoration efforts. Instead, National Grid maintained the lockout, in the face of an unprecedented tragedy in its own back yard. Instead, Columbia Gas has brought in workers from New York and Ohio, while qualified workers are sidelined by National Grid. Columbia gas has been forced to bring in 1,300 workers, who are are living on the Grand Celebration cruise ship in the Seaport at a considerable cost of over \$286,000 per day. All while the Merrimack Valley has yet to fully recover and the cold weather arrives in New England.

How many leaders of Massachusetts companies, how many leaders of American companies, would not pitch in to help in a time of crisis? The people who control National Grid in the Commonwealth are thousands of miles away in the UK. They are detached and indifferent about what happens in Massachusetts, as long as they continue to make money from ratepayers.

We have to address the systemic issues that this lockout, and the Merrimack Valley incident in have exposed over these last months. There is a lack of focus on public safety by gas companies throughout Massachusetts. Unfortunately, as we have seen with so many common sense measures, and with policies that are in the best interest of the public, National Grid acts only in their own financial interest and has held up that significant policy effort through litigation. They have consistently sought and received rate increases, only a few weeks ago, National Grid received an additional rate hike on their customers. And yet, National Grid continues to undermine public safety through misguided internal policies and pursuit of legislative changes. We are worried that very basic safety precautions are either not in place or are bypassed.

As you consider the root causes of the Columbia Gas explosion, I cannot emphasize enough that the issues that led to the incident in the Merrimack Valley are not isolated. In the National Grid service area, since 2011 , Joe Kirylo President of USW Local 12003 has submitted hundreds of safety concerns to the leadership of National Grid, including CEO John Pettigrew, US President Dean Seavers, and Massachusetts President Marcy Reed. This same information has been shared with the Commonwealth of Massachusetts Department of Public Utilities (DPU). Further, since the lockout started we have now submitted hundreds of potential safety violations by National Grid replacement workers to the DPU, including over pressurization events similar to those in the Merrimack Valley and in Woburn. I encourage federal legislation to ensure that when the utilities skirt the rules or fail to provide the services to the public that they are counted on to offer as a utility, like installing new service connections and fixing gas leaks, that the federal and state regulators have the authority to enforce tough penalties to compel compliance.

I am therefore recommending a set of policy changes to bring greater safety and transparency to the natural gas industry, to help ensure that the incident that took place in the Merrimack Valley does not happen again.

- **Employee Staffing Requirements** ( To ensure a sufficient number of employees )

(C.F.R. 192); recommend the following:

Federally mandated number of in-house Field Employees based on a Local Distribution Company's (LDC) total number of miles of gas main and service pipeline and the size of the customer base within the (LDC) territory.

**The Employees shall be required to perform tasks including but not limited to:**

- a) Pressure regulator Installation, maintenance, adjustments, repair, operations
- b) Gas Leak and Emergency Response
- c) Gas Leakage / Corrosion Survey
- d) Gas Leak repair
- e) Gas pipeline and infrastructure Mark-out and Locate
- f) All Gas pipeline Maintenance and inspection
- g) Pipeline installations
- h) Gas introduction and reintroduction
- i) Field coordination, gas control, dispatch and scheduling

- **Training of Field Employees** ( To ensure a sufficiently trained workforce)

(C.F.R. 192.809 General); recommend the following:

*Each L.D.C. operator shall have an on the job training (OTJ Training) period for each covered task that requires an Operator Qualifications (O/Q) requirement. The OTJ training period shall be for no less than eighteen months before an individual can perform the covered task without direct onsite supervision.*

- **Underground Service Line Valves** ( To ensure the ability to effectively control gas flow)

(49 C.F.R. 192.363 Service lines: Valve requirements); recommend the following:

*(d) Each gas service in addition to an aboveground service line valve shall be required to have a manual Underground service line valve in service; the underground service line valves shall be periodically inspected and maintained.*

- **Local Distribution Company (LDC) Dispatch /Call-In Centers and Gas Control Room Centers** ( To ensure the effective ability to respond and control gas system emergencies during localized incidents of extreme weather events and disaster occurrences)

(C.F.R.192.63 Control room management); recommend the following:

*A Local Distribution Company's (LDC) Dispatch/Call In center and Gas Control Room Center shall be located within the actual gas pipeline service territory in which the call-in center and gas control room center provides services.*

- **Grading Of Gas Leaks** ( To ensure the safest investigation of gas leak migration)

(C.F.R. 192); recommend the following:

Grading of gas pipeline leaks should be standardized (Grades 1, 2, 3) along with the investigatory requirements ; for example an investigation area size of 300 feet in all directions inside/outside of all dwellings and structures within 300 feet of the last known gas reading.

- **Cyber Security Protection ( To ensure that critical sensitive information regarding the gas system remains protected)**

(C.F.R. 192); recommend the following:

Any technical device that contains sensitive information concerning the gas pipeline system shall have effective security technology to prevent the information's dissemination.

Sensitive Security information examples may include:

- a) Maps of facilities
- b) Procedures and Policies
- c) Employee Information

Thank you for your consideration of these reforms. We look forward to your continued engagement on this issue.



John Buonopane  
President, United Steelworkers Local 12012

Senator MARKEY. I apologize. Senator Hassan.

Senator HASSAN. It's all good. I want to go back to the NTSB report and the timeline of this tragedy. Maybe, Mr. Kuprewicz, I can start with you.

The monitoring center for Columbia Gas received an alert at 4:04 p.m. and 4:05 p.m. that there was over-pressurization according to the NTSB report.

What technology exists, if any, that would have allowed the control center to shut down the regulator remotely?

Mr. KUPREWICZ. Well, they'd have to implement and go to the screen. Most gas distribution systems do not have automated or remote control shutoff valves across their gridded gas networks and so when I hear that's kind of where they're heading, well, that's a good thing, but it's kind of a different thing and so that's good and that would have given them the ability to say I'm monitoring the pressure at this point. I'm seeing over-pressure. My control center now has the ability to close that.

Now there's risk in doing that, OK, but that would give the control center the option of doing that because most distribution systems do not have the ability—while they may have remote monitoring, they don't have highly sophisticated remote controlling of gas distribution systems. It's highly unusual.

Senator HASSAN. So it's unusual to have but the technology exists to do it?

Mr. KUPREWICZ. I'm sorry. I didn't hear you.

Senator HASSAN. Sorry. It's unusual for a gas company to have but the technology exists to do it?

Mr. KUPREWICZ. That's correct. They could do it. It's just money.

Senator HASSAN. It took about, as I read the report, it took about 26 minutes from the first alarm to the actual closure of the critical regulator and that's a long time.

Mr. KUPREWICZ. In the industry, yes, but it's pretty typical for systems that have to be manually closed.

Senator HASSAN. Well, and that's really what I'm trying to get at here. If systems have to be manually closed and it takes somebody calling people in the field and then them going out and closing the regulators, during that 26 minutes, catastrophe can occur.

Mr. KUPREWICZ. That's right.

Senator HASSAN. It did. It did. OK.

Mr. Roberti, I want to go back to what I referenced earlier. Your agency, PHMSA, is responsible for developing and enforcing regulations for the safe operation of our country's 2.6 million miles of pipelines.

Your agency, though, doesn't have a great track record. So it is very clear that there are going to be recommendations of new safety regulations that come out of this tragedy with the hope that we will never see another tragedy like this one.

But it is hard, given your agency's track record, to believe that you are really going to initiate the implementation of these regulations. It seems that you'll have no regard for timeliness when it comes to implementing congressional mandates and recommendations from the NTSB, from the GAO, or the Inspector General's Office.

According to a 2016 GAO report, PHMSA has not implemented one-third of its mandates. It has missed numerous deadlines and 25 percent of its mandates remain completely unimplemented, including eight pipeline recommendations relating to safety.

The numbers are from 2016. So the first question is, have you made progress since 2016?

Mr. ROBERTI. Well, Senator, thank you for the question. We work—the current PHMSA leadership is working tirelessly to get these unfinished mandates out. We have made some success. The Administrative Procedures Act is a law that we have to adhere to. There are Executive Orders and OMB regulations and I can tell you that the PHMSA leadership, we walk the hallways and daily this is what we know we're tasked with this.

We have congressional mandates and we are doing everything we can to get them done as soon as possible.

Senator HASSAN. You are not the only Federal agency to have to deal with the administrative rules and acts. I would urge you, you know, we have a gymnasium full of people and a much larger community full of people whose lives have been forever changed by this tragedy and they are looking now to make sure that we do more than rely on the private sector to regulate itself.

They are looking to their state and Federal governments to step up and make sure that we implement the rules that we have and if we change some rules and implement some new ones to make sure that this never happens again, that PHMSA will be right out there and I would like your agency's guarantee that you will be initiating and pushing in ways that you haven't in the past, asking Congress, asking the Administration for more resources, if you need them, but this should not be an agency that is this woefully behind in implementing critical safety mandates that protect the lives and the economy of this country, is that fair?

[Applause.]

Mr. ROBERTI. That's a fair statement, and we commit to meeting the congressional mandates and awaiting for the conclusion of these investigations so that we have a full and complete record on which to move, whether or not the minimum standards need to be changed.

As you know, we set the minimum standards. States can go above and beyond. It's actually not a pure delegation. Congress granted or the authority over interstate systems has been reserved to the states. So it's a little bit more complex.

Senator HASSAN. I do understand that, and as a former Governor, I am always appreciative of having that kind of partnership, right, but what states are also looking to the NTSB and to PHMSA for is leadership and coordination and, frankly, it would be helpful to the point I made earlier to the Chairman, given that state legislatures will be reconvening in most states in this country next month. I would really highly recommend that you take what you can share with state governments now from this investigation and you get to work on coordinating with them so that, to the degree there are state laws and regulations that need to be changed, our states have the opportunity to get on the ball and do that and they're looking to you all for leadership and coordination to do that.

Will you commit to me and this panel and to the people here that you will initiate that kind of coordination and communication?

Mr. ROBERTI. Yes, Senator. It's underway and we commit to doing that.

Senator HASSAN. Thank you. Thank you, Mr. Chair.

Senator MARKEY. Congresswoman Tsongas.

Ms. TSONGAS. Thank you.

It seems to me much of the discussion is focusing—it begs the issue of the company's anticipation that such a terrible disaster might happen. We are focused very much on what caused it, how to put in place measures that prevent it from happening ever again, but also being mindful that we have to plan in the event that they do happen, and it seems to me much of our experience here in the Merrimack Valley and much of the questioning is eliciting answers that show you really did not anticipate a disaster like this ever taking place.

So my question, Mr. Hamrock, is, how does your company plan for worst case scenario disasters? Was there a plan in place that you could immediately turn to and implement?

Mr. HAMROCK. Thank you, Congresswoman. We do in fact have extensive emergency response and crisis response plans in place that we train on, drill on, run tabletops. We run through scenarios on a very frequent basis.

When this happened, I was notified within 18 minutes of the initial alarm, immediately knew something terrible had happened and activated our Corporate Crisis Response protocols which included and entailed bringing support to the Columbia Gas of Massachusetts team, dispatched senior lieutenants who were on the ground here within hours here that evening from other parts of our system.

I was on the ground the very next day and have spent the vast majority of the time here. The local operating company, Columbia Gas of Massachusetts, also has emergency response planning for such a scenario.

This clearly stretched—was an extreme scenario. A lot we can learn from this, a lot we are learning from this. We're committed to working with the NTSB.

One of the areas of their investigation looks at emergency response. We're fully cooperating with that and will in fact take back all lessons and actions that we can from this terrible tragedy.

Ms. TSONGAS. So as you're looking at your response and it's clear that there were many shortcomings in it, what would you identify at this point as some of the clear takeaways from it, things you really have to deal with?

Mr. HAMROCK. As Mr. Bryant said earlier, communications is an area that we clearly have lessons that we learned and will continue to learn. It's an area that requires additional focus for us but we are focused on that.

And then I would commend the Administration, the Baker Administration for implementing SMS on a statewide basis because I believe that framework will help not only us here in Massachusetts, but ultimately the entire industry have a more effective overlay of risk analysis and the ability to do more assessment of risk

of these kinds of situations and be better prepared in the event they could happen.

Ms. TSONGAS. So is your disaster plan a written plan? Is it something somebody could take a look at to be sure that it's adequate? Where does it exist?

Mr. HAMROCK. Our emergency plan is, in fact, a written plan. It's drilled and it's shared with all of our stakeholders. We actually we work with fire departments on emergency response drills. We work with emergency responders. We built a training center here in Massachusetts where we do that kind of training and drilling. Very committed to that and recognize there are things in this tragedy that we need to learn from that didn't quite meet the standard.

Ms. TSONGAS. So clearly need some work.

Mr. Roberti, I have a question for you. As part of your regulatory oversight, do you require pipeline companies to have a disaster response plan in place that you can review and determine whether it's adequate or not?

Mr. ROBERTI. So under Federal regulations, for any incident, including a pressure alarm going off, a leak, a fire, or a call, an emergency call, companies have to respond promptly and effectively. That's in the regulations.

Ms. TSONGAS. And how do you describe promptly? How is that determined?

Mr. ROBERTI. Well, I can tell you it's not three hours and 20 minutes to shut off the regulator stations. It has to be—as Mr. Kuprewicz said, that each pipeline system is different. In order to physically go out and shut off valves, it will require different logistical actions.

There is no set timeframe, but typically 30 minutes is a typical response time for an operator to respond to a call for a leak or to respond to a situation like this.

Ms. TSONGAS. And that's because there are people in place who've been designated to take those actions?

Mr. ROBERTI. Personnel and resources have to be readily deployable to respond to an incident like this.

Ms. TSONGAS. So given the fact that this took so much longer, what would you say about that?

Mr. ROBERTI. Well, I don't want to prejudge. This is—again, I said that the jurisdiction to review compliance is within—the compliance with Federal and state regulations is with the State of Massachusetts. That investigation has to complete.

We fully expect the Massachusetts Department of Public Utilities, when it completes its investigation, to make determinations about the company's compliance with existing Federal regulations and state regulations, to the extent Massachusetts has regulations that exceed the minimum.

Ms. TSONGAS. All right. Well, thank you so much because I know we've dealt in Washington with other disasters in which it was clear there were no disaster response plans in place and we watched these disasters unfold, as we did here, in a way that caused much more damage than ever should have been the case and so as lawmakers, we need to look at whether or not we need to require by law something more particular that reassures the public that the company is being held to the highest of standards.

Thank you, and I yield back.  
 Senator MARKEY. Thank you.  
 Congressman Moulton.

Mr. MOULTON. Yes, I'd like to talk to you, Secretary Beaton.  
 How would you describe the current state of our gas pipeline infrastructure in Massachusetts, Mr. Secretary?

Mr. BEATON. I think given the nature and the history of the Commonwealth of Massachusetts, the fact is we have one of the oldest networks of natural gas distribution in the nation. I think we see that in the Northeast in particular and our industrialized, our early industrialized parts of the country, but we do have a plan in place, called our GCEP Plan, that is a plan submitted by the public utilities, of the replacement of that older pipeline to be modernized by more modern infrastructure.

Mr. MOULTON. And how long will that plan take to implement?

Mr. BEATON. Well, when they were originally filed, the companies ranged between 20 and 25 years with one exception of 11, but for the most part, I think we're in year five. They were 20-year plans.

Mr. MOULTON. So 20-year plans. So in the interim, we need to make sure that another tragedy like this doesn't occur, and it seems to me that part of the way we do that is through inspections and your office is responsible for inspections of our gas pipeline system, is that correct, Mr. Secretary?

Mr. BEATON. Yes.

Mr. MOULTON. And do you take responsibility for the safety of our pipeline systems since you are in charge of inspections?

Mr. BEATON. Yes.

Mr. MOULTON. Do you believe that the current inspection and regulatory system in the state is adequate?

Mr. BEATON. I believe it serves the function. I believe it serves its intended function is what I meant to say. Are there improvements that we could make to it? Certainly, and I think that is the reason for us calling on an independent evaluator.

Mr. MOULTON. OK. So, Mr. Secretary, could you just—I'm not sure what serves as function means exactly.

Do you think the system is adequate, the current system, the current inspection system?

Mr. BEATON. To accomplish what it is intended to accomplish, yes. Other opportunities—

Mr. MOULTON. And what is it—Mr. Secretary, what is it intended to accomplish?

Mr. BEATON. To oversee compliance and enforcement of Federal and state standards.

Mr. MOULTON. What about the safety of the citizens of the Commonwealth, isn't that fundamentally what it's supposed to accomplish?

Mr. BEATON. If that is the sole tool that is going to solve all the answers to accomplish that, then yes, but I think by inspection alone, we are not going to eliminate all risk associated with natural gas.

Mr. MOULTON. OK. I understand you can't eliminate all risk, but you said you do take responsibility for the safety of the citizens of the Commonwealth?

Mr. BEATON. I believe I was asked a different question, but I think it is our role to put policies, procedures, and enforcement and compliance in place that protects the Commonwealth citizens, yes.

Mr. MOULTON. OK. So there are 21,000 miles of pipeline currently in Massachusetts. Can you say with confidence that we are safe from another accident like this occurring in the future, at least before the 20-year timeline for the replacement of these pipelines?

Mr. BEATON. Is the definition of safe a guarantee that something would never ever happen again?

Mr. MOULTON. You can answer that as you like. I'm just asking, do you have confidence that an explosion like this will not occur again?

Mr. BEATON. I think we're going to do everything in our power to make sure and I think we've taken great action. I don't think anyone sitting at this table could guarantee nothing could happen. There are too many scenarios that I think makes that guarantee an impossibility.

Mr. MOULTON. OK. Well, let's just talk about the inspectors for a second. According to the *Boston Globe* just prior to the explosions, Federal pipeline regulators audited the state's utility commission and raised concerns about attrition among the agency's inspectors. Data from the state comptroller show eight DPU inspectors have retired in the past 3 years, including four since March. Six engineers were certified to conduct pipeline inspections at the time of the most recent Federal audit but one was out on medical leave, another was working on desk-bound duties due to medical issues, and two were working as supervisors.

So at the time the state had just two engineers doing field inspections of pipeline work. Do you think that is adequate?

Mr. BEATON. No.

Mr. MOULTON. Just to put this in perspective for folks, there are 21,000 miles of pipeline in Massachusetts. That means that with two inspectors in the field, each is responsible for 10,500 miles of pipeline.

If you had a pipeline going from here to San Francisco and from San Francisco to Houston and then from Houston back here, that wouldn't be 10,500 miles. In fact, you could then go all the way to San Francisco again and that wouldn't be 10,500 miles. That's the responsibility of one inspector. That doesn't seem even close to adequate.

Mr. BEATON. Well, could I bring some clarification to that?

Mr. MOULTON. Yes, Mr. Secretary, please.

Mr. BEATON. Yes, thank you. So those numbers aren't entirely accurate. Currently, we have six certified inspectors, two professional engineers on the pathway for inspection, three new hires, two additional postings, and a divisional inspector.

You pointed out that there is high turnover. This is a national challenge that every state faces, especially in a good economy, when higher-paying private sector jobs, you can go in, get the training with the state and through the Federal Government and then be ripe for purchase in the private sector, and it is a challenge all of our states face.

I will say in 2013, we had eight inspectors. It reached a peak of 12.5. In 2017, we had 10. In 2013, 716 inspections were completed.

In 2017, 1,177 inspections were performed. There has been a trajectory of trending in the right direction of both the number of inspections. We did hit one of those cycles and one of those dips where we had a large transition out of inspectors at that moment in time when the incident occurred.

We have since taken the action to post new positions and will be at an all-time high of 14 inspectors once all the hires are made.

Mr. MOULTON. OK. Well, I hope we get the 14 but just to put it in perspective for folks again, through all the numbers you went through, it seems to me that in the past years, the highest you ever reached is 12. OK. Again, with 21,000 miles of pipeline in Massachusetts, that's like saying that each one of those inspectors is responsible for a pipeline that goes from here to Dallas. That doesn't strike me as adequate, Mr. Secretary.

I have one more question. I'm over my time. At a time when the DPU had only two inspectors in the field, hundreds of locked-out National Grid workers offered to assist in the recovery effort. However, it wasn't until a month later that these workers were actually deployed. Why did it take so long for this to happen?

Mr. BEATON. There were a number of complexities there associated with it. We don't have the unilateral jurisdiction and authority to mandate that that happen. The Governor convened multiple meetings between the parties to try to negotiate and come to terms on this.

We also worked very closely with all parties to try to get the workers to be able to work as quickly as possible. There were many conversations and there was actually an effort by NiSource to put out a notice that any of the employees would be welcome. They would have to come through another contractor, given the nature of the contract dispute between the Union and National Grid.

There was an open door. We were trying to—there were some workers that were able to work on the site but the expertise of those workers was the work that was in the ground, not the house-ready work that has been the challenge that we have talked about and that work was way ahead of schedule, 43.3 miles and over 5,000, I think it was 5,086 service lines were placed in 29 days.

So there was a short window of time where the expertise of those workers would have been able to fit into the puzzle of this extremely complicated restoration, but we did make every effort and led by the Governor actually initiating conversations and mediation talks to try to get the parties to sit down and negotiate and try to accelerate the opportunity to get those workers working as quickly as possible.

Mr. MOULTON. Thank you, Mr. Secretary. But the bottom line is it took a month for them to come online, and the bottom line right now is that we have enough inspectors for each one to be responsible for a pipeline from here to Dallas and your goal is to add just two more. I think we need to significantly increase that goal.

Thank you.

[Applause.]

Senator MARKEY. Thank you.

So this panel has made it very clear that there are huge deficiencies in the regulatory system in our country, that there is a huge regulatory black hole that has been created where everyone

can point a finger in another direction in order to avoid the responsibility of actually having put the real safety protections in place to guarantee that accidents like this don't happen.

That's why we're having this hearing, to make sure it does not happen again.

Mr. Hamrock, Mr. Bryant, at every step of the process, there was a chance for NiSource and Columbia to avoid this disaster. You could have had the correct maps of your system but you did not. You could have made sure the Meters and Regulations Group, the brains of the pipeline system, reviewed all work plans but you did not. You could have had a professional engineer sign off on plans but you did not. You could have had automatic shutoff relief devices installed to prevent over-pressurization but you did not. You could have had someone onsite at the regulator station to monitor operations but you did not.

Instead of choosing safety, you chose savings. Instead of choosing action, you chose to cut corners, and instead of choosing—

[Applause.]

Senator MARKEY. Instead of choosing to do things the right way, you chose the easy way every time and the result was disaster, but because of the decisions that you made to cut corners, to never prioritize safety, you created a situation where there were ticking time bombs underneath every street and inside of every house and business.

The deeper we dig into your company, the more frightening this has become. Your recklessness took a wrecking ball to the lives of residents in these communities.

Columbia Gas has been making up its response to this disaster as it goes along. Its deadlines—

[Applause.]

Senator MARKEY. Its deadlines in November are now deadlines for December, but as Christmas is arriving, there are families all over Merrimack Valley who still doubt that they will be back in their homes. There are businesses who are still doubting that they will be open and that's a legacy of your negligent activities in the days and weeks and months and years leading up to that disaster and now you're not even close to making it up to the people in Merrimack Valley, not even close.

We're not going away. We're going to be here with the people of Merrimack Valley to make sure that your company is made accountable, to make sure that there is a reckoning which NiSource and Columbia Gas has to suffer as a consequence of your negligence, of your taking the lowest common denominator as your standard for safety.

The people in this room, they paid the price for that lowest common denominator. Their families paid the price, and we're going to make sure that this system is overhauled so that a real safety system is put in place, not just for Merrimack Valley but for the whole country. We owe it to the people of this country.

As the natural gas industry says it wants to dramatically expand natural gas into every city, every town, every state in the United States, that's their goal, but we're going to make sure that safety is Issue Number 1, that this lesson is not lost, that all of the answers which we have been receiving, which basically have been

saying they don't know all of the details, that they're still learning, that they're still responding to the NTSB, that's all we really need to know about how little they had planned for this disaster.

So you might be making it up as you're going along, but for the people of Merrimack Valley, their lives have been affected by that lack of attention, lack of concern, lack of safety.

So this is the first hearing but it's not the last. This is the beginning of accountability, the beginning of a process to ensure that our promise to the American people and on behalf of the people in Merrimack Valley that this never happens again.

So this completes the first panel and we will be submitting questions in writing to you and we would also expect prompt answers to those questions in detail to the Committee.

So this hearing is concluded and we now invite the second panel up to begin their testimony.

[Applause.]

Senator MARKEY. Now I would like to welcome our next panel made up of leaders from the communities who have been hurt by this disaster.

First, we have Lawrence Mayor Dan Rivera. Mayor Rivera has in many ways been the face of this issue, speaking for his constituents. He's been doing an outstanding job in ensuring that those voices are heard, and we thank him for his work.

[Applause.]

Senator MARKEY. Also, he's joined by North Andover Town Manager Andrew Maylor and Andover Town Manager Andrew Flanagan, who have been representing their communities to make sure that their concerns are heard on a daily basis, and I am submitting joint testimony on behalf of both of the Town Managers into the record and I thank them for providing their stories to the Committee.

[The information referred to follows:]

JOINT STATEMENT OF ANDREW W. MAYLOR, NORTH ANDOVER TOWN MANAGER  
AND ANDREW P. FLANAGAN, ANDOVER TOWN MANAGER

Chairman Thune, Ranking Member Nelson, and distinguished Members of the Committee:

**The Merrimack Valley Gas Disaster**

On Thursday, September 13, 2018, at approximately 4:00 p.m. the over-pressurization of the low pressure gas lines in a 5 square mile radius in the Merrimack Valley area of northeastern Massachusetts resulted in more than 130 fires, close to two dozen injuries and at least one fatality. More than 10,000 households and 685 businesses lost gas service and as a result did not have access to heat and hot water and other gas appliances. For more than three hours after the over-pressurization residents in the impacted area could smell gas outside of their homes. It is estimated that this disaster impacted between 40,000 and 50,000 residents in the towns North Andover, Andover and the City of Lawrence making it the largest disaster of its type in U.S. history. By Friday, September 14, 2018, the Governor of Massachusetts had declared a state of emergency.

*Note: Columbia Gas of Massachusetts, a NiSource company, is the gas utility that provides gas service to the impacted area.*

**The Four Phases of the Disaster**

*1. Response*

Less than an hour after the first 911 call the executives in the three impacted communities made their first major decision when they recommended that all residents with gas service evacuate to emergency shelters or to the homes of friends or relatives outside of the impacted area. Within ninety minutes we needed to make

a second major decision-to authorize that electric service be shut off to a significant portion of each community placing already scared and confused residents into darkness. The public safety response, fire, police and emergency medical services (EMS), was extraordinary and no doubt saved lives, reduced injury and substantially mitigated the impact that this disaster could have had on the region. As stated in the NTSB Preliminary Report (PLD18MR003) their investigation is ongoing and one of the factors that will require additional inquiry is “the coordination between the emergency responders and Columbia Gas”. Just after 6:00 p.m. on the night of the disaster and only moments following the Incident Command Center (ICC) going operational, there was agreement that each of the impacted gas meters needed to be shut off to reduce the risk of future explosions and fires. By 7:00 p.m. those working in the (ICC) including the Governor, chief executives of the impacted communities, fire chiefs, the fire marshal, and the director of the Massachusetts Emergency Management Agency (MEMA), requested from Columbia Gas officials the maps of the impacted area and a definitive list of the impacted households and businesses. Columbia Gas was unable to produce such information for hours and when they did, the information was not completely accurate. As a result, the process to shut off all impacted meters began at approximately 2:00 a.m. Friday morning. Ten hours after the first 9-1-1 call. This, combined with the delay to fully depressurize the low pressure gas mains, hindered the work of the public safety personnel to fully eliminate the risk to the region. These were the first of many milestones that Columbia Gas would not meet during the response phase. Columbia Gas struggled coordinating their resources to complete the shutoff process and it became evident by the early afternoon on Friday September 14, 2018, that they were not up to the task. As a result Governor Baker declared a state of emergency and handed the responsibility of shutting gas service off to the remaining residents to Eversource. It should be noted that weeks into the recovery phase of the disaster the communities still did not have an accurate list of the properties impacted.

## *2. Recovery*

A disaster of this magnitude is all consuming. Dozens of decisions need to be made daily and the command structure nature of a disaster response reduces the time available to develop consensus between professional staff and elected officials and creates challenges in finding ways to delegate the responsibilities and still meet deadlines. An additional complication in the decision making process for a regional disaster is representing the interests of your community while trying to understand the specific issues facing the other communities and trying to strike a balance that improves success for the entire recovery effort. Recognizing these challenges and the shortcomings during the gas shutoff effort, on September 21, 2018 Columbia Gas, with the support and encouragement of Governor’s office, hired retired Navy Captain Joe Albanese as the Chief Recover Officer (CRO). Columbia Gas has done an effective job of understanding the different needs of those impacted and has worked well to avoid a one size fits all approach to the recovery effort.

### **Gas Main and Gas Service Replacement**

In order to restore service all 45 miles of gas main in the impacted area had to be replaced as did the service mains and meters to all homes. Columbia Gas under the direction of the CRO was well positioned to complete this work. More than half a dozen large gas main replacement contractors supplied the crews, at times more than 200 such crews, and the gas main replacement was completed 3 weeks ahead of schedule on October 30, 2018. Interestingly, there were more than 1,000 contractors from at least 7 states at the peak of the construction phase. The impact on the roads, sidewalks and other infrastructure in the impacted neighborhoods as a result of this massive utility project will not fully be known for years. Miles of streets which have been repaved in the past 5 years now have been damaged and there has been a similar impact on hundreds of linear feet of sidewalks, countless street trees and thousands of lawns and driveways. The communities have requested that Columbia Gas replace, not just spot repair, all public assets that were damaged. We have not yet received confirmation from Columbia Gas if they will do so. As it relates to the private property impact we would expect that Columbia Gas would return all impacted properties to their pre-disaster condition.

### **Gas Device Replacement/Repair**

In the early stages of the recovery phase all gas devices including stoves, dryers, water heaters, boilers and generators were determined to be unsafe and therefore needed to be replaced, not just repaired, prior to service restoration. One of the most important decisions that was made during the recovery phase was determining the time-frame for completing the work to safely restore gas service and allow people to return to their normal way of life. Based on all of the information available the

agreed upon “re-light” date was set at November 19, 2018. The restoration process turned out to be far more challenging than expected. Arguably the most difficult decision of the entire disaster was made on October 24, 2018, when, based on the information available, the town managers and mayor agreed to change course and allow, if possible, temporary repairs to heating systems previously determined to be unsafe and extend the deadline for completion from November 19th to December 16, 2018. As of November 19, 2018, sixty-seven days after the event and the original date for having all impacted residents and businesses “re-lit”, 67 percent of residents and 81 percent of businesses have been “re-lit”. With the change in strategy from “repair when you can and replace later” it is expected that Columbia Gas will have to return in spring of 2019 and embark on a 5 month process to replace the equipment that has been temporarily repaired.

With the average nighttime temperatures ranging from 20 to 45 degrees and dropping on a daily basis alternative housing and temporary heat have been significant priorities. There are currently more than 1,700 families in hotels, travel trailers, shelters and apartments all secured for the purpose of providing alternative housing. When the restoration process began decisions needed to be made regarding prioritizing certain properties to reduce the risk to health or safety. These decisions had the burden of knowing those that wouldn’t be restored quickly may remain impacted for weeks or months. It is difficult to get people to leave their homes even when faced with the prospect of no heat, cold showers, and the inability to cook a hot meal, and/or dry their clothes. The decision to add travel trailers (RVs) was made in response to that concern. Locating the travel trailers presented its own challenges and therefore, another set of decisions was required. Where should the trailers be located given there would be loud generators and bright lights? How many trailers on each site? Should laundry facilities be included?

Decisions regarding the most effective way to communicate with residents and determining who the audience is can present real challenges. More than 1,500 contracted employees from around the country are working in the three communities. There are cultural, societal and language differences between the employees and residents. Social media has taken on a more prominent role than what the communities experienced pre-disaster. We had to decide early on to focus increased resources in this space and push the gas company to do the same to help manage the misinformation that was running rampant early on. It took Columbia Gas weeks to engage in the appropriate communication channels and this ultimately led to confusion and mistrust which still exists through today.

A strength of the recovery process has been all three communities working cooperatively. This has driven decisions which included holding joint, rather than separate, press events, entering in joint contracts for engineering services, developing inter-municipal agreements to help fill hundreds of police and fire details on a daily basis, and having similar agreements for hiring plumbing inspectors from other communities.

During the past seven weeks we have had to make hundreds of decisions each of which directly impact one or more residents or business owners. Many of these decisions needed to be revisited or revised. To say that the environment for making decisions in a disaster such as this is dynamic would be an understatement. The primary lesson learned has been that the residents, business owners, and other stakeholders in the communities are looking for someone to trust, not someone to always be right. This lesson has helped instill confidence in our ability to make decisions even when insufficient information or limited time have made the decision making process less than ideal.

We have no doubt that for many of the residents and businesses that remain impacted the frustration must be mounting by the day. It is frustrating for me as well. In many ways the “Rapid Relight Plan” which was instituted on October 24, 2018, raises new questions that will need to be answered. When exactly will my heating unit be replaced, will I have the option to move my gas service, who do I call during the winter if my now repaired heating unit breaks, how does the repair effect the warranty on my boiler, when will my driveway or lawn be repaired?

### **Claims**

The claims process has been challenging for most residents and business owners. Claims centers were opened in each of the three communities within a week of the disaster and those claims centers remain open today. Impacted residents can also file claims via telephone. Most claimants have had multiple claims representatives throughout the reimbursement process as the third party company managing the claims process ramped up the demand. To date more than 23,000 claims have been filed, 9,940 of those claims remain active and more than \$61 million in claims have been paid.

All three towns have been advocating on behalf of the residents and businesses impacted since this disaster occurred and will continue to do so. To expedite meeting the date established in the original plan we made decisions based on verbal commitments from Columbia Gas. Given what has transpired to date and the ongoing nature of the recovery process, one which extends well into next year, verbal commitments will no longer be acceptable. The Town of North Andover expects at a minimum the following from Columbia Gas:

1. That a written agreement be drafted which very specifically identifies what each resident/business can expect from Columbia Gas and when. That agreement (contract) should be provided to each customer impacted.
2. That Columbia Gas continue to provide the necessary resources to respond to service questions and claims. These resources must remain local.
3. That Columbia Gas commit to the curb-to-curb replacement of ALL roads impacted by the gas main replacement work associated with this disaster. Columbia should also commit to the repair or replacement of all other impacted public assets such as sidewalks and street trees.

### 3. Mitigation

As you know the NTSB issued its Preliminary Report on October 11, 2018 (PLD18MR003). In that report they were clear about the cause of this disaster "Columbia Gas developed and approved the work package executed on the day of the accident. The work package did not account for the location of the sensing lines or require their relocation to ensure the regulators were sensing actual system pressure. *The work was performed in accordance with steps laid out in the work package.* In light of this accident, Columbia Gas implemented a safety stand-down for all employees who perform work related to low-pressure natural gas systems for NiSource subsidiaries." (Emphasis added)

In a conversation we had with one of the lead NTSB investigators around the time the report was issued, it was confirmed to me that Columbia Gas was responsible and the fact that the report was "Preliminary" would not change that but instead allow them to provide more details about what took place before and after the incident. This is supported by the last sentence in the report, "The NTSB's investigation into this accident is ongoing. Future investigative issues include the coordination between the emergency responders and Columbia Gas; an analysis of the engineering work package preparation and execution, including the design documentation; and a review of construction packages for constructability and safety." Since the time the preliminary NTSB report was issued the State DPU issued a moratorium to Columbia Gas for all non-emergency gas work. It should be noted that a current Department of Public Utilities order includes a penalty of up to \$1,000,000 per impacted property if Columbia Gas fails to meet their obligations to complete work required.

The NTSB has just recently (11/14/2018) issued a Safety Recommendation Report (PSR1802) related to the disaster which provides guidance to mitigate the likelihood of a similar disasters in the future. That report recommends the following actions:

#### **To the Commonwealth of Massachusetts:**

Eliminate the professional engineer licensure exemption for public utility work and require a professional engineer's seal on public utility engineering drawings. (P-18-005)

#### **To NiSource, Inc.:**

Revise the engineering plan and constructability review process across all of your subsidiaries to ensure that all applicable departments review construction documents for accuracy, completeness, and correctness, and that the documents or plans be sealed by a professional engineer prior to commencing work. (P-18-006) (Urgent)

Review and ensure that all records and documentation of your natural gas systems are traceable, reliable, and complete. (P-18-007) (Urgent)

Apply management of change process to all changes to adequately identify system threats that could result in a common mode failure. (P-18-008) (Urgent)

Develop and implement control procedures during modifications to gas mains to mitigate the risks identified during management of change operations. Gas main pressures should be continually monitored during these modifications and assets should be placed at critical locations to immediately shut down the system if abnormal operations are detected. (P-18-009) (Urgent)

#### 4. Preparedness

Per the NTSB Preliminary Report Preliminary Report issued on October 11, 2018 (PLD18MR003) “minutes before the fires and explosions occurred, the Columbia Gas monitoring center in Columbus, Ohio, received two high-pressure alarms for the South Lawrence gas pressure system: one at 4:04 p.m. and the other at 4:05 p.m. The monitoring center had no control capability to close or open valves; its only capability was to monitor pressures on the distribution system and advise field technicians accordingly. Following company protocol, at 4:06 p.m., the Columbia Gas controller reported the high-pressure event to the Meters and Regulations group in Lawrence. The company protocol does not appear to include contacting local or regional Public Safety Answering Points (PSAPs or dispatch) when such an event occurs. The first resident called 9–1–1 at 4:11 p.m. Fire, police and emergency medical services (EMS) began to respond in all three communities within five minutes of the over-pressurization as a result of an overwhelming number of resident calls for service. However, there was no direct communication to each community by the company regarding the nature of the problem. Therefore, for the next one to two hours confusion and fear spread throughout the region. “Columbia Gas shut down the regulator at issue by about 4:30 p.m. The critical valves of the involved natural gas distribution system were closed by 7:24 p.m.”. The municipal chief executives were told that the complete depressurization of the impacted gas mains was not completed until several hours after that. It is possible that more local control of the system and a more robust protocol in response to an event could result in less overall damage. Specific questions regarding the preparedness issues are:

- Would more local control of the system have allowed the “regulator at issue” to shut down this regulator sooner? If yes, would this have reduced the extent of the damage?
- Would more local control of the system have allowed “the critical valves of the involved natural gas distribution system” to be closed before 7:24 p.m.? If yes, would this have reduced the extent of the damage?

Finally, the communication protocol must reflect the need to get public safety agencies involved as quickly as possible and that gas mains and therefore gas main failures do not recognize community borders. PSAPs in all impacted jurisdictions must be contacted immediately after an event occurs.

#### Conclusion

The actions of Columbia Gas which resulted in the gas explosions and fires in the Greater Lawrence area have had a profound and continuing impact on the region’s residents and business owners. The exact impact both personal and economic will not be known for months or years to come. What is most concerning is the unforeseen costs such as the long term impact on the economic viability of many of the small businesses in the region, the emotional impact on vulnerable populations from being without heat and hot water, and/or the effect the disaster has had on families displaced and remaining in hotels rooms or travel trailers.

In a disaster such as this identifying areas of deficiency is not only acceptable, but quite frankly not difficult. That being said, the senior leadership of Columbia Gas has partnered with the three communities to find solutions to the most significant and impactful problems. Also, the work of the Chief Recovery Officer Joe Albanese and his team with the support of Governor Baker, the Lieutenant Governor and several members of their senior staff, to continue to find creative ways to solve problems and to challenge those on the project that have underperformed is important to recognize. Without this leadership we would not have made the progress we have made to date.

Finally, the residents and the business owners of the impacted area woke up on September 13, 2018, never imagining how dramatically their lives would change as a result of this disaster. They have endured loss of life, property, income, and a degradation of their quality of life. However, they have demonstrated great resilience, strength and courage during this difficult time and they deserve our thanks and a commitment that we will take steps to ensure their lives return to normal and that a similar disaster does not occur anywhere in the United States again.

Regards,

ANDREW W. MAYLOR  
Town Manager  
North Andover, Massachusetts

ANDREW P. FLANAGAN  
Town Manager  
Andover, Massachusetts

Senator MARKEY. We thank you all for being here and we will begin with you, Mr. Mayor, and then I will introduce the other witnesses as their testimony is called for.

So, again, we welcome you, Mr. Mayor, and we thank you for everything that you've done for your community and whenever you are ready, please begin your testimony, and if you could move that microphone in just a little bit.

Mayor RIVERA. How's that?

Senator MARKEY. If you maybe lift it up a little bit.

**STATEMENT OF HON. DAN RIVERA,  
MAYOR, CITY OF LAWRENCE**

Mayor RIVERA. Good morning, Senators, invited guests, and fellow affected citizens.

I want to begin by thanking Senator Markey for advocating on behalf of our communities to bring this hearing to Lawrence, an honorary Lawrence kid. It allows all those affected to be present and included throughout the investigation process.

The gas fires and explosions of September 13 and the days that followed were both a human tragedy and a human disaster. That tragedy continues despite the best efforts of Columbia Gas for the recovery effort.

I never thought that I would have to ask people in my community and those in surrounding communities to evacuate the city fearing for their lives, asking them to abandon their homes, their businesses, and their neighborhoods because no one knew if it was safe for them to be there.

Residents everywhere in the area evacuated out of sheer panic. We had to cut the electrical power to every domicile and business in South Lawrence, Andover, North Andover in the middle of the night.

What followed the devastation of the fires and explosions was loss of life, grave unbearable injury to people, priceless loss of property and the regional economy, but worst of all, we lost the underlying security that the very thing most of us relied on to keep ourselves and our families warm in the coldest of New England winters could destroy our homes, our neighborhoods, our towns, and our very peace.

We expected that the gas services that we pay good money for every month, that many families sacrifice to make those monthly payments, and that business owners base the core of their businesses on, would not put us in grave danger. However, that is exactly what happened.

And during the heart of the disaster, I said this before, Columbia Gas was the least informed and the last to act. It is important to know that while we were trying to save lives and make heads and tails of the tragedy and disaster of those days, Columbia Gas was failing to manage the disaster in the same way they had failed to maintain their gas lines.

I beat most of the upper echelon leadership to the scene that night after driving in Thursday night traffic from Boston. Those who have done that understand what I'm talking about.

It was clear that the Columbia Gas engineers and Columbia Gas of Massachusetts top leadership were afraid and lacked a clear

path to deal with the disaster. They owned the gas in the pipe, they owned the customer relationships, yet they failed to own this disaster.

They failed so much so that Governor Baker had to call for a state of emergency and put a different utility company in charge and we lost critical hours that first weekend getting people back in their homes because Columbia Gas refused to call for mutual aid, motivated by what appeared to many of us to be an unwillingness to bear the costs of that mutual aid.

One person was dead, many were injured, and the core of three communities had been shaken, and it appeared to many of us that Columbia Gas didn't have an actual plan for dealing with the disaster of this magnitude, as if it had never crossed their mind that this could occur.

And earlier today, they said they did have one. I would love to see that. I'd love for them to put that up, the plan that was in place prior to this event.

These plans should be mandated across utilities, not just natural gas, for there to be a system failure and customer evacuation plan created and refreshed every two years. Ordinary people have plans to get out of their own homes in case of a fire. It's the least the utility could do to have a basic plan in place if they set your city on fire.

It's cold outside today and there's snow on the ground. People in our communities are still without heat and hot water. Some people are still in hotel rooms and RVs and some are still cooking on hot plates and most of the people in the affected areas, regardless if they were living before Thanksgiving or not, let's just say they didn't have the Thanksgiving they wanted to due to this disaster.

The recovery's a material effort, fixing things in the system so that life can happen. I mean, in that sense, the recovery's an awful experience only made better every day for some who get their gas turned back on.

I want to say thanks to Governor Baker because, because of him, we have Chief Recovery Officer Joe Albanese leading the recovery effort, a 28-year veteran and former captain in the United States Navy Civil Engineer Corps, the Seabees. We're honored to have Joe leading our restoration efforts. He enjoys our full support and appreciation for walking away from his own business to work on this recovery.

Every day, he has done all he can to assist us to get Columbia Gas to live up to the responsibilities and get the work done.

As I have lived it, the recovery has really been about four things: fixing the pipe in the street and to the house to get gas to the house, fixing the pipe and appliances in the house so they can turn the gas on, making people whole as customers of Columbia Gas for their physical loss, for mental anguish, and terrifying experiences that they had to endure and that means financially, and, four, supporting those people throughout this time as they waited for the first three things to be completed.

Columbia Gas did accomplish the work of fixing the pipe in the street ahead of schedule and without further disaster. For this, we are thankful.

However, the rest of the work has been miserable. Any time the recovery has had to deal with the plight and need of people, Columbia Gas has initially failed, only getting it right days and sometimes weeks after local and state officials have raised the pressure on them so much so that they had to relent.

The plight of people and their suffering has been prolonged because of a broken claims process, a broken repair process, and the total lack of understanding on how to communicate with customers.

Long before we had 250 houses late in the day with gas, we had weeks of only 40 homes a day lit. For this, not only does Columbia Gas but Gilbane Recovery Services bear responsibility and as such should be investigated. I want to repeat that. Gilbane Recovery Services also bears responsibilities for missing the initial date and should be investigated.

Before we had a hundred appliances delivered to homes on a day, we had days with none, and for almost a week, securing temporary housing was not only daunting but nearly impossible. Customers were lied to about availability of hotels and RVs and consistently left in the dark on their claims process. All the while, all the while hotel rooms and RVs sat empty. Having to endure not one, not two, but as many as five assessments of their homes and appliances before one wrench was turned to fix their boilers or furnaces was a common experience of the affected communities.

Many times people languished without answers to important questions about when they should stay home from work to accommodate the Columbia Gas and the Gilbane contractors and when they could expect answers regarding their claims. All the while, people were sleeping in cold beds and cooking on hot plates and taking cold showers. Other families huddled in RVs and far-away hotel rooms waiting for their homes to be fixed.

I'm not sure what would have happened to our communities if not for the firefighters of Lawrence, Andover, North Andover Fire Departments, and the over a thousand firefighters that came in support of them, including the State Fire Marshal's Office.

The effect of this disaster was controlled only by the professional posture and response of the Lawrence, Andover, and North Andover Police Departments and the over 1,100 police officers from across the Commonwealth and the State Police, all the municipal employees that put down their city and town bureaucracies and became an army of first responders, aid and humanitarian workers.

[Applause.]

Mayor RIVERA. From the city councils and selectmen to the library directors, from the state representatives to the teachers and staff of our public schools, many of them affected themselves, the Governor and his staff and cabinet who seamlessly rolled up their sleeves and became an active informed part of these efforts, the state legislature and the Federal delegation, both of you have made us feel that our plight was the most important business before the Commonwealth.

Town Managers Maylor and Flanagan and I, as well as the affected across communities, can never thank them all enough for their actions.

I must say that I have never been more proud to be associated with this group of people in my life. They all showed the spirit of government and its power to do good.

I want to be sure to say the rank and file of Columbia Gas workers and zone captains and the workers who fixed the pipe in the street all were shining spots in this ordeal. Zone captains became a symbol of the good Columbia Gas could do if it got its stuff together.

The recovery and the personal and communal sense for every person affected is going to take some time, not measured in days or weeks. I'm not sure when we will remove from our memories the darkness, the fire, the cold nights, the cold showers, the evacuations, and the loss of such a young life.

So in the end, we will need help from state and Federal officials and government to pave our roads, to fix our infrastructure, to pay for economic development, basic help for us to get off the mat after being knocked down by Columbia Gas, but what we all expect from you, what we ask of you is to do what is at the core of why we have governments and that is to protect us and to ensure this can't and won't happen again.

In this one instance, in this one incident, Columbia Gas has shown they could not provide safely the service they promised everyone. This failure alone should cause that you take that privilege of running a gas company away from them and break that company apart.

[Applause.]

Mayor RIVERA. I'm not sure how you do it, revoke their licenses, make them sell their business to someone else. It doesn't matter how you do it, but after they have met their financial obligations not only to the individuals and the businesses and to the municipalities, Columbia Gas should cease to exist. No second chances.

Leonel Rondon's life was taken and multiple homes no longer exist and our livelihood and our peace has forever been altered, so should Columbia Gas no longer exist.

A disbanded Columbia Gas that no longer exists will send a strong message and motivator to others to do better around safety. That is what justice for everyone affected by this disaster would look like.

Thank you.

[Applause.]

[The prepared statement of Mayor Rivera follows:]

PREPARED STATEMENT OF HON. DANIEL RIVERA, MAYOR, CITY OF LAWRENCE

Good morning senators and invited guests and fellow affected citizens. The gas fires and explosions of September 13, 2018 and the days that followed was both a human tragedy and a human disaster. That tragedy continues despite the best efforts of Columbia Gas and the recovery effort. I never thought that I would have to ask people in my community and those in surrounding communities to evacuate the city, fearing for their lives. Asking them to abandon their homes, their businesses and their neighborhoods because no one knew if it was safe for them to be there; others evacuated out of sheer panic. We had to cut the power to every domicile and business in South Lawrence, Andover and North Andover in the middle of the night. What followed the devastations of the fires and explosions was loss of life, grave, unbearable injury to people, priceless loss to property and the regional economy, loss of business and jobs. But worst of all we lost the underlying security that the very thing most of us relied on to keep ourselves and our families warm in the

coldest of New England winters could destroy our homes, our neighborhoods, our towns and city, our very peace. We expected that the gas services that we pay good money for every month, that many families sacrifice to make those monthly payments and that business owners based the core of their business and their livelihood on, would not put us in grave danger, but that is exactly what happened.

During the heart of the disaster Columbia gas was the least informed and last to act. It is Important to know that while we were trying to save lives and make heads or tails of the tragedy and disaster of those days Columbia gas was failing to manage the disaster, in the same way that they had failed to maintain their gas lines. I beat most of the upper echelon leadership to the scene after driving in Thursday night traffic from Boston. It was clear that the Columbia Gas engineers and Columbia Gas Massachusetts top leadership were afraid and lacked a clear path to deal with the disaster. They owned the pipe, owned the gas in the pipe, they owned the customer relationships, yet they failed to own this disaster. So much so that Governor Baker had to call for a state of emergency and put a different utility company in charge. We lost critical hours that first weekend, getting people back in their homes because they refused to call for mutual aid motivated by what appeared to many to be an unwillingness to bear the cost of that mutual aid. One person is dead, many injured the core of three communities has been shaken. It appeared to many of us that Columbia Gas did not have an actual plan for dealing with a disaster of this magnitude; as if it never crossed their minds that this could occur. It should be mandated across utilities (not just natural gas) for there to be a system failure and customer evacuation plan created and refreshed every 2 years. People have plans to get out of their homes in case of a fire. Utilities to should have a basic plan if they set your city or town on fire.

It is cold outside today and there is snow on the ground. People in our communities are still without heat and hot water. Some people are still in hotel rooms and RVs. Some are still cooking on hotplates. And most of the people in the affected area, regardless if they were lit before Thanksgiving or not, did not have the Thanksgiving they wanted to due to this disaster. The recovery is a material effort; fixing things and systems so that life can happen, in that sense the recovery is an awful experience only made better every day for some who get their gas turned back on.

Thanks to Governor Baker we have Chief Recovery Officer, Joe Albanese, leading the recovery effort. A twenty-eight-year veteran and former Captain in the United States Navy Civil Engineer Corps. We are honored to have Joe leading our restoration efforts and he enjoys our full support and appreciation for walking away from his business to work on this recovery. Every day he has done all he could to get Columbia Gas to live up to their responsibility and get the work done. As I have lived it, the recovery has really been about 4 things: (1) Fixing the pipe in the Street and to the House to get gas to the house, (2) Fixing the pipe and appliances in the house to turn on the gas, (3) making people whole as customers of Columbia Gas for the physical loss but also for the mental anguish and terrifying experiences they had to endure and (4) Supporting people as they waited for 1, 2, and 3 to be complete.

Columbia Gas did accomplish the work of fixing the pipe in the street ahead of schedule and without further disaster. For this we are thankful. However, the rest of the work has been miserable. Anytime the recovery has had to deal with the plight and need of people Columbia Gas has initially failed only getting it right days and sometimes weeks after local and state officials have raised the pressure so much that they had to relent. The plight of people and their suffering has been prolonged because of a broken claims process, a broken repair process and a total lack of understanding of how to communicate with customers. Long before we had 250 houses a day lit with gas, we had weeks of only 40 homes lit per day. For this not only does Columbia Gas but Gilbane Recovery Services, bear responsibility and as such should be investigated. Before we had days of 100 appliances delivered we had days with none. For almost a week, securing temporary housing was not only daunting, but nearly impossible. Customers were lied to about availability of hotels and RVs and consistently left in the dark on their claims processes. All the while hotel rooms and RVs sat empty. Having to endure not 1, not 2 but as many as 5 assessments of their homes and appliances before one wrench was turned to fix one boiler. Many times people languished without answers to important questions about when should they stay home from work to accommodate Columbia Gas and GRS contractors, and when can they expect answer regarding their claims. All the while, people were sleeping in cold beds and cooking on hot plates and taking cold showers. Families huddled in RV's and far away hotel rooms waiting for their homes to be fixed.

I am not sure what would have happened to our communities if not for the firefighters of the Lawrence, Andover, North Andover fire departments and the over 1,000 firefighters that came in support of them including the State Fire Marshal's office. The effect of this disaster was controlled only by the professional posture and response of the Lawrence, Andover, North Andover police departments and the over 1,000 police officers from across the commonwealth and the State Police. All the municipal employees that put down their city and town bureaucracies and became an army of first responders, aid and humanitarian workers, from the city councilors and selectmen to the library director, from state representative to the teachers and staff at our public schools (many affected themselves). The Governor and his staff and cabinet, who seamlessly rolled up their sleeves and became an active, important part of these efforts, the State legislature and the Federal delegation both made us feel as if our plight was the most important business before the commonwealth. I have never been more proud to be associated with a group of people in my life. They all showed the spirit of government and its power to do good. I must say that the rank and file Columbia Gas workers and zone captains and the workers who fixed the pipe in the street all were a shining spots in this ordeal. Zone captains became a symbol of the good Columbia Gas could do if it got it stuff together.

The recovery in the personal and communal sense for every person affected is going to take some time not measured in days or weeks. I am not sure when we will remove from our memories the darkness, the fire, the cold nights, the cold showers or the evacuations. So, in the end we will need help from state and Federal officials and government to pave our roads, to fix our infrastructure, to pay for economic development, basic help to get off the mat after being knock down by Columbia Gas.

But what we all expect from you, what we ask of you, is to do what is at the core of why we have governments, and that is to protect us and to insure this can't and won't happen again. In this one incident, Columbia Gas showed they could not provide the service they promised everyone safely. This failure alone should cause that you should take their privilege to run a gas company away. Break it apart revoke their license make them sell their business to someone else, it doesn't matter how, but like Leonel Rondon's life was taken, and multiple homes no longer exist, and our lives and livelihood has forever been altered, Columbia Gas as a company should no longer exist. That is what justice for everyone affected would look like.

Senator MARKEY. Thank you, Mr. Mayor. Thank you for your great work.

And next, we're going to hear from Tina Messina. Tina is a leader in the small business community in North Andover. We thank you for coming here and representing all of those businesses who want to have answers as to what happened and how soon they can go back to work.

So we thank you and whenever you're ready, please begin.

**STATEMENT OF TINA MESSINA, OWNER, WINE CONNEXTION**

Ms. MESSINA. Sure. Thank you.

Good afternoon. My name is Tina Messina, and I'd like to thank the Committee for this opportunity to discuss the impact on September 13 gas explosion has had on the business community.

Senator MARKEY. Could you move that microphone just over in front of you just a little bit?

Ms. MESSINA. Closer?

Senator MARKEY. Yes.

Ms. MESSINA. After the initial shock of the event, the community needed to understand the scope of the problem. Information on the details came slowly as we learned what happened and who was affected by this event.

By the following Sunday, I found myself hitting the trifecta. I was impacted as a landlord with two retail properties, a three-unit strip mall, a 23-unit shopping center, a business owner of a retail wine store, and my home were all in the affected area.

We learned that there could be over 40 miles of gas line that needed to be replaced and our gas equipment had been compromised. Upon learning this information, we didn't know if we were looking at months or years to get back our gas service.

That Monday, I began receiving many phone calls from my tenants. While some tenants could operate without gas, others, such as the restaurants, were shut down. Our restaurant tenants found themselves with no revenue stream and they were facing loss of help.

Sharma Grill, a 164-seat restaurant, began to receive cancellations of future events as he could not give these clients any assurances that he would have a functional facility.

During that first week after the explosion, finding solution to our problems was difficult as we needed to wait on state and local officials to give us direction. Information was scarce and frustration set in.

As property owners, we began to explore our options to provide alternatives to heat our buildings. It was September and we figured that we had three months before the cold weather was upon us and we knew that if we didn't have heat, we could not provide a working sprinkler system and we would have to shut down the buildings. It was an unthinkable scenario.

We immediately began to look into alternative fuel sources, such as LP tanks, but quickly found we weren't the first to be making those phone calls. It became clear they were many of us. Businesses as well as homeowners fighting for the same limited resources.

We were also encountering state regulations and large costs for these solutions, making it very difficult to determine what to do. We needed answers.

It wasn't until the following Friday that we learned that the recovery process was going to take approximately two months and businesses were going to be addressed first. While we were all relieved to hear the short timeline, understanding the execution of the recovery plan was unknown.

During this planning stage, many of us were experiencing loss of revenue, whether you were able to open your business or not. People stayed away from the area and many people didn't know that businesses were open.

As the recovery plan unfolded, it became apparent we all needed to individually manage the process of getting our gas turned back on. This became a full-time job for some of us. Understanding what needed to be fixed versus replaced was not a simple yes or no answer.

Managing that process with Columbia was challenging as parameters and information changed daily. You will be told what to do 1 day and then the next day you would have a new crew telling you something different. It was important to stay on top of the situation to ensure that your business and/or building would get relit.

Once the gas-ready plan was deployed, we were hit with another wave of disruption. While we all understood replacing 48 miles of gas line was a monumental task, we did not understand the impact it would have on the infrastructure surrounding our businesses. Roads were shut down and dug up while traffic was redirected

making it time-consuming and difficult for people to get to our businesses.

For more than 5 days, the only way to get in and out of our 23-unit shopping center was through the CVS Drive-Through.

As it became difficult to get to these affected areas, many people were told not to go to these areas via social media. People were posting "What a mess, took me 40 minutes to go a half mile, don't go there if you don't have to." Frustrations amongst patrons began to set in and they stayed away.

I experienced this with the Wine Connection as our year-over-year sales were down from the previous time last year and I expect other businesses experienced the same.

Also during this time, it became evident that people were living out of the area, whether by choice or the need to relocate due to their living conditions. Our regular customers were not around to shop for our goods and services. As someone whose personal home was affected, I understood the difficulties of living without heat, hot water, and cooking capabilities.

Now that we are entering our third month into the recovery, concerns turn to the holiday season. This is a critical time for retailers and hospitality businesses and we wonder how will we fare through this season. Do customers know we're open? Will they return to our businesses or have they adopted new locations for shopping for goods and services? When will residents be able to return to their homes and patronize our business? In a booming economy, these are unsettling questions we're about to face.

In conclusion, I'd just like to say to the Committee that the people of Merrimack Valley are resilient and while we're still dealing with these challenges to recover from this disaster, we look forward to the days when we can get back to normal.

Thank you.

[The prepared statement of Ms. Messina follows:]

PREPARED STATEMENT OF TINA MESSINA, OWNER, WINE CONNEXTION

Good Afternoon, My name is Tina Messina and I'd like to thank the committee for this opportunity to discuss the impact of the Sept 13th gas explosion has had on the business community.

After the initial shock of the event the community needed to understand the scope of the problem. Information on the details came slowly as we learned what happened and who was affected by this event.

By the following Sunday, I found myself hitting the trifecta. I was impacted as a landlord, with 2 retail properties; a 3 unit strip mall and a 23 unit shopping center, a business owner of a retail wine store and my home were all in the affected area.

We learned that there could be over 40 miles of gas lines that needed to be replaced and our gas equipment had been compromised. Upon learning this information we didn't know if we were looking at months, several months or years to get back our gas service.

That Monday, I began receiving many phone calls from my tenants. While some tenants could operate without heat, others such as the restaurants were shut down. Our restaurant tenants found themselves with no revenue stream and they were facing loss of help. Chama Grill, a 164 seat restaurant, began to receive cancellations of future events as he could not give these clients any assurance he would have a functional facility.

During that first week after the explosion, finding solutions to our problems was difficult as we needed to wait on state and local officials to give us direction. Information was scarce and frustration set in. As property owners, we began to explore our options to provide alternatives to heat to our buildings. It was September and we figured we had 3 months before the cold weather was upon us and we knew that

if we didn't have heat we could not provide a working sprinkler system and we would have to shut the buildings down. It was an unthinkable scenario.

We immediately began to look into alternative fuel sources such as LP tanks but quickly found that we weren't the first to make those calls. It became clear there were many of us, businesses as well as home owners, fighting for the same limited resources. We were also encountering state regulations and large costs for these solutions making it very difficult to determine what to do. We needed answers.

It wasn't till the following Friday that we learned the recovery process was going to take approximately 2 months and businesses were going to be addressed first. While all were relieved to hear the short time line, understanding the execution of the recovery plan was unknown.

During this planning stage many of us were experiencing loss of revenue whether you were able to open your business or not. People stayed away from the area and many didn't know if businesses were open.

As the recovery plan unfolded it became apparent we all needed to individually manage the process of getting our gas turned back on. This became a fulltime job for some of us. Understanding what equipment needed to be fixed vs replaced was not a simple yes or no answer. Managing that process with Columbia was challenging as parameters and information changed daily. You would be told what to do one day and then the next day you would have a new crew telling you something different. It was important to stay on top of the situation to ensure your business and/or your buildings would get "re-lit".

Once the Gas-Ready plan was deployed we were hit with another wave of disruption. While we all understood replacing 48 miles of gas lines was a monumental task, we did not understand the impact it would have on the infrastructure surrounding our businesses. Roads were shut down and dug up while traffic was redirected making it time consuming and difficult for people to get to our businesses. For more than 5 days, the only way to get in and out of our 23 unit shopping center was through the CVS drive thru.

As it became very difficult to get to the affected areas, many people were being told not to go to these areas via social media. People were posting "what a mess" took me 40 minutes to go a 1/2 mile, don't go there if you don't have to." Frustration amongst patrons began to set in . . . and they stayed away. I experienced this with the Wine ConneXtion, as our year over year sales were down from the previous time last year and I expect other businesses experienced the same.

Also during this time it became evident that many people were living out of the area. Whether by choice or the need to relocate due to their living conditions, our regular customers were not around to shop for our goods and services. As someone whose personal home was affected, I understood the difficulties of living without heat, hot water and cooking capabilities.

Now that we are entering our 3rd month into the recovery, concerns turn to the holiday season. This is a critical time for retailers and hospitality businesses, and we wonder how will we fare through this season? Do customers know we're open? Will they return to our businesses or have they adopted new locations of shopping for goods and services? When will residents be able to return to their homes and patronize our businesses?

In a booming economy, these are very unsettling questions we are about to face. In conclusion I'd like to let the committee know that the people of the Merrimack Valley are resilient and while we are still dealing with the challenges to recover from this disaster, we look forward to the days where we can get back to normal.

Thank you.

Senator MARKEY. Thank you, and thank you so much for your testimony.

[Applause.]

Senator MARKEY. And next, we are going to hear from Andover Fire Chief Michael Mansfield and I am also going to submit to the record testimony on behalf of Lawrence Fire Chief Brian Moriarty and North Andover Fire Chief William McCarthy.

[The information referred to follows:]

BRIAN F. MORIARTY  
Chief of Department



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KEVIN M. LOUGHLIN  
Deputy Chief  
ROBERT WILSON  
Deputy Chief

November 21, 2018

Re: Merrimack Valley Gas Crisis  
To: Senate Hearing Committee

Dear Committee members

On September 13<sup>th</sup> 2018 at approximately 16:05 hours the City of Lawrence and Towns of North Andover and Andover were suddenly thrust into a disastrous situation where as the low-pressure gas system that serviced the south side of Lawrence, North sections of North Andover and Andover was suddenly and dramatically over pressurized to what has been stated to as much as 75 PSI.

This caused a sudden and dramatic increase in flame size to any device that had a standing pilot, one where the little flame is always on. This increase caused the fire to leave the walls of the appliance and spread to any combustibles within flames reach. It caused numerous building fires and multiple building explosions, resulting in the death of one young male and serious life threatening injuries to a young female as well as seven firefighters being injured in the ensuing aftermath.

I write to you today as we are still in a severe state of disrepair. We have 5 mobile trailer parks set up for temporary housing, each requiring fire, police and medical protection. We have shelter set up in a Manufacturing complex requiring the same and numerous fire apparatus staffed in addition to our normal compliment because of the increased response time and fir risk with all the temporary heating solutions.

I have a great concern that this could someday happen again. There needs to be an oversight process or device that will prevent such a catastrophe from ever developing again. The fact that the gas was allowed to build to such severe pressure and then take hours to shut down and drain was totally unacceptable.

I know I speak for many when I say that this situation was due to human error and the possibility of a repeat still exists today. I would like to offer my experiences, time and effort

*SPRINKLERS SAVE LIVES.*

to assist in any way possible to prevent a future event from ever occurring. I believe the lessons learned during this recovery phase have been invaluable to emergency planners and should also be looked at closely as other disasters will need temporary housing in the future whether they are manmade or natural.

The costs to the communities should also be scrutinized as a city such as Lawrence that is poor and subsidized heavily by the state has had its equipment and staffing stretched to the limit and should be compensated for same.

I have also attached a PowerPoint presentation of the situation up to this point in time and I hope that it will assist this committee in the determination of needs for our communities.

Thank you for the opportunity to present this evidence and do not hesitate to contact me for any further explanation or assistance that I may offer.

Respectfully

*Brian F. Moriarty*

Brian F. Moriarty  
Lawrence Fire Chief



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Fire Chief William McCarthy  
 North Andover, MA 01845

Office of Senator Edward J. Markey  
 975 JFK Federal Building  
 15 New Sudbury Street  
 Boston, MA 02203

November 21, 2018

Dear Senator Markey,

Thank you for providing a forum to educate legislative leaders on the events and aftermath of the Merrimack Valley gas disaster. As North Andover Fire Chief, I offer the following perspective.

On the evening of September 13, 2018, while out of the country, I was notified of the events as they were unfolding. I was able to make contact with my dispatch center and Town Manager Andrew Maylor, who updated me on the seriousness of this unprecedented event.

The North Andover Fire/Police dispatch center received over 700 calls in the first eight hours of the incident. The North Andover Fire Department responded to over 100 incidents during that time frame, which included 11 structure fires. All of these buildings had limited personnel on the scene fighting these fires. Many of these fires had single-engine companies with only two firefighters in the building. Our ladder truck and our ambulances were on scene of separate building fires with no water, using only fire extinguishers in order to search for any possible victims.

All of these fires would normally have had the entire North Andover Fire Department on site, with mutual aid companies assisting. Because this catastrophic event was happening simultaneously in Lawrence and Andover, neither community could provide us with assistance.

Tragically, this incident caused a death and numerous serious injuries in the City of Lawrence. North Andover did not experience any deaths or injuries to the public, but did have one firefighter injury. Undoubtedly, the professionalism, dedication and drive of all three communities' first responders prevented additional casualties.

In the first 30-hours, this incident was especially difficult for me as I was unable to be on site to assist my department and community. Although out of the country, I was getting calls from my community residents and businesses seeking information and direction. It was the longest, most harrowing and frustrating 30 hours of my 33-year career. I secured the first available flight home arriving late Friday evening. Early Saturday morning, I met with my exhausted command staff at the station, and then headed to the Regional Command Center in Lawrence to be fully briefed on the status.

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When I arrived I witnessed the magnitude of the response from all over Massachusetts, New Hampshire and Maine: I was able to truly understand the extent of the damage and intensity that this event caused. Since the Thursday afternoon of the castrastrophe, all three communities have been dealing with its repercussions. Many businesses remain unable to operate. Families are displaced. Roads and neighborhoods are torn up.

My department and I have worked countless hours with other town departments to bring our residents back to a semblance of normalcy, although we have a long road ahead.

Hopefully, this Congressional hearing will result in the necessary changes to ensure that no other community has to experience what the Merrimack Valley has endured, beginning on the afternoon of September 13, 2018.

Sincerely,

  
William A. McCarthy  
Fire Chief

Senator MARKEY. Also with us are Andover Police Chief Patrick Keefe, Lawrence Police Chief Roy Vasque, and North Andover Police Chief Charles Gray. We thank each and every one of you and all of the people who work under you who responded so valiantly on that first day and on all of the ensuing days. We are in your debt. We are in your debt every day but that was an especially trying time.

[Applause.]

Senator MARKEY. And we just want to—we are mindful that on that day and on every day, you run toward the flames as everyone else is running away from the flames and on a day like today, I think it's appreciated more than ever. So thank you.

And now Chief Mansfield speaking on behalf of all of the brave men and women who worked up in Merrimack Valley to respond to that crisis, we welcome your testimony.

**STATEMENT OF MICHAEL MANSFIELD, FIRE CHIEF,  
ANDOVER, MASSACHUSETTS**

Mr. MANSFIELD. Senator Markey, thank you very much. Senator Warren, Representative Tsongas, Representative Moulton.

I appreciate the opportunity to testify before you today representing those men and women of the Fire Service who responded to the catastrophic natural gas incident that occurred at approximately 4:18 on September 13, 2018. This event has been identified by some as the worst natural gas disaster to ever occur in the history of the United States, if not the world.

I must state that the time afforded to me to speak today will not even scratch the surface with regards to the specifics of this event or the challenges we have been confronted with and are still confronted with as we navigate through the recovery phase of this operation.

Senator MARKEY. Chief, could I ask you just to move the microphone in a little closer? OK. Beautiful.

Mr. MANSFIELD. Certainly.

Senator MARKEY. Thank you.

Mr. MANSFIELD. The events that led up to the disaster would have never occurred if there were technological stopgap measures on the pipeline in place by Columbia Gas. Those measures would have prevented what has been reported to be up to 74 pounds of pressure introduced into the gas line that took well over, well over 1 hour by Columbia Gas employees and/or subcontractors to shut down and purge.

To date, it remains incomprehensible that Columbia Gas, which is a subsidiary of a multibillion dollar conglomerate known as NiSource, is involved in an industry that is so dangerous to our communities, but had no ability to stop the flow of natural gas to its infrastructure that supplies the three communities of Lawrence, North Andover, and Andover.

The Fire Service in all three communities usually rely heavily upon one another to assist in the mitigation of any type of emergency incident when they occur. In this incident, all three fire departments found themselves competing for the same resources to assist in the emergency response which included a total of 141 fires, five building explosions, unfortunately one death, and I want

to express my sincere condolences to the Rondon family for your loss, three civilians seriously injured, and seven firefighter injuries.

9-1-1 calls for assistance at the initial point of the incident were overwhelmed, all available fire-rescue resources in the three affected communities within minutes, all off-duty fire-rescue personnel were requested to report back in to work, 150 of those off-duty firefighters answered the call from the three communities immediately.

The 9-1-1 telecommunications in the communities' Dispatch Centers were overwhelmed immediately by the deluge of calls from the affected residents. In the first eight hours after the initial natural gas line over-pressurization occurred, the Lawrence, North Andover, Andover and mutual aid assets responded to over 375 calls for assistance.

Firefighter safety was drastically minimized during the height of this incident as a result of the immediate lack of available resources. There are many instances on record where only one piece of apparatus with only three firefighters onboard responded to a full-blown building fire.

A normal initial response to these types of incidents would include up to three engines, an aerial ladder, command staff, and rescues, totaling upwards between 15 to 17, quite possibly 20 firefighters.

There were many reports of fire personnel passing by structure fires as they responded to a structure fire at an address they had been originally dispatched to. There are also many reports of firefighters exiting homes after extinguishing a fire and being met by frantic neighbors telling them that their home was also on fire.

Mutual aid was immediately requested response all affected communities, as well. That system was overwhelmed to a point that a request to the State of Massachusetts Emergency Management Agency was made to activate the statewide Fire Mobilization Plan which allowed for several task forces of personnel, engine and ladder companies and ambulances to respond to assist with the disaster.

The Fire Mobilization Plan brought in the following additional personnel and equipment assets from as far away as York, Maine, Nashua, New Hampshire, and communities as far away as Weston, Massachusetts. We had a total of 18 additional engine companies, six additional ladder companies, nine additional chief officers, 56 additional ambulances, and 80 additional fire suppression personnel per 12-hour operational period were involved.

These additional assets were rotated every 12 hours to ensure firefighter safety was paramount and those asset numbers were maintained until Monday, September 17, 2018.

Many Commonwealth of Massachusetts and Federal agencies assisted with the initial responses, investigations, mitigations, and are still operating as part of the recovery phase of the operation, such as the Massachusetts Department of Fire Services, the Fire Marshal's Office, Massachusetts Emergency Management Agency, the National Transportation Safety Board with their investigation, Federal Bureau of Investigations, and the Federal Emergency Management Agency, as well.

There are many lessons to be learned by this event. We within the Fire Service are willing to work with those at the state and Federal level to assist in the writing of additional legislation to further regulate the natural gas industry so that we may prevent anything to this magnitude to ever occur again in our country.

All the aforementioned agencies' assistance has been immeasurable and we greatly appreciate the seamless methodology of their approach and response to all of our requests to ensure that the citizens we serve maintained a high level of safety.

Their compassion and caring in an effort to meet all of the communities' needs and our citizens has been nothing short of astounding.

In closing, on behalf of Lawrence Fire Chief Brian Moriarty, North Andover Fire Chief William McCarthy, and myself, I would like to thank all of those who have assisted us throughout this ordeal to date and those who continue to assist us with the recovery process.

Most importantly, we would like to thank those who reside in our communities for their patience throughout this event and the outpouring of support we have received.

Thank you.

[The prepared statement of Mr. Mansfield follows:]

PREPARED STATEMENT OF MICHAEL B. MANSFIELD, FIRE CHIEF,  
ANDOVER FIRE RESCUE

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The events that led up to the disaster would have never occurred if there were technological stop gap measures on the pipeline in place by Columbia Gas. Those measurers would have prevented what has been reported to be up to seventy four (74) pounds of pressure introduced into the gas line that took well over one (1) hour by Columbia Gas employees and/or subcontractors to shut down.

To date, it remains incomprehensible that Columbia Gas which is a subsidiary of the multibillion dollar conglomerate known as NiSource is involved in an industry that is so dangerous to our communities, but had no ability to stop the flow of natural gas to its infrastructure that supplies the three communities of Lawrence, North Andover, and Andover.

The fire service in all three communities rely heavily upon usually assist one another in the mitigation of any type of emergency incident when they occur. With this incident all three fire departments found themselves competing for the same resources to assist in the emergency responses which included:

- 141 Fires
- 5 Building Explosions
- 1 Death
- 3 Civilians Seriously Injured
- 7 Firefighter injuries

911 calls for assistance at the initial point of the incident overwhelmed all available fire/rescue resources in the three affected communities within minutes. All off duty fire/rescue personnel were requested to report back into work. One hundred and fifty (150) off-duty firefighters from the three communities immediately answered the call.

The 911 Telecommunicators in the communities dispatch centers were also overwhelmed immediately by the deluge of calls from the affected residents. In the first eight hours after the initial natural gas line over pressurization occurred, the Lawrence, North Andover, Andover and mutual aid assets responded to over three hundred and seventy five (375) calls for assistance.

Firefighter safety was drastically minimized during the height of this incident as a result of the immediate lack of available resources. There are many instances on record where only one piece of apparatus with only three firefighters on board responded to a building fire. A normal initial response to these types of incidents would include three (3) engines, an aerial ladder and Command Staff totaling fifteen (15) to seventeen (17) firefighters. There were many reports of fire personnel passing by structure fires as they responded to a structure fire at an address they had been originally dispatched to.

There are also many reports of firefighters exiting homes after extinguishing a fire and being met by frantic neighbors that their home is on fire also.

Mutual aid was immediately requested to respond to all affected communities as well. That system was overwhelmed to a point that a request to the State of Massachusetts Emergency Management Agency was made to activate the statewide fire mobilization plan, which allowed for several task forces of personnel, engine and ladder companies and ambulances to respond to assist with the disaster. The fire mobilization plan brought in the following additional personnel and equipment assets from as far away as York, ME., Nashua, NH and communities as far away as Western Massachusetts:

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Senator MARKEY. Thank you, Chief, and—  
[Applause.]

Senator MARKEY.—again we're in your debt today but every day for what you do. So we thank you so much.

So let's begin with an overarching question and I would ask each of the witnesses to answer it.

Mayor Rivera, Ms. Messina, Chief Mansfield, what grade A through F would you give to Columbia Gas in their response on the night of the incident and why would you give them that grade?

Mayor RIVERA. On the night of the incident, I think that those who were close to this would give them an F. You know, having

been in the military, there's a term people talk about this, like somebody's in the weeds, even just not really present in the magnitude of the situation. We were pretty present but then looking for guidance and action from Columbia Gas, we just saw that they were in the weeds. They had no sense of this magnitude.

Senator MARKEY. Ms. Messina.

Ms. MESSINA. That night, the first thing that happened with us was that we had an alarm in our big 23-unit plaza and went down and thought nothing of it. It was in one of the restaurants and didn't think much of it until the fire truck passed us and was like what's going on here.

So I think, you know, it was a very difficult night. As far as the response from Columbia, I mean, it wasn't there. I didn't hear anything till the Governor came on late at night, but, you know, it was just a lot of panic. For me, it was a little bit reminiscent of I was in Boston on 9/11 and it felt a little bit like that where it was just what's going on, what do you mean? It didn't feel—like depending on where you were, it didn't feel like you were either in dire straits or what's going on? It was not a big deal until I walked into my house and smelled gas. That's when I started getting very unnerved.

Senator MARKEY. And what grade would you give them on the first day?

Ms. MESSINA. It wasn't there. So for me, it would be, you know, in the D range because we didn't hear anything. We didn't know what was going on, period.

Senator MARKEY. OK. Chief Mansfield, where were you when you were made aware that there was a gas-related emergency on September 13? When did they notify you on that day, and what grade would you give to Columbia Gas for their response?

Mr. MANSFIELD. I wasn't in contact with anybody from Columbia Gas for several hours after the event occurred. Due to the lack of communications, due to the lack of organization, due to the lack of their emergency planning, I would give them an F.

Senator MARKEY. Mayor Rivera, you said in your testimony that Columbia Gas engineers and top leadership were afraid themselves and lacked a clear path to deal with the disaster. Can you elaborate on that?

Mayor RIVERA. Yes, I mean, I guess I think we all were afraid. I think the problem is that when you're tasked, you make five times the amount of money a year I make or 50 times the amount of I make a year, you're going to be called to action, and I just felt like we couldn't even get maps from them and then every time somebody in the room would have a suggestion on how to mitigate or deal with the problem, every idea went on the map and went on the list, and I think in a situation like that, even though I'm the Mayor of the city, I'm not really sure that I'm fully equipped to understand the complexities of a gas line and how to mitigate that problem.

So I really do think that they were at a loss and they did send one person. They sent national support but they only sent one person on the ground that night.

Senator MARKEY. And when did they respond to you on that night, Columbia Gas?

Mayor RIVERA. I called them first. I got a call from my Chief and then I got a call and then we all got together and then we ended up at the site, but on my drive in, I had called the Columbia Gas Government Affairs person. I called their head engineer. I was breaking the news to them and so I was kind of surprised that I was doing that, considering that I already had made it all the way down the building that I was in in Boston and I had already been in traffic for a good time when I called them after getting a sense of what was going on and they still had not known that something was going on.

Senator MARKEY. And that's unbelievable that you're calling them to notify them of what's going on.

Mayor RIVERA. Yes.

Senator MARKEY. It's absolutely incredible and unacceptable.

Mayor RIVERA. I don't know how that happens and, frankly, the first time I talked to—that I saw somebody live was when they came up to me and said you have to shut the electricity off.

Senator MARKEY. OK. So I've already referenced this—

Mayor RIVERA. I'm sorry. Can I say, when they said you have to evacuate the city?

Senator MARKEY. Yes. So, again, we should talk about evacuation because the Columbia Gas Emergency Response Plan was woefully inadequate. They failed to imagine that there was a disaster of this scale that could occur and by doing so, they guaranteed that they would fail to execute a swift and effective response when a system-wide catastrophe did occur.

Mayor Rivera, in your testimony, you requested that there be a Customer Evacuation Plan created and revisited every year. What are some of the components that you would like to see in a Company Evacuation Plan?

Mayor RIVERA. Well, first of all, they have to have a notification system to make sure that every customer who they get a bill from every month gets notified in a way that's appropriate and in their language immediately that something's happening.

I think that their conversations with the 9-1-1 folks, with first responders has to be immediate, and I think that it has to delineate what you would do with those people once you get them out of their homes, how you plan to put them in a place that's safe, how you plan to support them in the long term and the short term, and then immediately figure out how to get them whole.

They stood up a claims process two or three days right after and I think everyone saw pictures of what that looked like in Lawrence. They just did it in Lawrence. They didn't even think about doing it that weekend in North Andover and Andover. It was a huge shortcoming. But that it really looked like a refugee center. There was no control. If it wasn't for the staff of the city, the towns, and the State Police to get people in an orderly fashion, to give them a sense of how to get their claims started, I'm pretty sure we would have had a riot down there.

Senator MARKEY. Yes. And I understand how utilities think. They don't like to anticipate an accident which can occur. So it's actually my law which requires the distribution of potassium iodide that could protect against thyroid cancer to everyone within a 10-mile radius around the Seabrook Nuclear Power Plant. You have

to anticipate that something wrong can go wrong and thyroid cancer is the single-most likely consequence if you're exposed.

So here, there was no plan and they just assumed nothing could go wrong.

So, Chief Mansfield, Columbia Gas is required to notify fire departments in the event of a Grade 1 gas leak which are severe and potentially dangerous. How quickly are you notified of these leaks by Columbia Gas and do you feel like the response from the company is sufficient to keep this area safe?

Mr. MANSFIELD. The short answer is no, we don't like their response to how they inform us of Grade 1 natural gas leaks. Several of us in the Merrimack Valley have been trying to get the ears of legislators in Columbia Gas. We've had open discussions with Columbia Gas leadership with regards to how we get notified when Grade 1 natural gas leaks occur and typically the response is they find that a Grade 1 leak occurs, they go ahead, they mitigate it after they find it, and then they notify the fire department and the law enforcement official as required by Massachusetts state law.

Senator MARKEY. So what you're saying is that the company identifies a serious potentially dangerous gas leak, they don't call the fire department, they don't call the police department, they fix it as best they can, then they call you the next day or 2 days later and say, oh, we had a big problem, but we didn't feel we had to call you, the fire department, the police department of the city, is that correct?

Mr. MANSFIELD. That is correct. The Grade 1 leak is the worst case scenario of a natural gas leak you can possibly have and it's in their infrastructure and what they do is they go out, they locate a leak through their surveying process. They'll mitigate the leak, repair it, and then the following day, we don't get a phone call, we get an e-mail from somebody in their Operations Center that states that they had a Grade 1 leak at a particular address and there's no need for emergency response.

Senator MARKEY. So the question of long-term relief is also important because these businesses, these families that are going to be impacted, and we've been pushing the Trump Administration, Small Business Administration, trying to make sure that there is emergency home heating assistance for everyone who needs it because we're never going to forget that these communities need help and we're going to be there every step of the way.

Mr. Mayor, Ms. Messina, Chief Mansfield, what grade A through F would you give Columbia Gas' work over the longer-term restoration process and why?

Ms. MESSINA. This is a double-edged sword. You know, when we first started in that first week, it was pretty bad because we just didn't have any information. As the plan started to get deployed, there were a lot of resources. I mean, as someone who's lived through this, I don't think any of us can really complain about the amount of people that have been put on the ground.

The biggest complaint I think that we would have is again, and I think this is an underlying issue, has been communication. You know, they were there when I called. I would be able to speak to them. They always had people that were available to talk to but trying to find the right person was difficult and being able to get

some straight answers, especially for the higher-end equipment, like HVAC units and things like that, that, you know, what do we do, you know. Do we have to replace them? Do we have to fix them because it's not like these HVAC units are sitting in a warehouse somewhere. They take months to have to order and take a lot longer to have put up.

So, I mean, I'd give them—clearly, I'd go from a D that I rated them in the beginning to a B+ because I really felt that I could get to somebody and get answers done and things were getting done faster, so that's the double-edged sword.

Senator MARKEY. Does anyone else want to give a grade to the long-term restoration?

Mayor RIVERA. I guess I'd say the idea of the different points in time, I think you've got to give them an A for fixing the pipe in the street. Everyone thought there was going to be mass disaster and there was going to be—you couldn't do it. I seen many people talking on TV about how it was undoable. So you've got to give them an A for that.

I think for the fixing the pipes and the appliances in the house, you know, I think that that's got to be a D to a C. We knew we needed an army of plumbers on September 14 and 15 and we were having discussions about plumbers in the first week of November. I'm not sure why Columbia Gas and Gilbane let that most important resource go unattended for so long, and I think they're still at a D with the customer support and making people whole. They still are failing to cut checks to people. They put big numbers on the checks that they're cutting to people. There are still people with fundamental issues unresolved, mainly because they just refuse to cut the check, and I'm telling them they should just cut this check now and not spend money on attorneys because it will turn into litigation, but I think all that type of grading goes to underscore, I think, something that I forgot to say in my comments and that's to mention the people that have been affected.

These people have been the most patient and understanding people. Literally the pipe froze on an RV and they asked this lady who clearly couldn't speak that much English anyway how you feel? She said, oh, it's Mother Nature, like this too shall pass.

It is a miracle that we don't have a riot. People have been so thankful for the crap they've had to put up with this company every day. It's a blessing on them. It's another reason why they should double their forces on the claims, pay these folks. You've put them through too much.

Senator MARKEY. So thank you. We're going to give them an A+ to the people from Merrimack Valley—

Mayor RIVERA. Amen.

Senator MARKEY.—for their response and to all of those—

[Applause.]

Senator MARKEY.—who helped them in their response. We thank you.

Let me recognize Senator Warren.

Senator WARREN. So thank you very much.

I just want to ask, did Mr. Bryant stay? Is he in here? How about Mr. Hamrock? Did anybody stay from Columbia Gas? Good. OK.

You represent the employees. How about representing the company? For what?

VOICE. Claims questions.

Senator WARREN. Good. Well, I'm glad you're here. I'll ask about claims.

So I wonder who is here to at least hear this and take this information back to Mr. Bryant and Mr. Hamrock. I want to ask actually about the process, about what's happened to the small businesses.

We've heard from the Mayor. We've heard from the Fire Chief. But I want to drill down just a little bit on small businesses.

Ms. Messina, I appreciate your being here today. Prior to the explosion, you had several businesses, as you testified, several properties in Andover. You were one of the many people whose businesses as well as your home was affected by this disaster.

Can I just start by asking you about some of the financial costs here? How much money did you lose for the weeks that you could not operate your businesses?

Ms. MESSINA. We're still in the process of trying to put that together. It didn't happen just for the month of October. This is something ongoing. As I said in my testimony, one of the things that we didn't recognize as we were looking at, hey, how come so and so hasn't been in? Well, we find out that so and so's been living in their home in Maine because it's too uncomfortable to be living here and dealing with this issue.

So, you know, we had planned a great month of October and I just barely broke last year's numbers, if that. We put everything on to it and, you know, in booming economy where we were seeing increases, it just kind of like came to a stop. I mean, those first 2 weeks, we lost about 30 percent of our business.

Senator WARREN. So what you're saying is one of the ways small businesses lost out obviously is if they were closed all together, but the second way is small businesses lost out because there were just a lot fewer people who came in to shop, even if your business was otherwise operational, is that right?

Ms. MESSINA. Correct. I mean, and to add to that was the difficulty of getting to the actual stores once the gas-ready plan was put into place. I mean, I think we all understood, like I said in my testimony, that 48 miles was a lot. I don't think we understood that there'd be areas that were just completely cutoff and you would have to be redirected and there were times you'd go around in circles and you'd just say that's it, I'm done, I'm going home.

Senator WARREN. OK. And this obviously was affecting your customers. So has Columbia Gas explained to you whether or not they're going to pay for your diminished business during this period of time?

Ms. MESSINA. Going through the claims process, we were given—we were asked to give information but most of this information was skewed toward mainly a restaurant or anybody that had a hospitality business because they're asking me about my food loss and stuff like that and it's like no, no, I'm hot goods.

So in fairness to them right now, we're in the process of still trying to make those parameters for that claim. So my claim is still open and I have yet to really even talk to somebody because once

I found out that I could self-mitigate my home, I dropped my business claim so I could get my house online.

Senator WARREN. So they haven't told you yet then if they're going to—they've not committed to reimburse you for the time that your business was less than it otherwise would have been if this disaster hadn't occurred?

Ms. MESSINA. Correct. But at the same time, I haven't given them the complete information that they've asked for.

Senator WARREN. OK. So let me ask you just a little bit about the information because I had some people come up during the break who have a small business that they have just launched and they said that they were asked for 3 years worth of financial information which they don't have because they're a beginning business.

So what happens to a business like that in the claims process?

Ms. MESSINA. Well, I mean, I would tell the claims process that they're going to have to, you know, sit down and talk to them on an individual case basis because you're right, there's plenty of—I mean, I have three years but what does that mean?

The other side of that equation is you can't compare the last three years to this year which is a very good economy year, you know. You've got consumers buying more. So it's going to have to be done on a case-by-case basis.

Senator WARREN. OK. And what I'm hearing you say is there's no commitment on the part of Columbia Gas. They have described it. This was the question. This is why I wanted to know whether or not we still had Mr. Bryant here and Mr. Hamrock. They both said that everyone who'd been injured would receive full compensation, and I'm just trying to—

Ms. MESSINA. Well, I have not.

Senator WARREN.—ask what that means?

Ms. MESSINA. I have not.

Senator WARREN. And are you confident that you will?

Ms. MESSINA. I'm pretty confident.

Senator WARREN. You're pretty confident.

Ms. MESSINA. And only because of the way things have been handled on the home end.

Senator WARREN. OK.

Ms. MESSINA. So I feel like I have some kind of idea as to how it will be.

Senator WARREN. And are you confident for small businesses that have just started, say businesses that don't have a long history? Are you confident they're going to be fully compensated for their losses?

Ms. MESSINA. I can't speak for that. I mean, like I said, I don't know how they're going to be able to structure what is fair for a new business that just started, you know. That would be difficult to try to monetize but that's going to be a task that they're going to need to do.

Senator WARREN. Mayor Rivera, did you want to weigh in on that?

Mayor RIVERA. I mean, I think at least the sense is that they're—because they're having the insurance company deal with these claims and not themselves and the money they have in the bank, they're making decisions based on what their attorney's al-

lowing them to make and it is incredibly difficult if you're an immigrant entrepreneur serving at least our city where it's a lot of folks who don't have the same resources that folks in Columbia Gas have to have 3 years of information.

All those things are true even more so and then the idea that they're going to have—the bodega owner's going to have the wherewithal to stay on top of these people for two years so they can get reimbursed for lost income but that's what they're going to have to do in order to be made whole.

So I think that they're better that they're going to get out of here, you know, with maybe 50 cents on the dollar what they really owe because the bureaucracy itself does not allow it.

We have a lady who has a laundry mat and she has dryers that are gas and she doesn't believe that they could fix her gas dryers but they fixed other laundry mats' dryers and they're all working. She doesn't feel that that's going to be effective for her. They're refusing to pay her the cost of new dryers. They think that that mitigation should be the case for everybody and, you know, the sense I get back from them is that they're trying to get over on Columbia Gas and I just keep telling them you're going to have to pay somebody. They're not. You're just making this lady's life more miserable. Just buy her the new dryers because, frankly, she doesn't believe that you're going to make it safe for her in her business.

So I think that that's happening a lot. So I have less sense of a hundred percent of what was lost will get put in place and like Town Manager said, and even if they do get back, some places have lost employees and clientele and that's a double whammy. In 6 months, I'm not sure they can recover and we may lose that business forever.

Senator WARREN. It's hard enough to run a small business but these folks are now being asked to take on two jobs, run a small business and run a claims prosecution against an insurance company that doesn't want to pay.

Mayor RIVERA. And they stop talking to the business owner if they mention an attorney. Then they'll only go through the attorney.

Senator WARREN. So, in other words, reaching out and getting help may not help under these circumstances.

Mayor RIVERA. Correct.

Senator WARREN. Can I ask you a couple more about this, and that is, cash flow for these small businesses? Has money been forthcoming? You know, it's one thing to say some day there will be a check coming, 3 months from now or 6 months from now or 10 months from now, but people have to meet payroll, people have to buy supplies, people have to buy food, thinking of the restaurant business. They need cash flow right now.

If the customers don't come in for the past month and a half because either the business was entirely shuttered or because they couldn't get there because the streets were torn up because everything's chaotic and no one comes, they're going to have depleted cash-flow which really puts the business at risk of collapsing.

Has money been made available for people under those circumstances?

Ms. MESSINA. My understanding is, is that, with some of the restaurant tenants, they have done things for.

Senator WARREN. Some, mm-hmm.

Ms. MESSINA. I have three restaurant tenants that were affected by this. One was able to get online within a week. The other two was anywhere between four and five to six weeks before they could get on and that's what—in my testimony, when I talked about you had to manage it on your own, it really came down to that because their needs were different than somebody like myself, the Wine Connection, which I could operate. I was just feeling loss of sales.

So they did receive some financial. As a landlord, there were some tenants that, you know, did not pay because they just didn't have revenue coming in and, you know, we're floating that and waiting to see what happens there. So, again, we're looking for that to be made whole.

Senator WARREN. Mayor Rivera, did you want to add to that?

Mayor RIVERA. Yes. Just there's a bit of a chicken-and-egg thing with that process, too. If they tell you that your claim check is imminent and that it's going to cover all the things, including cash flow, it's hard to go and find cash flow or maybe even apply to the Emergency Loan Program that we had.

So there was always this dueling thing of what check is going to hit for them first and then will Columbia Gas pay the subsequent issue after. So I think it has been confusing for small businesses on which way to go, mitigating on which heat source to use, do you stay on natural gas, do you go to electric, do you go to propane, because you're not sure which is going to hit first, the claim check or a loan check, and money that you got for lost, spoiled food and those things, that came pretty fast, but like you said, if you don't have food, as well.

Senator WARREN. Well, when you think about small businesses, I'll wrap this up, when you think about small businesses that live so close to the margin, I worry that something like this just wipes them out or puts them on such a downward path that they can't recover and it doesn't sound like the claims process is oriented toward how to get them stabilized and climbing again and then I worry about what the long-term implications are for Lawrence, for Andover, and for North Andover if they lose some number of their small businesses that try to keep an economic activity in the city and real economic engine for those areas.

So I thank you.

Senator MARKEY. Thank you, Senator Warren.

Congresswoman Tsongas.

Ms. TSONGAS. Thank you all, and thank you all for being here, and for your leadership and resolve through these very—these times that are certainly sorely testing you, and I am so sorry. I regret that the leadership from Columbia Gas and NiSource is not here to hear from you all just the dramatic shortcomings of their processes, at least in the near term.

I'm sure, Mayor Rivera, as you heard Mr. Hamrock say that the company had a well-oiled response plan in place in the event of a disaster that you heartily disagreed. Am I correct?

Mayor RIVERA. I would just like to see it. I'm not sure that anybody could put their hands on it. I was talking to Manager Maylor

and he looked for it. So if they can make it public, it'd be great to see the pre-thirteenth plan——

Ms. TSONGAS. Yes.

Mayor RIVERA.—because we haven't seen it. It sure felt like there wasn't one.

Ms. TSONGAS. This is just an off-the-top of my head, but when you finally talked to somebody at Columbia Gas or NiSource, who was it? At what level was it?

Mayor RIVERA. Well, I spoke to—I'm going to get the lady's last name wrong—Dana Argo. I first spoke to Mike Kane, who was the Government Relations guy, and then I called Dana Argo, who's the head engineer, but he didn't know what was going on.

Ms. TSONGAS. So when did Mr. Hamrock finally manage to get in touch with you?

Mayor RIVERA. Oh, he wasn't on the ground till like maybe after we had gotten people home and safe, right, week plus. Pablo Vegas who came, he was there the night of, came in from Ohio.

Ms. TSONGAS. Well, you're right when you say that the way in which the community responded is really quite a testament to the character of the City of Lawrence as well as Andover and North Andover.

I know when we all visited and made our way to the senior center to see the way in which people were coming forward to be sure people had a place to stay, food to eat in the near term while we started to sort of sort things out, I think was just again yet another remarkable testament to the character of the city. So I commend you for your leadership and for the remarkable people who live in this city as well as the Town of Andover and North Andover.

Obviously communication was one of the extraordinary shortcomings of their response plan and you really had to step in. The City of Lawrence had to step in and do that in ways just to be reassuring in such a frightening time.

Can you talk about how you did that and how you coordinated that with your response plan, let them know what was happening, when it was happening, at least especially in the near term?

Mayor RIVERA. You know, I think what became evident very fast was that people were looking for information. I know the town managers and I, we spent a lot of time communicating with people as it is through, you know, whether it be for a town meeting or for a city council event or for whatever we're doing. So we started to use those processes. We set up websites to put every single piece of information we could get on to that and then we just started to get to people and also monitoring social media.

I know a lot of people don't think that people live on social media but there are a lot of really important conversations happening on social media, a tactic that Columbia Gas came to late in this process, and I think that once we got all those things squared away, we started to just use that information, as much as we could get, to get to people.

It got to a point where we were getting more information on a daily basis than they were giving out, and I think MEMA, Kurt Schwartz from MEMA started to do a MEMA daily update. So I would just post that daily update. There's a lot of information it was hard to make heads or tails of, but we were getting this pretty

daily PowerPoint presentation and almost simultaneously all three of us started to ask them to allow us to publish this and we went days—I think we went a week and a half, maybe 10 days before we just said we’re going to publish it regardless of whether they let us and so that started to go out and it has the key indicators about who’s getting lit, where’s the information going, and if you go to the websites now, all of our websites has every single daily update on there.

And then, you know, I think the Governor’s staff pushed them through Joe Albanese to again be more transparent. They had not done one direct mail piece to their customers in the whole time that we were there. We were pushing them to do that and they finally did the newsletter. I think they’re into their fourth newsletter of this event, which has become a very important tool.

Ms. TSONGAS. Have they done a direct mail piece yet?

Mayor RIVERA. That was it. They’re doing a newsletter. I think we got four newsletters in the can. They’re supposed to do weekly ones going forward but that was a battle, too. They didn’t want—again, I think in this process of trying to cover, trying to mitigate their damages, they created a situation where everything gets, you know, attorney’d to death and meanwhile people, you know, who need real answers about claims, people who need real answers about their housing stagnate, takes 2 days to do something and that means 2 days more in an RV or two days more without your business being open, and they scrub anything of any real meaning so that they’re not really providing any information.

Ms. TSONGAS. At this point, what are the costs that the City has absorbed in order to respond to this?

Mayor RIVERA. Well, we have very smart public safety folks and they started charging the Columbia Gas directly for every dollar we spend on public safety. So we’ve been made whole on that front, but I think that that number’s still yet to be understood. We each have areas where we put RVs on that need to be made whole again. We each have staff that have taken time away from their normal processes, focused solely on this, and also people who are affected who’ve been only focused on doing this, and so the roads, you know, have to spend much time in the affected area to see the immense disaster and mess they have made of our roads. Thank God they did it because they got the gas to us fast but there are some roads that literally were paved three months ago with just a fresh coat of paving on it and people have been waiting 30 years for that road to get paved and so I think that the paving of the roads are going to be the first real example of their hundred percent making the municipalities whole but along with the staff time and effort and energy and again I think that the amount of confusion they’ve created in our world is another reason why they just can’t be allowed to keep doing business.

They’ve just not earned that privilege and that to keep doing business in our country after the death of a young boy and after the immense chaos they created in this community. There are other people that can do that work.

Ms. TSONGAS. Well, I encourage you, all of you, all the communities to keep close tabs on what your costs have been so that we

can make sure Columbia Gas and NiSource assume responsibility for those, as well.

I yield back.

Senator MARKEY. Thank you.

Mayor RIVERA. I will say Manager Maylor's keeping the spreadsheet and I scream loud. He's the good-looking one. He's the smart one. That's a compliment.

Senator MARKEY. Congressman Moulton.

Mr. MOULTON. Thank you, Senator.

Mayor Rivera, a major complaint we have heard during our office hours in the District is that Columbia Gas failed to provide native language speakers in dealing with customers' concerns and issues.

As one of our first community leaders to address our Spanish-speaking constituents, can you elaborate on that and explain to everybody some of the challenges that many of your residents have faced?

Mayor RIVERA. I mean, I think it's when you think about the impact to everyone that's involved, the impact to folks who are new to our country, who are already facing tons of challenges, and even some people who are not new to our country who are facing challenges around poverty, I think this has shown the weaknesses around our infrastructure and the weaknesses and our inability for communities like ours to defend ourselves against such a big disaster.

It goes without saying that if we weren't talking in Spanish, they weren't listening because they don't speak English and so it was important for us to translate things. They stood up a process to hire a ton of translators. I think immediately, you know, the solution is can we hire enough full-time translators, and they were having a hard time doing that because people who could translate have full-time jobs and so they initially didn't want to do part-time translators and they got themselves into a situation where they didn't have enough translators.

I think later on, they backed off of that and, you know, you could work nights and weekends with the translation process, but again in the sense of trying to make it easy for themselves, not really thinking about the impact to the customer.

And I think that right away, they took our suggestions about making things bilingual, but I think they fell down on that with the robocalls and I think it wasn't till a couple weeks ago that they put a Spanish TV commercial that talks to those issues.

You know, they said they had 30 business-focused claims agents but only had really two people who speak Spanish but they would put a translator with them, even though half of the businesses affected were in the city of Lawrence and I would say a good half of those needed English and Spanish translation.

Mr. MOULTON. Thank you, Mayor.

Ms. Messina, I just want to ask about your experience and your colleagues in the small business industry's experience with the Small Business Administration.

Did you seek a disaster relief loan from the SBA?

Ms. MESSINA. I'm sorry. I didn't hear the question again. With the SBA?

Mr. MOULTON. Did you seek a disaster relief loan from the Small Business Administration?

Ms. MESSINA. I did not.

Mr. MOULTON. Are you familiar with people who have sought that resource?

Ms. MESSINA. I'm not familiar. The only one that I'm familiar with is that one of the tenants did. I think they're still in the process of trying to get something. It's my understanding there was some kind of—I don't know if it was through the SBA, that there was some way to get some interest-free, up to \$50,000 was available for funding like cash flow and things like that.

So, again, the hard part for me was trying to deal with all these different types of tenants with all different issues. Some had more needs than others and we were trying to find out how to best keep them operating while they were either down or just even like earlier said that their businesses were just off.

Mr. MOULTON. So is it fair to say that you're basically unaware of what the SBA offers here?

Ms. MESSINA. Yes, that would be a fair statement.

Mr. MOULTON. OK. Clearly, we need to do a better job of making those resources available.

Chief Mansfield, thank you again for your response to the effort.

What are some lessons that you would like to just briefly share with us that you've learned that will affect your response and your advice to others going forward?

Mr. MANSFIELD. I think the lack of communications that was not there between Columbia Gas and the emergency response personnel. I think they need to do a better job at getting the word out and getting communications to the first responders so that they know exactly what it is they're dealing with.

We shouldn't have to wait four-five-six hours to talk to somebody from Columbia Gas to find out exactly what's going on with their pipeline infrastructure. We had people going out immediately responding to these natural gas calls, fires, explosions, and had really no idea, hard factual data that was indicating to us exactly what was going on with that infrastructure.

I think there just needs to be—there could certainly be some tightening up of legislation, as I stated earlier, at the local level. I think we could probably tighten up within the Commonwealth itself. Bill 4164, which basically outlines how fire departments and law enforcement officials are notified, when they're notified about Grade 1 leaks, and I think there could be certainly from what we've all experienced here, could certainly be some legislation tightened up at the Federal level, too, to make these people accountable for what they're doing so that we don't have the tragedies that we experienced in the Merrimack Valley.

Mr. MOULTON. Thank you.

Senator MARKEY. Thank you.

For the information of the members and the witnesses, I'm going to ask unanimous consent that the hearing record remain open two weeks. Without objection, so ordered.

And I would also ask unanimous consent to submit into the record testimony that was shared with the Committee by commu-

nity members hurt by this disaster. I think it's important for their voices to be in the congressional record.

[The information referred to follows:]

STATEMENTS FROM COMMUNITY MEMBERS

*Rosario Germinudy from Lawrence:* I felt desperate, hopeless and depressed when couldn't go back home coming back from work. Finding a place to stay with 5 kids and a dog was a challenge for me and my husband. Thanks to really good friends we kept the family together. But can't take the scenario I saw and experienced when had to go back home for some clothes the next day, seeing that my town turned into a ghost town was terrible; once I made it back to the north side all I wanted to do was cry and had that feeling of deception and for some reason kept on asking God why and why us. I know this will be in our lives for ever and will be remembered as a disaster, feel sorry for the lost of the boy that died and for others injured. What most of us lost can be replaced but a life can never be. Then the struggles that we are still going through is never heard off, happening in the USA, but we will stand because what does not kill us just makes us STRONGERS and that is what we are and will always be, strong people rising back a strong city . . . Lawrence strong. Together we are more and together we can overcome anything. I want to thanks Columbia Gas for trying their best even when it was after something that big happened once it did nothing else but to rescue and respond was to be done and that they have, the support my family have received from them and the city and mayor Dan Rivera have been priceless for me and my family. Hope everyone gets their services back and continue with their lives. Happy holidays for everyone.

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*Monica Morell from Andover:* We need to deep talk. I am still displaced. Limited network access. Please contact me via e-mail to set up a time to talk, or call me directly.

Monica Morell Andover

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*Nathan Ray from North Andover:* I was not directly affected by this event. Friends stayed at my house for a few nights as they were looking for assistance. I have volunteered and promoted effected businesses and Families as much as possible. Unfortunately, I have witnessed a high level of fraud, mismanagement, and lack of accountability. I will not use names in this brief note. There is a massive amount of mismanagement and fraud. I know of one group that invoices \$80k per week, just to install a dozen ovens. That is not the cost of the ovens, just the installation and service. 12 OVENS!! There is no organization in any part of this effort. The winners are the divorced or single guys out of state that earn 10x what they would normally earn. Meanwhile elderly family's still do not have a place to sleep and are suffering badly. The rest of the community is stuck sitting in traffic all day watching all of these people doing nothing. Contractors and family's have confirmed all of this information. Please feel free to contact me to discuss in more details.

Best regards,  
Nathan Ray  
617-863-0062  
nate.ray@gmail.com

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*Leo Lafond from North Andover:* While we are being compensated for money spent to replace alliances etc I have not heard anyone talk about compensation for all the time we have spent on working through the recovery process. The number o hours spent on the phone with Columbia Gas, the claims adjusters, the assessment teams, added travel time etc is enormous. I self mitigated and going out shopping for appliances and contacting and working with contractors was a part time job This is time take away from family and friends that we won't get back. My rough estimate is that it is somewhere between 40 and 59 hours at this pint and I am still not done. Once heat is on for everyone I really hope that we will all be compensated for this. This does not take into account the emotional stress that has been placed on all of us. I was home when my house filled with gas. Thank god I wad luckier than many of my neighbors. They did to do more for us than just pay for appliances. etc.

*Max Lopez from Lawrence:* I live in 8 Halsey st Lawrence. I originally had a 99.9 energy efficient boiler which meant CG had to replace this boiler with something comparable. They did so but did not provide me a receipt or information on who installed the boiler. It has been a pain for me to register the unity under warranty and it has also been a pain to received a rebate associated by this new unit. Ultimately I did not ask to have my boiler replaced, instead this happened because of the negligence of CG.

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*Javier Caban from Andover:* We purchased the house in April 15, 2017. We went thru the whole year thru reconstruction replacing Gas appliances. Right when the project finalize in early May 2018, where the kitchen and new gas Range, gas dryer and gas fire places were completely done to start enjoying the new house, the " catastrophe" happens . . . right now I am living with nor gas dryer, and no gas stove, eating out most of the time . . . Impossible to find a plumber to fix the gas line Columbia Gas remove to provide gas to the stove, so we can stop eating out. I understand that this is nothing compared to what other people are going thru . . . but it is my story and it has an impact on us after spending 12 months going thru construction and living surrounded by the stress that reconstructions creates and the cost involved.

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*Christopher McCarthy from Andover:* On September 13th, around 4:50pm our CO<sub>2</sub> detector and fire detectors started going off. My two children (age 2 and 8), my girlfriend and I were all home. We discovered smoke coming from our basement and quickly got our children and animals out of the house. We called 911 once we were safely outside—it took over 4 minutes to get someone on the phone, continually got a busy signal. Once the fire department showed up they quickly put out the fire in our basement and told our surrounding neighbors to not go into their homes. They left shortly after without further instruction on what we should do (at this point it was around 5pm and you could hear sirens going off everywhere).

Luckily we had family in Boston we could spend the night with so we decided to head there. We didn't realize how bad this situation was or how lucky we were to escape our house without getting hurt till we heard on the radio what was going on. It was a very traumatizing experience for my 8 year old son who is still scared of loud noises.

Since September 13th, my family and I have not been able to return to our home to live there. We have been bounced around from 9 different hotels which in itself has been very difficult with two small children, two dogs, and a cat. The hotels that they have put us up in are covered by them except for a deposit. This deposit has ranged from \$30-\$500. . . Now tell me how we can continue to afford this when we are constantly being moved from place to place? These deposits sometimes take up till 10 days to get back. It has definitely been a struggle.

My son has had a hard time adjusting to school life again because of us constantly moving. Luckily our school has an amazing support system and he is getting the help he needs.

Columbia Gas has done little to help us with every day expenses we had to deal with because of being displaced. They had made promises of a debit card to help with food but never followed through. We have gotten very little answers on what is next for us. Every time we talk with someone or go into one of the centers they had set up we are met with different answers. They seem to put on a good front to the public but those going through this ordeal know all too well it's all a facade. We have spent so much money being displaced from this disaster with no relief in sight. We just want them to be held accountable for everything they have caused.

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*Eric Simili from North Andover:* This is a letter I previously sent to my Reps:  
Dear Representative,

I am a North Andover resident. As you know, our town went through a major disaster recently, along with Lawrence and Andover. Due to an unexplained incident having to do with natural gas pressure running through our streets and homes, at least 7 homes that I know of in my town either exploded or caught fire. I witnessed three of the fires, two on Pleasant St. and one on Phillips Ct.

I was at work at the local pizza shop down the street from my home, as a delivery driver, when suddenly the ovens stopped working. We realized there was no gas. As I was on hold with Columbia gas, trying to figure out what was going on, I realized there were firetrucks going back and forth everywhere. The owner of the store

next to us told me he heard there was an accident downtown. I turned on my scanner app to see if I could hear anything and heard them talking about two fires across the street from each other about two blocks from me. I looked over and saw the smoke. It didn't make sense, how was it possible that two houses across the street from each other were on fire? Then I heard them calling in a fire from Phillips Ct, down the street. I had already hung up with Columbia by now, realizing this was something big. I knew this had something to do with gas and houses on fire. I decided to take a drive down the road to Phillips Ct, where a neighbor of the house on fire was asking others if they smelled gas. I asked her if she knew what was happening. She said the firemen were telling people to shut off their gas. I headed back to the restaurant.

At this point, firetrucks and sirens were being heard all over. I saw three helicopters flying over town. I started to imagine the worst. Maybe this was an act of terrorism.

Maybe somebody had sabotaged the gas lines? Or a foreign government hacked into the gas company's computers? Who knows? I was pretty unnerved at this point. When I saw on tv that a house had blown up, I thought, wow, what if that was the restaurant? I felt my heart beating faster as I thought about it. I thought about my house, but we don't have a gas hookup, so I wasn't too concerned.

We had to close the restaurant at this point. After cleaning up, I stayed around a while talking with a co-worker and watching the news on my phone. There was traffic backing up as far as I could see. Thankfully I only live about a mile from work, so I went home. I joined neighbors who were out talking about what's going on for a while. The feeling I got reminded me a little of the days after 9/11. It was nowhere near that bad, but we still had the same uneasy feeling you get when something like this happens.

The reason I am telling you all this is because I am not happy with the way this is being handled. Columbia Gas has not shown up to press briefings. They don't seem like they are taking it seriously. A person has died and others are seriously injured. There were many people without electricity for days. Half of Lawrence was forced out of their homes. Highway exits are closed. And we still don't know when the gas is going to be turned back on. I heard maybe 3-4 weeks.

I have missed work and am losing money because of this. I don't know how much longer I'll be able to pay bills. I doubt my boss will pay me anything for missed work. Most of my income is from tips anyway.

I want this to be investigated thoroughly to make sure it doesn't happen again. If the pipes are old and rusty, we need to replace them. If we need more inspectors and enforcement, we need to make these utility companies pay for it. Massachusetts DPU needs to take this seriously. Joseph Hamrock, the CEO of NiSource, the parent company of Columbia Gas, earned \$5.4 million last year, or 51 times as much as the \$105,206 median salary of NiSource employees, according to the AFL-CIO. I'm lucky if I earn \$35,000 a year!

Respectfully,  
Eric Simili  
10 Walker Rd Unit 8  
North Andover, MA 01845

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*Kerin Miller from Andover:* Our family of four was home on September 13th when my husband received an alert on his cell phone that we needed to evacuate the house immediately. I was five months pregnant and about to head to the grocery store; my husband happened to be home sick that day with a cold. I told him it was a hoax; if there was an emergency why would we need to leave? Wouldn't they tell us to stay inside? We called 911 to confirm. "Get out immediately," she said. "What about pets?" I asked. "Take them if you can."

We put our seven year old daughter and five year old son into the car, and we put our cat in the back in a carrier. We had nothing else with us but our phones and our wallets. As we exited our neighborhood in the Shawsheen area of Andover, people were standing on their lawns, dumbfounded expressions on their faces. To me, this was the most terrifying and traumatizing part of the Merrimack Valley Gas Explosions: the fifteen minutes or so when we had no idea what was happening. This all happened two days after the anniversary of Sept 11th. Fresh on my mind were stories about 9/11, so when I was told to evacuate, and that it had something to do with gas, my first thought was that there was some kind of terror attack involving utilities.

There we were, our entire family in the car, sirens sounding all around, with no idea what was happening or which direction was safe. Emergency vehicles seemed to be headed north, and my husband was getting some preliminary news on his

phone, so when I asked him what direction to drive in he said “away from Lawrence.” We started driving on route 133 with no plan other than getting out of the area, the cat meowing in the back our SVU, all the while keeping our voices unnaturally cheerful for our children. “What’s going to happen to our house?” my daughter asked. We explained that everything in our home could be replaced, but people and pets could not be, so the important thing was that we were all together and safe.

I am grateful for a few lucky breaks we got on that day: my husband should have been at work, and as surreal and alarming as it was to get two kids and a pet into a car and drive off not knowing what was happening to our town and our home, it would have been much more difficult if I was alone. I am also grateful that I was feeling ill from morning sickness and put off running errands—I would have been closer to the fires, and away from our children. I am also grateful that our daughter had just arrived home from school, so we did not have the added worry of being apart from her.

We drove to Tewksbury and pulled into a Holiday Inn. We were lucky that it was a pet-friendly hotel and that a suite was available—later that night, I sat in the lobby and watched family after family get turned away.

That afternoon and evening we watched the footage on the news and learned about the death of the 18 year old man in Lawrence and about the Lawrence police officer whose home sat burning because there were so many homes on fire at once. We saw aerial views of our town completely in the dark, as electricity had been cut to the entire area to avoid more fires starting. I used the word “surreal” again and again. That morning I had thought about the families in North Carolina evacuating for the hurricane, never imagining I we would be evacuating that afternoon, or that the Merrimack Valley would be all over the news, locally, nationally, and even internationally.

Our two days at the hotel were spent trying to entertain our children and checking when we could return back to our home. My husband was allowed to return briefly and gather a few of our belongings, and he went back again to let a crew of gas workers and police in to check the house at night by flashlights. As we waited for word that we could return for good, we got some unrelated news that we had been anxiously waiting for: we were finally “clear to close” on the home in Andover we had been working for months to purchase. We had been living in town for almost five years, renting the bottom floor of a duplex, and we had been thrilled to find a 4 bedroom fixer upper we could afford in the same school district our daughter had been attending since Kindergarten. We had spent months completing paperwork and weeks waiting, and now, finally, we got the news we thought we would never hear: we were going to be first-time homeowners, in the town we had grown to love but weren’t sure we could ever hope to afford.

Instead of feeling joyful, however, we looked at the map of explosions. Our new home was even closer to many of the fires than our rental. Both were in the “affected zone” that would have no gas for weeks.

Within minutes of hearing that we were going to be homeowners, we also heard that we could return to our rental home. We took the last hot showers we would have for awhile and headed back to the affected area.

It was much, much worse for others: a life was lost. Homes burnt down. Pets disappeared. We had been inconvenienced, but we were okay.

I also thought that it was basically over; however, after the immediate impact of the gas explosions, we entered a much longer phase. It’s one thing to not have hot water for a few days—but not having it for weeks presents some very real challenges. In our rental, we had an electric stove, so in that way we’re lucky—we could cook as usual. Bathing was another story. We boiled water on the stove and mixed it with cold water in the bathtub to wash our children. We tried to take cold showers—but “cold” isn’t really the right word: the water was freezing. My husband could have taken hot showers at his gym, but his gym was also affected, so we took the advice of other families on facebook and invested in a “camping shower” from Amazon, a popular choice for those of us without hot water. (If you have never experienced a camping shower: A battery operated pump with a shower head on the other end, stuck into the bucket of hot water, gives you about 3 minutes of showering time; I soon learned to dread the sound of the pump running out of water at the bottom of the bucket.) I have long hair that was never going to get clean in the time or water pressure a camping shower provided, but I could also shower at Merrimack College, where I teach. A couple evenings a week, I left my house at 11 pm, drove to Merrimack, and obviously pregnant, surrounded by young people, went to the college gym to shower. It was a huge pain—something that took 20 minutes and relaxed me before bed now took an hour round-trip and involved flip flops, strange looks, walks back to my car with wet hair, and flashing my work ID (one night I forgot my wallet and the Merrimack students working the front desk, per-

haps not realizing the state I was living in—a divide those of us who were “affected” began to find ourselves looking at the “non affected” across from more and more—sent me back home to get it rather than break the rules of gym admittance). I was lucky, though: the showers were clean and private and the locker rooms were empty. My friends and neighbors were showering at the much more crowded YMCA or at the temporary showers set up at Pumps Pond. My husband made due with a camp shower for weeks.

All during this time we were supposed to be packing, as we were closing on our new home, two miles away. Finally, everything I had wanted was falling into place: but now, I found myself not wanting to move. Our new house had far more gas appliances than our rental: on top of no hot water, we would have no way to dry clothes and no stove to cook or even boil water. Also, there was the question of whether the sale would even go through. Can you buy a house with no gas? Was the house still going to be assessed at the same value? What about the appliances? What if we still had no gas by winter? How would we pay to stay somewhere else?

Thankfully our real estate lawyer was also my cousin’s husband, and he was extremely concerned for us; much to the annoyance of our seller, he made sure there were provisions before we closed so that funds would be available should Columbia Gas not pay for repairs to the home, or if the home became unlivable during the winter months. We could not immediately move as planned, however, because we had done so little packing while we were dealing with being evacuated and dealing with life post-evacuation. We also had to spend hours of our time at the empty new house waiting for teams of gas workers to arrive. My husband left his number on the doors, and they would call him at work, and if I was home, I would come by immediately, usually with our four year old in tow. In addition to the stresses of moving and new homeownership (getting floors redone, finding out the dishwasher didn’t work), we were dealing with our appliances at the new house being assessed and condemned. We had to buy new electric appliances—dryer and water heater—so we could at least wash ourselves and our clothes post-move, and then we had to get Columbia Gas to reimburse us for the cost of the appliances and installation. It would have been wonderful to get that reimbursement in the form of a check, but it came instead on a debit card, making it difficult to get money into our checking account to pay bills, and requiring my husband and I to pass a card with thousands of dollars back and forth for every errand (“Do you have the card?” “No. Do you have the card?”). We learned the hard way that there were some essentials we couldn’t buy with the debit card at all, including gas. And, again, we were the lucky ones, since we happened to have money on hand to pay up front—an unusual situation for us, and one that only happened because we were in the process of buying a home.

We did a lot of leg work to get a functioning dryer and hot water heater for our new home, but we decided to go through Columbia Gas to replace the gas stove in our new house, and, eventually, the boiler, too (it took a few weeks to get word that all boilers had to be replaced). In the meantime, a local charity gave us a hotplate to cook on.

Our new home sits on the Andover/Lawrence town line. Both of these communities turned into a maze of road construction at all hours of the day and night. It took at least 20 minutes to drive a couple of miles in any direction. Crews from all over the country descended on the area; day after day, groups of 9 or 10 workers, mostly men but some women, came in and out of our home, and we met people from all over the country. My husband is from the South, and we lived together in Atlanta for many years, so we enjoyed connecting with Southerners and hearing the stories of others, too, from as far away as Seattle.

We were optimistic at this time. The ball seemed to be rolling. The neighborhood was a mess of trenches and trucks; our own yard was dug up, the meter moved outside—but we were assured, almost daily, that our stove and boiler would be replaced soon, and our gas would be turned on after that. One Sunday afternoon, a crew from Chicago came by and said we were on the list for that week. Then, the next day, everything stopped. The roads were quiet. No crews showed up. A press conference was held later that week, and we learned that a new plan was being put in place, putting the priority on getting boilers fixed or replaced, and moving back the November 17th deadline to have all work completed.

We started to hear the term “self mitigate,” and a few neighbors got their gas turned on after having bypassed Columbia Gas and getting appliances through a contractor. My husband ran this option by our adjuster who said that Columbia would now pay for self mitigation up-front, and that it would likely be faster than waiting. We contacted a contractor and began the process of waiting for assessments and funds (always on the debit card, complicating every transaction).

This past Saturday, as I left the house to bring my daughter to ballet class, a gas worker approached me in my driveway. “Are you leaving?” she asked. “We’re ready to get your boiler hooked up. We have a team on the way.” Thrilled, I explained my husband was home and left. He texted me a half hour later. We couldn’t get a boiler installed because we had started using an outside contractor—even though no work had been done yet.

Within days, the temperature at night dropped into the teens. All four of us slept in one bed to stay warm. My husband was up and down most of the night, nervous about the pipes freezing and checking on the space heaters we didn’t want to run while we slept but didn’t want to turn off, either. Over and over he kept saying “I shouldn’t have let them leave. I should have made them put the boiler in. We could have had heat.”

It snowed last night. As of today, November 16th, we are still without gas and still without heat. The contractor we were working with told us it would be after Thanksgiving before they could get to us, even after my husband explained that we have small children and I am now seven months pregnant. We canceled our contract with them, are now waiting for a refund of our deposit, and have hired a plumber to install a boiler and gas stove on Saturday. Even if this does work out, I do not know when Columbia Gas will actually turn our gas on. Our facebook page of affected Andover residents has more and more people posting pictures of blue stove flames accompanied by those amazing three words: WE’VE BEEN LIT! Temperatures are dropping again after this weekend, and we hope by next week we are able to say the same. We have been contacted about finding alternate housing, but where would that housing be? My husband commutes to Boston; our kids have to be at school; I work at Merrimack College and teach nights at Bunker Hill—all easily accessible from here. We would have to pack, figure out a plan for our cat if we couldn’t take her with us, and winterize our home. Then we would have to share one room with two small children, who would have to adjust to sleeping in a new environment. The inconvenience of staying in a hotel seems about equal to the inconvenience of being cold and cooking on a hot plate.

What we want is normalcy. A friend who lives in Methuen said to me “I’m just so tired of hearing people who don’t have gas complain about it. There are so many worse things that can happen.” Yes—that’s true, and I can see why she feels that way. I’m tired of complaining, too. I’m tired of talking about all of this. I’m tired of people coming in and out of my home without warning. What no one seems to understand is that all the stresses of life have continued, and every stress is compounded by the additional stress of dealing with Columbia Gas—a process that easily feels like a part time job. My husband used up all his time off in the initial stages—the evacuation, and our move—so most of this stress has fallen on me in the late stages of my pregnancy. Imagine those families going through even more than we are: caring for the elderly or disabled, trying to find a job, going through chemotherapy, having a newborn to care for—all the myriad ways that life can be difficult and trying—never feeling like their home the safe haven it’s supposed to be.

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*Maureen Elliot from Andover:* My husband and myself have owned a home in Shawsheen, Andover, for over 30 years. We never had water issues in our basement other than damp corners in our fieldstone foundation during this time. After Columbia Gas dug up our front yard we have had major flooding issues in our basement. Columbia Gas claims it is ground water. Serve Pro came and said it was obvious that we never had water issues before this. Columbia Gas does not respond. It is going to cost us approximately \$10,000 to get this resolved. My husband has heart disease and is up every several hours turning on a sump pump we purchased at Home Depot. We own another home in North Andover and this is also in the affected area. Columbia Gas needs to step up and do the right thing. Please call me at 508 846 3301

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*Susan Haltmaier from North Andover:* I received my first assessment visit on 9/29/18 because I spoke to a team I saw in the street behind my house on Friday, 9/28/18. I had been scheduled for that Friday but no one called or came. The daily briefings initially suggested that Columbia Gas would repair any leaks that had been found during the assessments. One was found in my house on 9/29/18 but no one from Columbia Gas ever came to repair it, as promised. My yard was dug up for a new line from the street and my bushes were dug up to connect the new line to the house. The bushes were put back in a crooked manner, with roots showing, and using sand rather than soil. I had to track down a crew working down the

street to come back and correct the plantings. In mid-October, I arranged for third party deliveries and installation of a stove, dryer, water heater, and furnace. But Columbia Gas was still insisting on making repairs to any leaks, regardless of who was installing the new appliances. The rules changed several times between 10/10, when I arranged for my new appliances and received prompt reimbursement from Columbia Gas, and 11/1, when Columbia Gas changed the rules and stated that third parties installers would be responsible for repairing leaks. I had not received an estimate for repairing the leak from the third party installer of my furnace. A stand-off ensued where Columbia Gas refused to repair the leak and my installer said it was not in their estimate. One Columbia Gas representative threatened me with “You made a claim, you took our money, repairing the leak is no longer our problem. It is your problem.” After a series of phone calls that escalated up the ladder, a very competent man came on 11/5/18 to repair the leak. Several other connections were deemed to require replacement and a crew came in and completed them. Another man came on 11/8 to relight my existing furnace under the latest directive from Columbia Gas and he said I needed a “fan in a can” to provide more combustion air in my basement to meet the current code. He said that the installer would know to include a “fan in a can” when he came with the new furnace on 11/12. But my third party installer did not install such a fan. Now I am in the situation of trying to get the installer to come back or Columbia Gas to come and put in the fan. It is exhausting to be caught in the middle, to receive a variety of advice, suggestions, directives, and recriminations. It is not that the work did not get done eventually, but that each affected homeowner has to be vigilant, alert, and aware. The uncertainty is enervating. It affects trying to do one’s paid job and take care of the people around you. Fortunately, I had many friends and family members who could take me in and spend the day at my house waiting for assessments, deliveries, repairs, etc. But not everyone was so fortunate.

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*Nora Pelt from Andover:* Our story is no different than most affected by the Columbia Gas fires of September 13th, 2018. It is the story of a scary, chaotic night on September 13th followed by 60 days of being scared to leave the house because you have no word of when crews might show up at your door, of waking up early to turn on space heaters to try and warm the house before the rest of the family awakes, of watching Columbia Gas daily put a positive spin on their work while pulling my hair out because not once did their updates reflect the nightmare that everyone I knew was going through. It is the story of all my husband’s and my free time spent combing the Columbia Gas updates to see how they daily changes the rules, of (unsuccessfully) trying to find reputable plumbers and electricians that were available before mid-December, of boiling water in an electric kettle literally for hours to get everyone showered at the end of the day, of researching boiler types/like-for-like appliances/venting systems because it was impossible to trust Columbia Gas was making decisions in our best interest. It is the story of Columbia Gas playing “yes, you can” and “no, you can’t” for over two months. We have our home and our lives but every single aspect of our days was changed. I was able to recognize people in the affected area by the sound of their voices. Their shaky, quiet voices unable to make simple decisions betrayed their smiles. I recognize it because mine is the same.

I was about to pick up my son from soccer practice when I told my husband I smelled gas in the house. He took note and we went on with our day. Five minutes later, as I was pulling out of the driveway, I received the call to turn off the gas and evacuate. I spent the next three hours trying to get my three boys home from various after school activities—that were normally 10 minutes away—while my husband ran from house to house turning off neighbor’s gas and holding babies while moms ran inside for diapers. We were overwhelmed watching a staging area at the end of our street, the firetrucks from Chelsea, Burlington, Lynn, Methuen, Revere, Dracut and on and on flew off in every direction at screaming pace. Usually, they all go in the same direction. It was so strange to see them scatter. It was wonderful to know so many had come to help and horrifying to realize that while I may have been trying to convince myself otherwise, what ever this was, was indeed a very big deal.

Once cleared to reoccupy our house, my husband and I began learning to navigate the claims process. We picked up our hot plate and began discussing temporary hot water solutions. The hot plate was the first of many disappointments. It couldn’t boil water in less than an hour and truly wasn’t an option for a working mom of three boys to get dinner on the table each night. As for showers, my husband and I agreed an electric water heater was an indulgence we could live without. For \$100, my husband hooked a propane camp shower to the propane from our grill with a

garden hose through our bathroom window providing hot water and good water pressure. We settled in and waited for crews to arrive.

Eleven days after the evacuation, we were told to call to make a space heater appointment. I waited on hold for 56 minutes and scheduled the appointment. A crew came four days later (on time and pleasant). They made it clear upon arrival that these appointments were no longer for space heaters but for “data collection so more effective decisions can be made” BUT I didn’t call for data collection! I called for a space heater. They also had never seen a heating/hot water system like ours. They were standing right next to it when they asked me where it was. They said they had looked around my basement for 15 minutes for it. After sticking red “condemned stickers” on a few things, they left. My nerves began to unravel.

Fifteen days in and we finally saw crews on our street! Hopes soared but they came and went leaving some spray painted lines. This week friends began dropping off warm bread, coffee cakes, cookies . . . things we couldn’t make for ourselves. Trying any way to help but realizing that most of this recovery laid in Columbia Gas’s hands. People dropped off space heaters, heating blankets, and InstaPots. Heating blankets and space heaters allowed two of our children to stay in their bedrooms with some sense of normalcy while one of our boys began sleeping in our bedroom on the floor. The InstaPot allowed me to run the boys to their activities and still cook a healthy meal for dinner.

For three weeks, my husband and I have switched off working from home, afraid to leave the house unattended but the kids were getting squirrely so with great anxiety, we crossed our fingers, put our cell number on the door, and left the house unattended to head to Topsfield Fair. The kids had a blast and our joy was that we didn’t miss a crew at our door.

The month of October was one disappointment after another. At this point it was obvious to all affected, that the best source of accurate information was a Facebook page that those affected created. With 8,000 people affected, we found that we were having 8,000 different experiences. My adjuster told me to Columbia Gas decided not to haul away condemned appliances, so we needed to make arrangements for that. A friend was told she was not allowed to remove condemned appliances because Columbia Gas was taking inventory of them. Every aspect of the recovery had multiple variations of this. Our nerves frayed a little bit more. We would get calls that crews needed come to look at our appliances for the third, fourth, fifth time only to get notification later that Columbia Gas changed their minds. Our relight date was pushed to 11/19. The cruise ship for the workers arrived with word that it will stay for “several months” and our nerves frayed a little more. We had a constant debate over the forecast and what we will do about hot water and heat. Columbia Gas won’t give us a space heater and won’t approve a mini-split system. We ask our adjuster for alternative heat sources and he suggested a pellet stove. We debate the installation of a pellet stove with a hole cut into our dining room wall and wonder if our wood floors will be damaged. Then comes word that Columbia Gas will be taking back the pellet stoves after all this is over! An invasive installation and then a removal??? We decide to pass and try to make due with our own space heaters and donated heating blankets. Our relight date is pushed to 11/22. My office was also affected and I would sit in my winter coat next to a space heater. The Columbia Gas website listed had our office as “relit” but I can assure you it was not.

Almost five weeks in and crews arrive on our street to start digging. It took crews a little over a week on our short dead-end street to get the main and service gas lines tested and fixed.

I had my annual check up with my primary care physician. She was surprised to see my usually normal blood pressure was high. We chatted about the situation and she said she would leave it be as it was likely situational. I explained I had nightmares about fires and explosions, I jumped when I heard sirens. Then she said I could stay in their warm lobby for the day and use their vending machine as much as I liked. I held back the tears because there was no way to explain the biggest problem was not heat or hot water or cooking but the mental game Columbia Gas was playing with us. We were forced to put our trust in a company that proved over and over they weren’t trustworthy. We had no other choice and it felt devastating.

It was too cold for our propane shower system, so we borrowed an indoor camp shower from a friend. After boiling water in an electric kettle literally for hours each night for two weeks, we were done. I had too many tears, the boys didn’t want to get out of bed for school, they fought all the time and we decided to finally install an electric water heater. We still felt it was wasteful for the environment, we didn’t want it taking up space in our basement but hot water would be one less thing for us to have to manage on a daily basis.

We had a long planned family party to attend out of state for just two days. At this point it had been weeks with no one in our house and we weren't on the 72 hour list. We again took a deep breath, left our number on the door, and headed to the airport. Within two hours of landing, my cell phone rang with a crew at our door. We felt terrible about not being at the house but we had no notice of any kind and our relit date was still weeks away. We scrambled from out of state to get a neighbor to let them in and try to understand over the phone about what was happening and what decisions were being made. As we landed back at Logan airport, I checked the Columbia Gas website to see our relit date was pushed out three more weeks to 12/9.

As November began, 50 days in, we started the search for a reputable plumber that could beat our 12/9 relit date. Our plumber was booked until mid-December. Another plumber was going door to door giving estimates, so we let him in but online reviews showed they jacked up prices and work done wasn't great. Eventually, a friend pulled some strings and got their plumber to commit to a date to come and take a look. A day later Columbia Gas showed up saying they are ready to work. We don't trust them and we start to gamble. Do we trust that Columbia Gas will show up tomorrow? Do we trust that they will stay until we have heat? What do we do if we aren't happy with the work? Who do we call in three months if we have a problem with the new boiler? Will our friend's plumber be able to beat the 12/9 date (we know this is unlikely)? We are sick about it, and Columbia Gas can provide no information, but decide to call our friend's plumber and let him go knowing that we won't be able to get him back if Columbia Gas decides not to show up. We see Columbia Gas is under criminal investigation. This is no surprise to any one affected but our nerves fray a little more.

The crew come and stay. We are told we will get a like-for-like replacement for our boiler and the next day they deliver something completely different. Something that can't vent out our chimney so they will have to drill holes out our walls and we may need asbestos abatement. No one can explain to us why this happened. They all say, "don't worry . . . you are going to love it!" That is fine, but we want to understand the decisions that are being made on our behalf! Is it because Navien gave Columbia Gas a great deal on these boilers? Is it because Columbia Gas will get Mass Save rebates for installing them? Is it because Columbia Gas has a warehouse of them and needs to get rid of them? Why the hell is it? A week into working 10.5 hours days, one of the plumber explains our chimney was likely not up to code and Columbia Gas would have had to pay for our chimney to be rebuilt in order to vent a like-for-like system. Okay, this makes sense . . . I just wish someone would communicate these things . . . or anything. It takes the plumbers (kind, amazing, and lovely) nine days to install one boiler. They just didn't have enough parts. They would go scavenging for parts each day. They can't find any within a two hour radius of the area. One day they drove up into New Hampshire in hopes of finding parts. How can they not have enough parts when 6,000 people are still waiting?

On day 59, 99 percent of our heat/hot water was restored. We are happy crews moved on to those that have no heat, but hope they circle back someday and fix the small section of baseboard heat that is not working. This is a long process. There are still 5,000 waiting on heat and hot water. Even with using Columbia Gas crews instead of our own, we spent thousands out of pocket. We have been reimbursed for much of it but have been waiting weeks for a large check. On day 65, our stove was relit.

We are grateful for the progress and my eyes have been opened to what a recovery process can look and feel like. We were not physically injured. Our home is standing. My thoughts are on the California fires and hurricane hit areas and the nightmare recovery process. I hope FEMA does a better job than Columbia Gas and I hope Columbia Gas is held responsible for the complete lack of a disaster/recovery plan. The affects at our house will linger for a long time.

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*Janina Majeran from Andover:* I didn't lose my house to an explosion or fire, but my home without heat and hot water for so long did not feel like my home. My home was always my sanctuary, but once it's 50 degrees in your apartment and no amount of space heaters can warm it up, it ceases to be a safe haven.

The thing that boggles my mind was how some representatives of Columbia Gas could be so callous when dealing with us. When I asked about temporary housing because my apartment was too cold to stay in, I was told to get a space heater. A friend of mine was told to get an electric blanket. Neither of those things are in any way sufficient when it's dropping below 50. And it's not like you can run a space heater all night long because they are a fire hazard—and these people know this.

It took me over 3 weeks to get housing. I kept being put off, kept being told someone would be in touch with me and no one ever was. This was a lesson in how the squeaky wheel gets the oil.

I spent a month relying on friends and family to let me stay with them when it was too cold to stay at my apartment. I had to shuttle my cat here and there and everywhere. I was stressed out every day wondering how cold my apartment was going to get and checking weather apps all day every day.

I'm home now and it was hard for me to come back. I was worried it would be taken away and I wouldn't be able to get housing again. My home still does not feel like my home. I feel like I just moved in all over again only this time I'm worried I'll wake up one night or come home after work and find it all gone again.

The past 2 months have been hell and I've gotten little sympathy from people staying in warm places at the end of the day. And I worry about the people who have been trying to stick it out as the temperature drops and drops.

This never should have happened. And none of us should be made to feel like criminals for wanting compensation for the things we've had to buy extra just to survive. If I want an electric skillet or toaster oven over your crappy little hot plates, then don't argue with me over it. You did this. You did this to all of us. It's not our fault you screwed up.

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*Yeison Pinales from Lawrence:* This has hurt me so much that I'm missing out on my kids development I had to arrange for them to be more without me cuz of I can't be at my house.. Because my house is not a home at the moment I can't do my routine like I always did in the past. thanks giving is a no at my home this year

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*Nicole Pelletier from North Andover:* My two children, ages 5 and 3, were home with me on the afternoon of September 13. Without warning, one of our neighbors began practically banging the door down telling us that homes were exploding and that we needed to get out. Completely caught off guard and terrified, my children and I fled our home and tried to get out of North Andover.

During this trip, we had to drive through a "ground zero" of sorts . . . many of the homes that had exploded were in our neighborhood. We witnessed homes smoking and on fire. The sound of sirens was constant. We were unsure about the status of our own home left behind. My 5 year old son was so terrified he cried for an hour straight and was physically sick, before he finally passed out from exhaustion.

We were thankfully not one of the worst affected—although we were without gas for more than six weeks, our home is still standing and none of us were physically injured.

My son's mental and emotional health, on the other hand, has been a different story. He had just started kindergarten the week prior to the gas fires, so he already had so much going on when this struck. He is now petrified of any kind of siren, no matter how far away it may be, and the possibility of any type of fire drill at school had him so anxious that he doesn't want to go to school on most days. We have had to be in constant touch with his school counselor and we have also found him his own therapist for when he is not at school. This event has scarred him, and we are still dealing with this aftermath months later.

Having said all that I don't think Columbia has done nearly enough to remediate this disaster. My son will never forget this and although I am encouraged by the progress he is making with his therapist, the memory of his first "big kid" school experience will forever be colored by the events of September 13.

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*Joseph Beninato from North Andover:* I was at work my wife called said pilot in the gas wood stove hissing torch like flame shooting out. I told her go outside I would call gas company. When I called the operator was very calm asked address wanted to know the cross street told me to have my wife go outside and a man from Columbia gas would come by and take care of it. She said there was a problem in the area and they would take care of it. When I called my wife back she was hysterical all the neighborhood were in the streets. so much for the man coming by. so many people and teams coming repeating the same thing and no record of what the other team had done no database. our town is behind in the gas ready timeline. no one here was injured but the anxiety and fear will be with us for a long time. hopefully lessons can be learned because there will be another event if not looked into. we never found out the real cause. any word on that?

*Michael Silverman from Andover:* The gas explosion occurred on Sept. 13, 2018. Late that afternoon, we evacuated our home as ordered. We are a family of 4 including an 81 year old mother/grandmother who is a dialysis patient, a husband and wife with a 5-year old girl. Gas and electricity were shut off by 4:30 p.m. or so on that date . . . By Sunday morning, Sept. 16 electricity was restored. Gas was not . . . and still till this date, November 19, 2018 there is no gas service. This means that we have no gas for hot water, drying or heating in the home. While at first this was workable, as the cold weather has arrived, conditions are worse. We paid for and installed an electric water heater in early October so that we could take “hot” showers. We have an electric toaster oven, hotplate and microwave to heat foods. We also purchased several electric heaters. We have to be careful with which small heaters or cooking appliances are own. When the microwave is on with any one of the portable heaters, the circuit breakers switch off and have to be reset. This can be dangerous . . . especially at night for the 81-year old and the 5 year old.

Approximately, November 4th, the Gas Company set up some diesel powered generator outside with additional sub-generators inside. The main goal of these generators is to heat the water pipes to prevent them from freezing.

We have become to accommodate to the situation. Being able to “cook” food is a regular challenge due to not having a range to use. This has increased our normal food budget to approximately double it’s normal amount each week. With all the electric heaters in addition to the hot water heater, electricity costs are averaging \$460/month compared to \$65/month prior to the gas disruptions.

*Lauren Keating from Andover:* When I tell people my house almost blew up, they laugh, until I add, “no, but really,” before explaining the Columbia Gas fiasco that has dominated the last two plus months of my life. I was coaching in Chelmsford, MA when my phone figuratively blew up as the Merrimack Valley literally blew up. Friends asking if I was safe, telling me not to go home, and a former colleague desperately warning me to NOT, UNDER ANY CIRCUMSTANCES head to Andover. It got to the point that I had to have my team copy and paste messages to friends and family that I was towns away and really had no idea what was going on. As a neighbor called me, I could hear the alarms in the background from our whole neighborhood, in the heart of what would come to be the affected area. Throughout the night, the news became more and more unbelievable, explosions, evacuations and exits being closed down. Essentially the Valley was shut down.

On Sunday, when I returned from evacuation and was greeted with a bill from Columbia Gas. Newsflash—that was never going to get paid as this was around the time they referred to the devastation as an “inconvenience” or an “unfortunate incident.” As the weeks went on, it appeared that efficiency was a trait only possessed by their billing department as the weeks stretched into October and we still had no utilities, although we did have a LOT of people making a lot of doing construction at all hours. I think for people living outside of this, this is the hardest part—the small things that were the biggest disruption. For 10 days, there were police escorts as our street was shut down with no notice. Workers were jackhammering though the night and after a long day at work, the only options for dinner were a reheated crockpot and a cold shower. I took to going to the gym before 4 am to work out and shower and by mid-October was a zombie. As much as the reimbursement process was a pain, the worst part were the things you can’t quantify—the extra time to do daily tasks of living.

By November, I had been in three hotels, fought for reimbursement and spent multiple weeks in my own apartment with temperatures under 40° inside as the list to receive housing was so long. When we returned home, we had out electricity cut multiple days for multiple hours with 30 minute notice, which is super convenient when you need to use a crockpot or microwave to eat. We had to leave our doors unlocked for two weeks because the workers “might” be by to replace our appliances. Because we wanted the work done, we did it, risking that anyone could have walked in. It is now November 19, the original date of restoration and the “ongoing disruption” is still in full swing. Our “new” stoves were defective and the replacements are backordered and we weren’t given a date for their arrival. The new furnace upon installation is leaky and not functioning at full capacity so while we have heat, it is not efficient.

Through it all though, the strength of this community has shown through. The five people in our house have worked together to make sure we are as close to functional as possible. In the initial days of the evacuation, watching the communities come together to make sure everyone had what they needed even when Columbia was so distant was inspiring as everyone was in a state of uncertainty. I may still be rolling my eyes from all the euphemisms used by Columbia Gas for how miser-

able of a situation this is, but there is truly a soft spot in my heart for the resilience of the Merrimack Valley in circumstances for which they have had zero control and very little progress.

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*Constance Glore from West Boxford:* It is past time to face the truth that the burning of fossil fuels is making the earth uninhabitable for life as we know it. The rise in global temperature, sea level and forest fires is directly caused by the use of these fuels. The warming of the Gulf of Maine has brought shrimp populations to the brink of extinction. Pollution caused by the burning of fossil fuels was dubbed “the new tobacco” last week by the head of the World Health Organization who also reported that “the simple act of breathing is killing 7 million people a year and harming billions more.” (The Guardian)

I am one of those. I have COPD.

The Intergovernmental Panel on Climate Change reported in Fall 2018, “Governments should stop licensing new fossil fuel projects; and stopping new projects alone will not be enough-governments must also phase out a significant number of existing projects ahead of schedule, while investing in a just transition for workers and communities.”

A UN panel of scientists said every bit of warming matters, and we’re almost out of time to keep it in check. We have the next 12 years to begin to drastically reduce CO<sub>2</sub>.

The tragedy and ensuing future environmental damage caused by Columbia Gas/NiSource and other gas utilities must never be repeated. We need renewable, green, clean energy infrastructure to be built now.

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*Martin Boroian from North Andover:* I live with my sister Mary. I am a former Ma. State Metropolitan District Comm. Police Officer. We have been with heat from Sept. 13, 2018 till Nov. 2018. I am a disabled person. I have had 5 operations in the last five years. It was very hard waking up in a house with no heat. It was also very hard not knowing if and when we would have our heat restored. I also suffer from PTSD. I feel that there should have been more Ma. State utility inspectors to make sure that the Gas lines were in better condition. It was also not reassuring when none of our local politicians, except. Our U.S. Senator Edward Markey seemed to care about what happened to the citizens in Lawrence, North Andover, and Andover. Thanking you for letting us tell what happened to us. Ma. State and U.S. Citizens.—Respectfully Submitted by Martin Boroian-Tel.No. (78-655-7656—home address 58 Union Street, Apt.# 2. North Andover, Ma. 01845.—e-mail address=mborian@yahoo.com-tel.no.978-655-7656.

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*Vladimir Saldana from Lawrence:* September 13th

I was sitting with a friend on the front porch of Lawrence CommunityWorks office building going over the treasurer report for a Rwanda Youth Development Project we are both involved with. Not long after the explosions broke out, a colleague from Lawrence CommunityWorks walks up the stairs and says “Omg Vladi, Lawrence is on Fire” My immediate reaction was “of course Lawrence is on fire, lots of good things are happening in this city” Her face expression change significantly as she was walking closer to me with her cell phone out in her hands she turns the screen around to show me a video of the news coverage. We watched the news clip for about 3–5 minutes to get a sense for what was happening. After learning that the affected area in the city was South Lawrence and that folks were being asked to evacuate I got my phone and called a friend that lives in South Lawrence. As we were on the phone my friend was packing up her stuff to leave her home. I asked her where she was going and she said to a friend that lives in the North of the City. My thoughts and heart we’re raising 100 miles per hours trying to wrap my head around what I should be doing and what was most necessary at the time. Organizing my thoughts quickly, I concluded to a three-phase strategy: a) my organizations have affordable housing units in the south of the city so I felt it was our responsibility to ensure the safety and evacuation of those units safety b) ensure that all my friends that live in South we’re evacuated, safe and had a place to go c) assist the greater community with the emergency response.

It had been announced that the Parthum School was one of the emergency shelters that was set up for evacuees. After completing the first two part of my personal efforts to assist with the gas explosion I left the office and drove to the emergency shelter. When I arrived at the Parthum School there was a ton of activities and many faces I recognized, from community leaders to politicians. After hanging out

in the front lobby for 10–15 minutes with nothing to do I decided it was time to depart. When I was walking towards my car, a longtime friend/brother Emmanuel asked me where I was going. The question struck my cord because it felt as if I was abandoning the city during a tough time—I went on to explain to Emmanuel that I was leaving because they had enough volunteers and assistance. Emmanuel felt we needed to do more so he suggested we check out the other shelter at the Arlington School. We arrived at the Arlington School around 7:00 or so. When we arrived at the Arlington we didn't find the same situation as the Parthum School. It was a bit more chaotic in the sense that no one really knew what was happening and folks that were evacuated and looking for a place to sleep didn't know who to talk to or what to do. There was way too many activities happening and just not enough coordination. We approached the Red Cross respondent and asked how can we help? They said that at the moment there was nothing to do because they are getting organized. But, what we saw was a lot of emotional and personal disconnect from the vulnerable residents sitting in the school cafeteria with the people that were "in charge". I want to avoid critiquing the Red Cross because they were doing the best they can do with the resources they had at the moment. But in addition to having a low number of "official" volunteers, their low number of volunteers did not speak Spanish. This is where we saw an opportunity to assist. So we decided to serve as translators for the Red Cross. As time went on we made observations and noticed other gaps in their process, such as very little emotional support to the victims arriving at the shelter.

Emmanuel and I recognized other community leaders and friends such as Pavel Payano and many others who were also feeling the disconnection between the process and the people arriving at the shelter. From this point on, the atmospheres took a turn, it was a kinematic connection between the community leaders that were present at the time. We all started to assume leadership roles. By the end of the first night on Thursday, it was clear that local leaders we're going to manage the relief efforts with the Red Cross assistance. That night, I and other leaders that took an active role. From registering victims, feeding them dinner, getting answers for what was happening, setting up sleeping cots to even calling out of work for one the victim who did not speak English. That night, most of the community volunteers left the school at 2:30 A.M. on Friday. A few hours later, we all returned energized to assist our community. The situation at the Arlington School improved tremendously all due to the help of many local community leaders and neighbors helping neighbors. Like others, I've spent a tremendous amount of time in the shelter from Friday to Sunday. I slept at the emergency shelter Friday night and Saturday night. One of the reasons why I decided to stay was because none of the Red Cross official volunteers spoke Spanish. The vast majority of residents sleeping at the shelter did not speak English. I've felt responsible for their wellbeing and being a traumatic situation without interpretation can add more anxiety to a difficult situation.

During those 3 and half days, my heart grew every moment I witness people from all over the place come to the shelter asking, "what can I do to help" or bringing food, toiletries, necessities and all sort of donations for the folks at the emergency shelter. We had an abundance amount of food, clothes, and basic needs at the shelter from just regular people dropping stuff off. We also had educators set up activities for families with kids, therapist offering free services to families that needed to speak to someone. I've felt the love, compassion, and services from the wider community for the victim and the City of Lawrence.

Despite all the commotion that was happening outside of the walls of the Arlington emergency shelter, inside felt like a community center addressing individual needs. Responding to the larger crisis at hand. Volunteers stepping up and dedicating countless hours to help out in any way they can. The spirit of the community was incredible and eye-opening. To give you a sense on the sort of activities that were common during the emergency period read the following two scenarios. One night, a truck branded with a logo from a paving company from Peabody pulled up with about 50 cases of 24 pack of waters, inside the shelter, we probably had triple that amount of waters, and space was limited so we asked them to take it to the other shelter or the Senior Center. The stranger's faces looked disappointed. Ultimately, we ended up squeezing the waters inside the school. The second scenario happened on Sunday afternoon after the Mayor decided to lift the band and allow people to go back home. Firefighters from Lowell pulled up to the school with two full vans of donation items. Half of the shelter population had already gone home. The ones that didn't did have a home to go to.

Today marks two after the gas explosions and the relief efforts continue to be a challenge for various reasons. Many families are still in a dire situation and the City continues to do everything possible to restore a sense of normality. As we are approaching a holiday dedicated for to give Thanks, I want to give Thanks to the

community of Lawrence for showing me resiliency, to the wider community for having a blessed heart and giving their support during these hard few weeks. I am confident that we will come out stronger out of this situation.

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*Heather Wilson from North Andover:* On September 13 2018 at approximately 4:30 PM I had just got home from work and my son stopped by and said he smelled something, and immediately the smoke detectors went off he ran down the cellar to find my boiler engulfed in flames. My brother who has plumbing experience grabbed a tool and immediately shut the gas off to my boiler and went outside to turn it off at the house and while all this was happening I called fire department they were there immediately and the fire was out by the time they got there, They stayed for about 5 minutes when they realized it was a community wide gas leak and left to deal with more serious issues they realized there were higher triages to deal with., The next two weeks met me with many claims workers from all over the country who will all giving me different answers there was no consistency to their answers. Also they never called me I had to call them a week later only to find out that they had the wrong number, and they did not believe there was a fire in my house until I sent the report to them. I spent the next 5 weeks in 4 different hotels, very inconvenient as I am a handicapped woman away from my home.

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*Todd Sacco from Withrop:* I don't live in the affected area, however, a co-worker of mine does. His brother in law has been shipped in from other areas to assist with changing out meters. LOOK TO THE IMPORTED WORKERS FOR THE TRUTH. The local union workers are NOT carrying their weight and the imports are protecting them by not calling them out.

This is not only making it unsafe and extremely inconvenient for residents, it's making YOU, the elected official, who receives campaign funds from unions, look very very bad.

This is unconscionable and needs to stop. I have no dog in the hunt other than my sincerest concern for the innocent victims of the explosions and the ongoing war between the gas company workers and their management.

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*Astrid Nielsen from Andover:* Story from a resident in a NON impacted area

Thursday Sep. 13th I was on the road when my kids called from home to tell me, that their friends were texting if we had gotten a prank call too about leaving the house. On my way back home through town sirens were blasting left and right and just as a firetruck would pass one way, another would come in the other direction. Usually when there is a fire an army of firetrucks will be present as well as police and the street will be closed of. That day I passed several single firetrucks without backup running in and out of buildings.

We left the house and got a chance to talk it through and check social medias and found, that since we are on a street, where gas was never put in, we could go home safely. Instead we invited friends to come and stay with us.

A friends in Andover was driving around with her child and another 3 children. They had been at the library and had been evacuated and when the mom came to pick up her daughter, she took the other 3 as their parents were not close by. Two of the children's parents were stuck in Lawrence, where they have a restaurant, and was not able to get out of town until late that evening. We made beds for 10 but eventually only 3 stayed. The next evening they were able to go home.

That was suppose to be it for us, but

—My daughter had to go to emergency counseling. She is better, but it has been so hard to witness. All the uncertainty and not feeling safe is hard to deal with as an adult and much more for an adolescent with anxiety.

—I was in Andover a few days later and when a firetruck came blasting by and everyone absolutely froze including me. It took a minute or two before anyone were able to talk again. We all remembered

—For the next two month I would have to add a minimum of 15 minutes to any trip through town because of all the construction and detours. With two kids and their schedule it was very stressful to have to be places at specific times when you never knew what to expect.

—I have lunch in town several times a week and for two month my favorite places were closed. (Bueno Malo, Yella, Casa Blanca). There are people I used to pass by every week I haven't seen for month now. The dynamic in town has been so off since 9/13

The most popular costume this year for Halloween was a yellow vest and a hard hat!!!

On paper my family will not be a part of history. But we were impacted.

PS I don't think you will ever know the whole scope. I talked to a home owner who told me, that there had been 6 fires on their street, but when I checked the map, only 1 had been recorded.

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*Stacie Murphy from Lawrence:* I am submitting this story on behalf of CLASS, Inc. Located at One Parker Street, Lawrence, MA.

On Thursday, September 13, 2018 at approximately 4:20pm, several gas lines in the Merrimack Valley started to explode as staff was leaving for the day. A called was placed to the CEO Al Frugoli who was still inside the building in a meeting. He was told to evacuate the building and ask that the evening cleaning crew leave as well. Nancy Price, Facilities Manager was on her way home when she received the news of the emergency in Lawrence. She headed back to CLASS at One Parker St. but at that time, no one was allowed on or near the property. CLASS Management spent hours on the phones communicating with key staff regarding opening of the building on Friday, as we were not aware of the severity of the disaster.

On the evening of September 13th all power was cut to 1 Parker Street and the surrounding areas. No power means we lost all connections to our phone system and servers. At approximately 11pm a decision was made to closed CLASS at One Parker Street for programs on Friday. Staff would have to use a snow day in order to be paid. Meeting had to be canceled and rescheduled.

CLASS serves 265 individuals at One Parker Street on a daily basis, many of our clients live in group homes, many were also affected by the gas disaster in the Merrimack Valley. A majority of CLASS Staff lives in the affected areas and some could not even get to their homes.

CLASS lost approximately \$6,800.00 in Transportation, \$15,786 in Employment Services and \$10,591.00 in Medicaid. Total revenue lost on Friday, September 13 was \$33,177.00.

On Saturday September 15, at around 8pm, all power was restored to CLASS at One Parker Street.

On Sunday, September 16, Lawrence Fire Department along with Columbia Gas inspected One Parker Street and gave CLASS the green light to open. CLASS opened without heat operating in the building and re-opened programs at One Parker Street on Monday, September 17

On Monday September 17, programs re-opened. Many issues were discovered due to the power being cut. We discovered both garage doors were not operating and had to be manually opened. Service was called to repair the garage doors that resulted in charges as parts needed to be replaced. The security system dropped from the server and had to be re-programmed by technicians.

At approximately 10:25AM, an odor of gas was reported and our building was evacuated. After Friday's incidents staff were nervous and it was unsettling to many individuals we serve as well. The Fire Department arrived on scene, did a walk through and cleared the building, followed by the gas company who checked the building and gave the final ok.

On October 13, a temporary heating system was installed into the building. Due to the nature of our business, CLASS had to hire temporary staff for some individuals we serve. Gas was restored on Monday, November 12. During this disaster, CLASS paid overtime hours to our facilities manager who worked almost 24/7 to make sure things were done correctly and our building was handled with care.

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*Shawn Logan from Andover:* Although not directly impacted by the Gas explosions (with the exception of my brother staying at my home as his house was impacted), I am impacted peripherally—as were countless others in two ways:

1. The Columbia Gas workers and their efforts have closed streets, re-routed traffic and resulted in extreme congestion throughout the towns of Andover, North Andover, and Lawrence. This has been time consuming and frustrating. Further it appears they have taken advantage of the explosions to unnecessarily upgrade all their gas lines and forced homeowners to have their gas appliances and homes re-inspected and brought up to existing code.

2. The street work to dig up, replace, and repair gas lines has reduced the quality of the roads and paved surfaces in Andover, North Andover, and Lawrence. In my view, Columbia Gas should pay to have the impacted roads re-paved. The patchwork of repairs results in excessive wear and tear on the suspensions of all our vehicles and makes for some very uncomfortable travel.

*Dean and Mona Thornhill from North Andover:* Our home was set on fire. We lost 85 percent of all our possessions. We are estimated to be out of our home for a year to repair it.

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*Alexander Katsev from North Andover:* I own a property in North Andover that was affected by the disaster. I would like to get the property inspection results, but Columbia gas was unable to produce it. I called—10 times—no one knows anything. No written report, no certification that gas operated appliances are not damaged. Nothing, very poorly managed. . . .

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*Jon Paul from Andover:* I am the pastor of the Free Christian Church in Andover, a local church that is still not fully restored as of today (11/21/2018). We hope to have heat restored by next week but our kitchen could take weeks or months longer due to a number of complications. In the meantime, ministries that use the kitchen to provide meals for seniors and others in need are on hold.

Even our normal worship services have been challenging as the building is very cold. A number of our parishioners have chosen to stay home due to the cold.

I plan to do a wedding on Saturday morning 11/24. We have some temporary heat, but it is inadequate for our large church building. I feel bad (especially for the bride) that it will probably be cold indoors at her wedding.

We are doing our best to provide spiritual and practical support residents and businesses impacted by this crisis while dealing with our own issues. We recently received an e-mail from one of our seniors, a widow. I think is a good example of the struggles many are facing. She writes: "I am not feeling well today and will stay home [from the church's senior group] tomorrow. Exhausted trying to deal with everything. The gas situation is disorganized. I wake up and find people digging up my lawn and they have machinery blocking my driveway. Electricians came to hook up my furnace, but I don't have a furnace yet. Had a small flood in my basement when they took out the hot water heater, and the pipe is still leaking into a large bucket. I am really exhausted. They told me that my appliances would be coming on a certain day, but they didn't. Afraid to leave the house in case they do come, or people want to get into the house. I am just beat right now. . . ."

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*Lacey McManus from Andover:* On September 13th after smelling gas in my home I went outside, thinking I was losing my mind. How could there be a gas odor in my home, no gas appliance was on! I found a neighbor, who myself and my children consider family, in the middle of the street frantic! My heart broke for her when she said she had a fire in her basement and was told the fire department would get to her as soon as they could. We proceeded to tell our neighbors to get out of their homes and ensuring all were safe. Since that horrific day, we have all spent countless hours trying to find ways to feed our families, keep our children and pets warm, all while making life continue as normal. Because outside of the affected areas nobody understood the struggle of feeding a family without a stove or ensuring the house was warm enough when your kids got home or where and when their next warm shower would be. As a mother it has been very hard to look my children in the eyes and tell them everything would be ok and there was nothing for them to worry about. A hotel was out of the question, because how would I get the kids to school, how would I get to work, and the kids to their afterschool sports practices. We live here because our entire lives are within a 5 mile radius of where we live. I had already been inconvenienced enough with driving 30 minutes for them to take warm showers, spending hours on end planning and making meals for us to eat and stressing over the winter months just around the corner. Then we got into a routine and we made it work. Then the contractors came a month early to get us relit . . . what a nightmare!!! People in and out of my home, with no respect for my belongings or my family. The water tank blew water everywhere and the entire crew left without cleaning it up, they forgot about my house for days, and when they finally did come back it was days before everything was properly installed. The inspector spent 2 minutes in basement to say we were good to go, and when we were relit I still had no hot water. A task that took self mitigated people 2 days tops took us 2 and a half weeks! Once we were relit, I was happy but then fear set in. How am I supposed to feel safe in a home with gas again? Every noise, while probably normal, scares me to my core. Using a stove again, having the furnace on, and using my dryer, while normal and an everyday necessity that many don't bat an eye to, makes me so nervous! This is going to take a LONG time to recover from. What makes matters worse, is how do we feel safe knowing we have the same gas pro-

vider that caused this epic disaster? Monetary reimbursements for minimal expenses only get us so far, the responsibility of making us all feel safe and comfortable in our homes sits in the hands of our representatives, senators, our governor, mayors, town managers and everyone else who should have the residents well-being at the top of their agenda.

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*Susan Roussilhes from Andover:* The horror of September 13, 2018 has been recounted and retold many times so I'll start with the days following the explosions. We are doubly affected—our home and our new business are both in the affected area. We received an alert that our home had been broken into. We called the police and after some confusion and vague explanations, we were informed that Columbia Gas, along with the police and a locksmith, broke into our home to shut off the gas. We were allowed to enter both places 4 days after the explosions—both with no heat. In addition to having no heat in our home, we had no hot water, no dryer for clothes, cold showers, and no cooking. There was also the constant anxiety that what would happen before might happen again. There were “gas purges” that caused worry and confusion. In the days following the incident there were workmen, police, officials from the state and town. I think everyone was still in shock.

We attended meeting after meeting to receive whatever information we could—which was sparse and confusing. We filed our first claims at the new claim center in town. We waited in line with everyone else. We were given a hot plate and were told we would have to have our home inspected if we were to receive space heaters. No one came to inspect so we were then told to go out and buy space heaters and we would be reimbursed. We submitted receipts to an assigned adjuster who then issued a few checks to reimburse us. We continued to submit expense receipts with no response after 2 weeks. We called the claim number and spoke to our adjuster who told us she was no longer our adjuster and we were reassigned to another adjuster but she had no idea who that adjuster was. This changing of adjusters would occur 3 more times. She said that she submitted all of our documents to her supervisor who assigned our claim to another adjuster. We were finally told who our new adjuster was and it was a disaster from the beginning. We had to resubmit all of our receipts again and then we were accused of duplicating receipts. We spent hours in the claim center and on the phone with the claim center in Louisiana. We care for our grandson 3 days a week and it had started to get very cold. We talked to an adjuster for families who needed to be relocated and our only options would have been to go into an RV which would not have been acceptable with a young child and a dog and 3 adults or to be placed in a hotel 27 miles south. We explained to the adjuster in Louisiana that traffic in Boston is horrendous and that commute would be over an hour or more both ways (our business is located 3 blocks from our home). We were then lectured by this person located thousands of miles away that it would only be 35 minutes. We decided to stay in our home and remain cold.

This was our day: on the phone with adjusters in Louisiana, in the claim center in town—for hours on end—gather documents, receipts, etc. We called newspapers, news channels, and congress people and senators and even the governor—but since it was in the middle of elections, we had little response.

We became inundated with workmen and police. Our street was blocked off for several weeks. Work went on through the night with many sleepless nights.

Our home has 2 sections—one is 160 years old and there was an addition added 10 years ago so therefore we have 2 boilers and 2 hot water heaters. We were able to replace 1 hot water heat and convert it to electric so we had limited hot water and we were finally able to take a hot shower, after several weeks of. Old showers. We were also able to get reimbursed for that expense fairly quickly. We ordered replacements for all appliances but had to front the bill for a new oven, gas dryer, 1 boiler, and a combination boiler and gas hot water heater all costing around \$30,000. Getting reimbursed was agonizing—calling Louisiana and spending hours in the claim center. We got our gas back on November 9. We still have no stove in spite of the purchase of a brand new one. The town inspector would not approve the use of our stove because our cabinets above our stove are too low. These same cabinets were approved prior to these explosions. So now we have 2 options in order for us to use the stove—raise the cabinets 3 inches throughout our kitchen and extend the tile backsplash and paint the kitchen which would cost a few thousand dollars or have metal plates put under the cabinets which might be unsightly—we don't know because we've never heard of this before.

Now for our business—September was to have been the beginning of our busiest season. It has turned out to be disastrous. My daughter and I opened our store on November 9, 2017. We worked very hard to establish a women's boutique and we put everything we have into our store. We previously had a successful store on

Newbury street in Boston but decided to open a new location in our community. We wanted to leave behind the high rent, the hectic commute, and the higher cost of doing business in Boston and concentrate on our community. We opened in November of last year to a very successful few months. The business previously occupying the space was a very successful and lucrative women's boutique selling very similar styles to what we have so we anticipated doing a similar business. We started out that way and then September 13 happened. Our business came to a standstill. Because we don't have numbers for our Andover location from last year, we used an average of what we did in our Boston store and the store previously in this space and took an average. Our sales for the month of September declined by 83 percent. For October we used a similar formula and again sales declined 77 percent. We can now use last year's November numbers and as of this date-our November sales are down 57 percent. In the days since the explosions parking has been a nightmare because many of the available parking has been taken up by work trucks and such. Traffic has been snarled because of workers and construction trucks. The restaurants surrounding us have been closed. We get many customers from these restaurants and it is very much a co-dependent relationship. Business has decreased to such a point that we have been unable to pay rent. We don't want to lose the 3 employees we have so we have been scheduling them for half of the hours to which they are accustomed. We have orders that we can't take in so that those customers who do come in we can sell them merchandise that is current and not previous season inventory. Our business is suffering. Claim money that we have received has gone to paying rent and orders. We are paying pay roll out of personal funds which would not be so serious but we have had to put out \$30,000 up front for our appliances and work for our home.

We have received claim money and reimbursements for expenses but we are not sure if we will ever recover our customer base when there are other businesses in nearby towns that customers can frequent as well as online shopping.

In short we are very aware that we may never recover and the business that my daughter and I started may have to be declared bankrupt. We don't have the money from our savings to keep putting into our business.

We wanted you to hear our story. Thank you.

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*Janice Valverde from Lawrence:* TESTIMONY of YWCA Northeastern Massachusetts to the Field Hearing of the U.S. Senate Committee on Commerce, Science and Transportation—November 26, 2018—Lawrence, MA

YWCA Northeastern Massachusetts is a multi-site, multi-service agency that has served vulnerable women, children and families in the Merrimack Valley for over 125 years. One of its major program areas is Domestic Violence and Sexual Assault services.

Four of the agency's seven sites are located in Lawrence. One of those is the YWCA Domestic Violence Emergency Shelter, located at an undisclosed residential address in South Lawrence. It was directly affected by the gas explosions on September 13, 2018.

At any given time, the Shelter is home to five women and their minor children who have fled domestic violence. It is always full to capacity. On September 13, there were five women and six children living at the Shelter.

While the gas pipeline incident was extremely disruptive to all affected, and especially devastating to those who lost their homes, the YWCA Shelter residents were thrust into a situation that affected them in a way somewhat different from the way it affected others.

For them to have to evacuate the Shelter and very quickly adapt to a different environment and different routines, even for three days, was far beyond an inconvenience; it was extremely stressful, disruptive and fear-inducing, especially to a few with fragile mental health.

The YWCA wants to enter the unique story of these domestic violence survivors and their children into the record. We appreciate this opportunity to do so.

The YWCA Emergency Shelter was evacuated on the evening of September 13 after the gas explosions occurred. The Shelter's gas furnace and hot water heater were no longer usable. It would be three days (and nights) until the Shelter's five women and six children would be able to return to the Shelter. Columbia Gas offered accommodations in trailers or reimbursement to the YWCA for hotel stays. Neither of these was a viable or practical solution for the 11 Shelter Residents, however.

For domestic violence victims whose lives had already been profoundly disrupted, each of whom was at a point on their own path of healing from trauma while living in the Emergency Shelter, this new disruption was quite traumatic. Some of the

residents were experiencing PTSD or other mental health issues. Typically, over a period of time, usually months, survivors slowly heal from trauma as some stability and certainty comes into their lives. But a major stressor can cause a setback in their recovery.

Having to leave the Shelter in the midst of the gas explosion disaster was indeed a setback for all of the YWCA Emergency Shelter residents to some degree, but particularly for two women and one young teenage boy who are suffering with mental health issues.

Along with the rest of the Shelter “family,” they were frightened to leave the Shelter itself and did not want to be separated from each other or the YWCA Shelter staff. YWCA staff, who are highly trained and experienced in dealing with trauma, were able to manage the situation, but that did not erase the trauma added to all these residents’ lives.

Trailers offered by Columbia Gas as temporary quarters were at least a temporary solution for some people, but not a viable solution for the YWCA Shelter residents. Moving into a trailer in the city among others affected by the gas explosions, was not only an added stressor, but was potentially a threat to individual safety. The trailers provided no guarantee of privacy and physical safety and security, which are obviously paramount to someone whose abuser may be in the same community. Shelter residents typically bond into a family-like community within the house—bonding with each other and with YWCA Shelter staff who are present 24/7. This would not have been sustainable if every family was in its own trailer, and support of the staff is key to maintaining stability and encouraging healing for the residents.

Likewise, the option of a hotel stay was not a good one. There were not enough rooms in any one area hotel for all 11 residents. Again, this option brought up the issue of how to maintain the daily support system provided by YWCA Shelter staff and the common fear of being “out in the community.”

The bottom line was that Shelter residents were re-traumatized to varying degrees, and all of them were frightened to leave the Shelter, but forced to do so by circumstances.

After considering the options, the YWCA decided there was no choice but to use its own resources. For three days, Shelter residents were able to stay at the YWCA Fina House, a residential building that houses the YWCA Transitional Housing program for domestic violence survivors and the residential Teen Parenting Program, was available, too. It is a secure building, staffed 24/, as is the Shelter. Conditions over those three days were somewhat chaotic, overcrowded and far from ideal, but at least the residents were persuaded to go there since their safety and security could be guaranteed and YWCA staff could remain with them..

Once the Shelter was cleared by authorities after three days, the residents returned to a house, albeit without central heat or hot water. It was decided that the best course of action was to have the residents remain in the Shelter while YWCA senior staff “scrambled” as much as necessary to restore heat and hot water. For almost six weeks, residents were shuttled to other YWCA facilities in Lawrence to take showers—the Fina House and the YWCA Lawrence site which has a locker room with showers.

The YWCA discovered that the electrical panel in the house (Emergency Shelter) could not even accommodate space heaters in every room, so the YWCA purchased electric blankets for residents. Fortunately the weather was not too cold for the next six weeks—the last two weeks of September and all of October.

Over several weeks, with cold weather on the horizon, the challenge of restoring some normalcy to the Shelter residents’ lives was a big one. The YWCA made various requests for assistance, reaching out to the state and to private foundations, while negotiating with Columbia Gas regarding the YWCA’s claim for damages, and its need for a replacement water heater.

Ultimately, the YWCA was able to find emergency funding to cover the costs of replacing the failed gas heating system with electric baseboard heat, and had a new electrical panel was installed to accommodate the baseboard heating and a new stove. Columbia Gas finally provided a new gas hot water heater after about five weeks, but not without repeated calls from YWCA directors.

None of this happened without incurring many unexpected costs and a diversion from the regular work of the agency’s directors, and domestic violence program staff, but the emotional costs to the Shelter residents was perhaps the greatest cost.

Thank you for considering this story of how the Columbia Gas pipeline explosions affected a unique population in Lawrence.

*Jaime Sloan-McCarthy from North Andover:* My name is Jaime Sloan-McCarthy and I am the owner of Dani Kaye Store LLC located at 85 Main Street in North Andover, MA. My husband and I own two businesses in North Andover and thankfully his company Muse Intermedia LLC was minimally affected by the Columbia Gas explosions that happened on September 13, 2018. I opened Dani Kaye on August 24th, 2017 and we had just completed our first year of business when the incident occurred. Opening and cultivating a new business in a new market is a significant undertaking by itself, and the challenge of the gas explosions has been crippling. As a new business, I only have one year of records and every piece of product is purchased outright. My vendors do not extend credit terms to new businesses and one year of records is not enough to present to a bank for business financing options. There isn't enough documentation to show viability to any financial institution to receive a loan. My husband and I were in the process of building a home at the time of the incident and were weeks away from our closing date. We were displaced for a few days from the apartment we were staying in while waiting for the home to be completed as we were staying in North Andover. We are both self employed and did not have the luxury of using our personal credit or assets to ease the financial strain in my business, nor could we seek financing even to help our business with a pending mortgage. We knew our financials were being monitored up until we closed and we could not afford to jeopardize the home we had worked so hard to purchase. We applied for an emergency loan from MCCI after closing on our home to help us and we just received it yesterday morning; it took two weeks to receive because of the back and forth between the lender and Columbia Gas regarding my claim. Two weeks is significantly longer than the 24-48 hour approval we were promised. Two weeks is a long time after losing two months of my most lucrative season right before the Holidays which is supposed to be the icing on the cake for a retail business like mine and the necessary financial cushion we need to get us to the Spring season. Additionally, we still do not have gas in my shop and my HVAC unit has not been replaced for me to have a permanent heating solution. I currently have a Rheem heating unit that was supplied by my landlord who chose to self mitigate and until this unit was installed we had two weeks where it was too cold for me to operate my business out of the shop. I am grateful for the Columbia Gas workers who have tried to help get us hooked back up, but having them continually coming through my store is disruptive to my business and makes it an uncomfortable environment for my clientele to shop.

I am proud of what I have been able to achieve in my first year of business in this market as the first upscale women's boutique in North Andover. Growing a new business takes time and planning and this is something Columbia Gas is not willing to consider as we have been dealing with them for our business claim. After the gas explosions, I did not see many customers for four weeks due to traffic disruptions and the fact many of them were impacted and displaced as well. I did not expect to see them under the circumstances. After the four weeks it became too cold for me to operate in my store and we lost another two weeks of business over this. I was still trying to do business at this time because I had to sell product to pay for product that I ordered six months prior that was cut to order for our store. Some of my vendors cancelled a few orders for us but I could not cancel everything without jeopardizing my relationships and the exclusivity of some of our brands. I also needed the product for my regular customers who expect new items when they come to see me, and I didn't want to risk having my pieces re-allocated by the vendors to other businesses. I struggled to sell inventory that was intended for early Fall and that would inevitable go on sale online and in department stores within a few months. I am still sitting on many pieces that have effectively "expired" and I have lost my window to sell them due to the shift in weather. My money is still tied up in this product which should have moved through my business by now. Columbia Gas has ignored this part of my claim which has made doing business incredibly difficult. They do not want to take responsibility for my product needs and obligations and the numbers they have presented to us have netted out and discounted all costs associated with product. Since we don't have enough history as a business, the gas company is using our numbers from last year as a base line and we had barely been open. I don't know how they can compare a business that only had under 50 customers to a business that currently has 600 and counting as people are still discovering us everyday. I have fought to build our business and reputation over the last year and I am only asking that I be treated fairly so I can continue to operate and get back on track to grow as I had planned.

Despite the challenges and losses we have endured with our business, I have still made it a priority to give back to our community. I have hosted Sip and Shop events where we raised money for the Lawrence Emergency Fund and for the Soto family. I have also donated clothing to people who have needed it. I know I am fortunate

to be operational and that others have it worse than I do and I have felt obligated to help. I hope that we will be given that same support from our community as the situation is rectified. It is imperative that the Town of North Andover will push to bring business downtown now for the Holidays to help the businesses like mine that are up and running and are fighting to get back to business as usual. The road to recovery will be a long one; small businesses are necessary to the fabric of this community and we cannot be forgotten. I opened my store in North Andover a year ago because I believed in the future and potential of the area. I intend to not only survive this incident, but continue to thrive and service the community.

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*Lisa Cascio from Lawrence:* <https://www.greentechmedia.com/articles/read/ma-natural-gas-explosions-highlight-tension-between-recovery-and-efficiency#gs.dSkRLuc>

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*Elizabeth Rocco from Arlington:* I'm a family physician at the GLFHC clinic at Plaza 114 in South Lawrence. I was in the clinic during the explosions, and I heard of the impact on my staff and patients' lives for the last 2 months. 3 of my patients residences burned down and lost everything. One patient moved out of state. The other two moved from hotel to hotel for 2 months looking for housing and only found housing last week. One had to drop out of graduate school because the cost of losing all her possessions and living in a hotel wiped out her savings. She also experienced trouble sleeping, panic attacks and depression which interfered with her ability to study and work. Most of my patients had anxiety and sleep disturbances related to the fires and explosions depending on how closely they were impacted. Many of my patients and staff have complained of exhaustion from the extra time needed to heat water on electric hot plates for bathing, the inconvenience and extra cost of not being able to cook at home and the discomfort of not being able to heat their home during the cold fall nights. Patients also missed their appointments at the health center because they were displaced from their home.

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*Erika Ody from North Andover:* While I am one of the lucky ones that was able to safely retrieve my four year old son and dog the day of the explosions, our lives haven't been the same since Sept 13th. I didn't get the opportunity to retrieve any belongings that weekend and had to drive hundreds of miles picking up and dropping off my pet and child that weekend to find emergency care and housing. We stayed in the house from Sept 15th through Oct 8th without heat, hot water, a dryer or stove. Then, we were forced into emergency housing as my son has an eating disorder and doesn't have enough body fat for sustained cold temperatures. We are attempting to self mediate and hope to be home soon but I cannot emphasize enough how little contact we had from Columbia Gas prior to this last week when they finally started to check on me. It's too little and too late.

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*Rafael Juliao from Lawrence:* My name is Rafael Juliao; I live at 26-28 Farley St. in Lawrence, MA, and own a business two blocks from my home, First Class Car Shop, Inc. On the afternoon of September 13, 2018, I was at the shop when I got a call from my family at home-they were scared; all of the alarms were going off and they were saying there was fire and smoke in the house. I rushed home and saw all of the tenants-I have a multi-family home and rent apartments to two tenants-outside looking at the house. When I got to the driveway, I called 911 over and over again, but there was either no answer or the line was busy. Eventually, fearing that my house would burn down-and despite my wife's objections-I went into our basement, where I found the furnace on fire and flames creeping up the wall. I also heard the sound of blowing air. What I now know is that it was a gas leak. I used wet laundry and buckets of water and clothing to put the fire out. I grabbed pliers and turned off the gas meter and opened the windows.

When I went back outside, more people who live on the street were coming outside, and within minutes, all of my neighbors were outside, screaming and afraid their houses were going to burn down. I worked with a few of my neighbors to go into three other houses and put the fires out and turn off the gas meters.

After that, we started hearing there had been pipeline explosions all over town. Because we have emergency supplies in our house, we decided to stay put instead of going to a hotel that Columbia Gas was offering. Even with no electricity, no gas, and no heat, with two kids, ages 11 and 18, we felt we would be better off staying at home. But it was frightening every day. It felt like a war zone in the days after the explosions. We saw people robbing the house across the street. My son was

stopped when he was riding his bike because police thought he was a looter. The emotional and psychological toll this has taken on our kids and our family has been immense. My kids both missed school; they've been cold; they've been frightened.

I thought Columbia Gas would be sympathetic and helpful to those impacted by the disaster they caused, but interacting with them has been a nightmare. Because I am a business owner, a homeowner and have tenants, I have had to deal with them on multiple fronts. I have had to call them dozens of times. I have been passed around from one claim adjuster to another (at this point, I think the number is up to six), each one requiring me to submit a different set of documents and evidence and requiring me to start the process anew each time I am passed to someone new.

One of the adjusters assigned to me for my home told me to get an estimate from an electrician and plumber for the repairs that needed to be made in the house to have temporary heat put in. The estimate was upwards of \$13,000, and when I reported back to Columbia, the adjuster simply said there was no way Columbia would agree to pay that amount. Eventually, I spoke to the foreman overseeing a crew working on repairs to the pipelines in the street, and he felt bad for us and sent men in to put in a new furnace, new water heaters, and a new stove, but we still don't have cooking gas. According to one of Columbia's claim adjusters, I shouldn't be making a fuss about not having cooking gas because we "can find other things to eat."

On top of all of this, my business is suffering. The shop was shut down for five days after the explosions; we had no electricity. Once we opened back up, there was construction in front of the shop to fix pipelines, and it was blocking the entrance for customers to come into the shop. Beyond that, there is no one left in town. How is my business supposed to survive when there are no customers?

Columbia Gas was offering me a fraction of the profits I was losing—the income I need to feed my family—and when I tried to outline not only the lost profits, but also the costs of repair that were piling up, I was met with hostility and skepticism. I've had to use money from my pension to pay our bills. When I explain to the adjusters that my business will never be the same, they don't care. When I call them to ask them when something is going to be done, their response is that we have to wait or it's not happening. I have been stunned by how poorly they treat us.

The callousness of these adjusters has been like a punch to gut. They caused this disaster. They put my family and our whole community through this nightmare. They missed their deadlines for restoring heat and making the necessary repairs. And yet, when we talk to them, they act as if we've done something wrong, like we're inconveniencing THEM. There has been so little communication and transparency during the process, and my family and I are at our wit's end. We don't know when things will return to normal, if ever.

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*Elsa Berroa from Lawrence:* My husband and I are senior citizens with disabilities, and we suffer from multiple ailments. With no gas, heat or hot water in our home, we had no choice but to go to one of the temporary trailers after the explosions. But even the trailers were cold, and because I have poor circulation, the cold affects me tremendously. The trailers were such poor quality that they would move in the wind; it felt like we were on a boat. And the park where we were kept was so badly maintained that mud gathered in huge amounts and made it impossible to get around. I felt trapped in our tiny trailer.

When our gas was finally reconnected, Columbia Gas gave us 24 hours to move out of the trailer. It felt like an eviction. We don't move so well, and we don't drive, so this was incredibly difficult for us. I needed assistance to pack and couldn't get it. It was terrible. Further, when I tried to sign up for their Thanksgiving meal about two weeks before the holiday, I was told it was too late.

I have been traumatized because now I fear my home. I blame Columbia Gas wholeheartedly for what they have put us through. Every representative I have spoken to has been unkind. It makes me feel like I'm begging for assistance and that Columbia Gas wants to seem like a hero, like they're helping us, when really, they caused this disaster with their negligence.

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*Cynthia Rwabuhinga from Lawrence:* I'm Cynthia Rwabuhinga; I live in Lawrence, MA, and since the explosions on September 13, 2018, my life has been turned upside down. I'm a teacher's assistant at a local public school, where I work with kindergartners. I'm an active member of my church and community. I rent space in a house in Lawrence, but after the explosions, it was not safe to return home. I was only just able to return home last week, but I still don't have cooking gas.

On the day of the explosions, I was assisting with an afterschool activity at my school. We were outside when the chaos started. A child was crying and said she had heard there were fires—soon afterward, the school was evacuated. It felt like a terrorist attack. I thank God the kids were at school because it could have been worse, but it really felt like Armageddon. It felt like God was coming, and I wasn't going with him. Everywhere I turned, it was chaos.

A friend told me that explosions were happening everywhere, and police were saying don't go into your houses. As I drove from the school, I saw a house on fire, smoke everywhere, everyone outside of their houses in panic. I was calling 911 but couldn't get through. I started calling everyone I knew telling them not to go into their houses. I drove a town over to Methuen and stayed with a friend's parents for almost two weeks before being able to get a hotel through Columbia Gas. We were all in a state of shock.

When I reached out to Columbia Gas for a hotel, they told me there was nothing close and that the only thing they could give me is a place in Waltham; otherwise, I'd have to wait. And please understand, I had already waited. I didn't get into a hotel until October 3. I took it, but my work and my church, where I go almost five days a week for various community programs I participate in, are back in Lawrence. Columbia Gas said they would pay for my gas because of all of the driving back and forth I was doing, but meanwhile, my car battery also ran out, my mileage went up, and one of my tires popped. In addition to the financial and physical toll driving back and forth had on me, it was stressful, and I was spending more than an hour and a half in the car every day. Columbia Gas didn't care. I live paycheck to paycheck, and they refused to give me the gas money up front, which also made it near impossible for me to afford all of my living expenses. The gas card also didn't arrive when they said it would, and they were dismissive when I tried to explain that I needed it.

\*\*The hotel that they put me up in was dilapidated. The stove and entire "kitchen" in the hotel room was run down; the stove was crusted with rust and unusable. When I tried to raise this with Columbia Gas, they were rude and dismissive. They also had someone from the hotel knocking on my door regularly to see if anyone was staying with me. No one was, but they invaded my privacy nonetheless. Eventually, they did move me to a better hotel because I'd found a threatening note on my windshield at the first place, but why did it take so long? Why did I have to suffer and feel unsafe for them to put me in a decent place when I couldn't return home?

I suffer from chronic arthritis, and this ordeal has exacerbated my pain. I'm under such stress that my hair has started to fall out; my blood pressure is dangerously high; I've started having panic attacks. I'm drowning in bills. I haven't been able to cook and so have racked up so many expenses paying for food; I've gained weight from eating poorly. I had a good life. I loved my job; I loved my church and my community. And it's crumbled because Columbia Gas created a disaster and then resented the residents of Lawrence for needing relief and support. They've destroyed our community, and they couldn't care less.

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*Brigdetann Tavares from Lawrence:* I have MS and am a single mother of a toddler. I decided to weather it out and stayed in my home after the explosions. When the temperature started to drop, we went to a hotel that was very far from my child's daycare and from Boston, where I need to go regularly for medical treatment. I am having trouble sleeping. I am under so much stress, and one of the worst triggers of MS is stress, so I have been greatly physically impacted, too. I feel powerless and don't feel like Columbia Gas is listening to us to try to lessen the burden they created for me and everyone in Lawrence.

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*Karen Martin from Boxford:* The collapse of the gas system in the Merrimack Valley, the largest disruption in the history of the industry, has significantly impacted the residents of this area, devastating many. To be evacuated, to live in a trailer not fit for New England winter or in a hotel 20 miles from work and kids' school and activities, or to remain in unheated homes for months is the largest disruption of most victims' lives.

This was a preventable tragedy. Twenty years ago when I worked for a telecommunications company, a much more inherently safe industry than gas distribution, there was a process of review by a team of experts before any product was delivered. It's unimaginable that Columbia Gas did not have such a process in place. Even with the new rules for the gas companies that will be required by this and other hearings, who will monitor and enforce the implementation of these rules?

How long will it be before some belt-tightening measure buries these rules? The aging gas infrastructure, with its many known gas leaks, suggests another disaster is possible.

In addition to the obvious safety issues with the gas system that were experienced in the Merrimack Valley, there is the larger issue of climate change. Burning “natural” gas for heat and power produces 36 percent of the carbon dioxide emissions in Massachusetts. Methane, the main component of natural gas, is a greenhouse gas that is 80 times more powerful than carbon dioxide. Unburned methane escapes into the atmosphere from the many gas leaks in the area as well as when pipes are vented (as they were in the repair process).

Our Global Warming Solutions Act of 2008 requires us to reduce greenhouse gas emissions 25 percent from 1990 levels by 2020. We are a far cry from that. The recent IPCC report declares we have until 2030, just 12 years from now, to reduce emissions by 45 percent and develop into a net-zero planet by 2050. This would allow for the possibility of keeping global warming to 1.5 degrees Centigrade to avoid the most catastrophic impacts of climate change.

With this in mind, why is Columbia Gas allowed to rebuild the Merrimack Valley with more dirty fossil fuel burning, greenhouse gas emitting equipment? Why are they allowed to install gas equipment that is not the most energy efficient equipment available? Shouldn't they be required to rebuild with equipment that runs on clean energy, reducing our GHG emissions? Why is there not a state or Federal plan that would require a rebuild after any tragedy such as this to be one that would move us to a net zero state by 2050 or earlier? Why can't we make the Merrimack Valley rebuild a model for reconstruction in the eventuality of future catastrophes?

Lawrence is one of the poorest cities in Massachusetts. In our state, people whose income is below 50 percent of the Federal poverty level, spend 40 percent of their income on energy bills. With climate change making New England summers hotter, coupled with the “heat effect” in cities like Lawrence, this expense will only rise. High efficiency electric heat pumps provide both heating and cooling, satisfying heating needs for New England winters and fulfilling an approaching need for air conditioning. Heat pumps, coupled with weatherization of homes and a plan to “solarize” Lawrence would reduce energy bills for its residents while reducing greenhouse gas emissions.

A just solution to the gas system collapse requires a forward thinking solution that would move the Merrimack Valley toward a renewables energy future. It would enhance the safety of residents and put us on a path to meeting our climate goals, sustaining a livable planet for our children and grandchildren.

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*Laura Roffer from North Andover:* My story cannot even remotely compare to the family who lost a son, or those who lost homes, but I feel it is important for my story to be heard.

I got a call from my daughter on the afternoon of the explosions. I was at North Station about to board the commuter rail home. I was under such stress, and so anxious, that I boarded the wrong train as I tried to understand what was happening. I made my way to the correct train while trying to juggle calls coming from my son, 300 miles away at school, but had heard from friends what was happening at home, and my daughter telling me she was trying to get out of the house with our dog, and other friends and family members calling and texting making sure we were OK. The early calls from my son were full of emotion as I tried to tell him that we were OK.

I had to exit the train at North Wilmington because the train wasn't going further north. It was mass confusion. My daughter & dog managed to get in the car to come get me in Wilmington. We drove back to North Andover to gather some belongings, and the scene was like nothing I had ever seen before. I entered the house with a flashlight so as not to spark anything. We all headed to Manchester NH to my fiancée. I had to use my son's car and not mine because we were turned away from Merrimack Street where the commuter rail garage is and where my car was. The house was without power from Thursday at 6 until sometime on Saturday morning. I wasn't able to get my car until Sunday when the street and the garage were opened.

From that weekend and continuing to current day I, and would assume most, have experienced a total lack of coordinated statuses, communications and solutions. I remember going back to my house to put a note on the door with my cell # so that I could be contacted for a relight, clearly not knowing it would take 66 days for me to get to that point.

I believe it was a full week after the explosions, that residents then knew the extent of the issue and had hopes of being made whole by November 19 as shared

by the recovery team. I showered for 3 weeks at the Y on the Andover/North Andover line before my commute to Boston. I bought substitute cooking appliances. I went to my fiancée's every weekend with my laundry. I bought space heaters to warm the house a bit, which in the early days was OK, because it wasn't that cold yet.

I received 2 confirmations that an assessment team would be coming on October 3. I stayed to work from home, put my dog in doggy daycare, and no one showed up. I went to work the following day to get a text from my neighbor that the crew was there. Thankfully my daughter was about 15 minutes away and they could get in and condemn all of my appliances: furnace, tankless hot water heater, dryer and stove.

As the recovery options changed, I opted to have an electric hot water heater installed with my own contractor. I spent hours making calls to plumbers and electricians to come give estimates, and made arrangements to work from home so I could explain the situation and show them the space. About a week later, it started to get cold. Options were made available for alternative housing. I called my claims adjuster, he told me I didn't qualify because Columbia Gas had made the investment in the hot water heater, so the assumption was that I could stay. I spent hours getting estimates for alternate heat options like mini-splits and pellet stoves, again, making arrangements to work from home to allow the workers in but couldn't find a reasonable solution.

Days later, I made the request again based on the upcoming colder forecast. It took 3 days for someone to get back to me with options. We were eventually provided with a trailer in Andover. We never stayed in it though, because of the inconvenience of the location.

Then came the news conference with the announcement that they would not hit their deadline. My relight date went from November 9, to November 9–19, to December 7. I read the daily updates, I checked the 72-hour schedule and the interactive map almost daily. We made the decision to stay in the house as long as the temps at night were 40 or above. If the temps were going to be below that, I took the dog with me to my fiancée's house, my daughter went to her boyfriend's house in Bolton. I never really knew where I was going to be on any given day.

Based on the December 7 date, I made the decision to self-mitigate. Again, took time to be home to have an HVAC contractor come, took the time to write e-mails, ask questions, submit estimates and eventually get something approved for a December 3 install which was the earliest my contractor could get there. I had hoped to have heat in my house for Thanksgiving so my son could come home & actually stay in his own bed.

On November 10, my street was full of various crews. I was home because I was scheduled for an assessment. But there were other crews, installing emergency heat systems. I asked one of the workers if I was getting one and he told me I wasn't on the list. I never received a call or door hanger offering that option.

That day, the assessors determined that I was eligible for the rapid re-light. I assumed that was still my December 7 date, but a couple of days later, when I called to inquire about the emergency heat, Columbia Gas said my address was on the 72 hour schedule. That was November 12. No one was home that day, nor did I get a call from a contractor, but Columbia Gas told me it was likely they'd be at my house. So I stayed home on November 13, worked in a cold house, no one came. I called to get additional information, and demanded to speak with a supervisor. He told me that I would receive a call from a contractor the night before someone would come. My address remained on the 72 hour schedule through November 14, and that was the date I finally received a call from a contractor. I let my neighbor know (as I live in a duplex), and made arrangements to work from home on November 15. It was 47 degrees in my house. I'm not sure why given that it's a duplex, my neighbor's address was not on the 72-hour schedule or why he did not receive a contractor call.

They did indeed come & work. The inspector arrived at 5. Again confusion. He was only provided with my neighbors address and not mine, but did the inspection. The Columbia contractor thought they could get the relight done that night, but that was not the case. So I drove back to Manchester.

The relight happened on November 16, 66 days after the explosions. Had I known Columbia Gas was coming earlier, I'd have had my new appliances ready for installation. I'm thankful to have heat, but wasn't able to do any special cooking for my son's arrival home for Thanksgiving and am still doing laundry in Manchester.

A few of my neighbors still have emergency heat. I have a generator outside of my front door the size of a dumpster with hoses running across the sidewalk and my lawn into my neighbor's windows. It's frightening to me to know that some peo-

ple don't have heat and the temperature in the teens, the coldest Thanksgiving on record.

My time is important. I spent far too much time and energy on this incident. Too much time e-mailing, calling, waiting at home. Too much time packing and unpacking my belongings and trying to plan my days. There was tremendous stress, anxiety and uncertainty.

While I'm thankful to those on the street performing the work who work through the rain, snow and cold temps, I am not thankful for the miscommunications and disjointed efforts across subcontractors hired to answer questions. After my relight, I received 5 calls from various Columbia Gas centers asking if I had heat. I also had a knock at the door at 9:30 at night asking if I had heat. I appreciate the concern, but I think they just can't keep up with the information as it changes, so they needed to be sure. I'm also thankful that my claims adjuster turned things around quickly, which from reading stories in the paper and hearing from neighbors at one of the open houses, this was not the case for many.

I'm hopeful that this will be but a blip on the radar when I put my house in the market in the spring and that there are no long term impacts to the housing market due to fear of natural gas in the neighborhood.

I appreciate your efforts on our behalf as well as the efforts from the offices of Senator Warren, Congressman Moulton, AG Maura Healey and Governor Baker, all of whom I've written.

Please hold those responsible accountable for this.

Kind regards,  
Laura Roffer  
978-302-0834

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*John Matera from Andover:* I live in Andover, MA, where the consequences of the Columbia Gas disaster continue to be felt. Fortunately, our home does not have natural gas service and was not directly damaged. Our community has been damaged greatly.

Loss of life and destruction of dozens homes and commercial buildings is horrific. Friends are still without heat in their own residences. Traffic continues to severely restricted, making ordinary trips arduous while circumnavigating the destruction/construction. Commerce is not back to normal—many retail and services business are still not operating normally. The loss of productivity is huge. Even if the tangible costs are remediated, the intangibles and difficult-to-quantify damages—that are nevertheless real—are unlikely to be addressed.

NiSource and its subsidiary, Columbia Gas, have not evidenced any degree of competence in either preventing the disaster in the first place, but in making repairs or even estimating when they will be complete. No one has explained how this was allowed to be possible. Why weren't redundant safeguards in place? What assurance do we have that the same level of negligence will not continue?

My friends and neighbors live in fear or what is next. Will there be an audit of cybersecurity at all of the gas utilities in the country? If not, haven't we just trained terrorists how to blow up cities? The likelihood of companies that allow such unsafe gas networks to be in place will have good computer network security is low. Are we one hacking incident away from another catastrophe?

Mostly, we fear that nothing will happen at all. The utility executives and regulators will keep their jobs and get promotions and bonuses instead of being held accountable. We will continue to live with sub-standard utilities and infrastructure that should be an embarrassment to a nation that is supposed to lead.

Sincerely,  
John Matera

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*Isabelle Ceron from Lawrence:* The worst part of the gas disaster for our family was that my son was alone at home in South Lawrence when the explosions happened. He is a teen, and he was terrified. He called me at work, telling me about the terrible gas smell, the sirens and helicopters, and I told him to get out. We met on the road between Lawrence and North Andover.

Because of all the commotion we went to my sister's house in North Andover. However, there too there were fires and everyone was evacuating. At first, we were just out in the front yard trying to understand what to do. Then we understood we had to evacuate—and in all the commotion we made a hotel reservation and drove what took about 2 hours to Manchester. Once we got there, we realized that this wasn't the place where we made the reservation. We'd been so upset we didn't write down the name correctly. The place we went to didn't have space. So, we turned

around and went back to North Andover and stayed the night at home. We knew we weren't supposed to, but the gas and the electricity were out, and we had nowhere else to go, so we stayed home.

The next morning, we went to Lowell to eat, since there was nothing open around us, and we didn't feel comfortable staying home.

We were lucky that our gas was turned on after the first weekend, since we were on a high-pressure line. My sister stayed with us for 65 days until her gas was returned.

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*Elsa Berroa from Lawrence:* First, it's important that the senate committee understand that we were all subjected to a terrifying event. I was certain that I was not going to survive on the evening of Sept. 13th. I heard sirens and helicopters and heard something rushing out of the basement of our triple decker. There was a terrible odor of gas, and I realized the rushing sound was the gas coming out. I ran for my life onto the street—and then I saw that a house down the block was already on fire, and the street was filling with smoke. We hopped in the car and evacuated with everyone else as quickly as possible. We went to stay at one of our children's homes.

A painful headache started that evening and has plagued me on and off frequently since then. When evening comes, I feel jumpy and afraid—as if again this awful fear and dread will overtake me. I feel so relieved that the over pressurization of gas didn't happen at night—we all would have been asphyxiated in our beds. There are two kids upstairs, my granddaughter on my floor, and a child downstairs. I think of how we all could have been gone.

We remained evacuated for 4 days, and when we returned at last our apartment had no gas appliances.

We were told a space heater couldn't be installed even though we requested it. It was a hardship for us to purchase our own space heaters, but we had to. Even though we could get reimbursed from Columbia Gas, it wasn't an easy process. I don't have Internet or a scanner at home, and I'm retired, so it was a lot of trouble to get reimbursed. Perhaps if this ever happens again the gas company should accept pictures of receipts to make reimbursement easier or provide cash before a purchase is made.

To cook, we were supplied a hot plate. I cooked on the hot plate, an electric fry pan, and the microwave. No hot water, which was very uncomfortable.

Then it began to get quite cold out, and it was very uncomfortable to be in the house. We requested a trailer close to our home for temporary shelter. We're on a limited income, and it was too much for us to go far to a hotel, have meal and gas expenses, and be uncertain if we'd be reimbursed, since Columbia Gas said they'd provide me a refillable debit card—but the funds were never put on it. Therefore, I couldn't trust leaving my cold apartment to go far away. SO I requested a trailer, and was told by the claims agent they would call me back. I called again, waited, was transferred, and was told again that they'd call back. There was so much negligence in setting up the temporary housing. After about literally a month, and after getting very cold, I finally had a friend of mine who works for the city call Columbia Gas. They did give us a trailer that night—but far from home. I went to the site and saw the mayor there, and he finally got us set up for a trailer close to our home. We moved there the next day.

However, the thing about the trailers is that they turned off the heat when we left the site, and we had to request that they turn it back on, and then had to wait for the space to heat up. It was certainly a nuisance. I didn't cook in the trailer because I don't want to use gas.

So, 63 days after the explosions I still get headaches in the afternoon. I still have trouble sleeping—I stay up watching boring TV with the hopes of sleeping, but really have a hard time getting to sleep at night. And I am still afraid of gas—and am so happy that my landlord got us an electric stove. All of this has made me wonder why I don't just leave all this trouble and retire to my native Dominican Republic.

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*Alice Fulton from Lawrence:* While checking on my 92 year old mother in Haverhill on September 13, 2018, as I do every day, life as we know it changed for the foreseeable future. My wife, Lora, had received word from a friend that houses were exploding in Lawrence and surrounding towns, and nobody knew why. i agreed to go home, get the cats, and she'd meet me there so we could decide what to do. I was battling a heart condition at the time, so was moving very slowly. As I walked past one apartment at my mother's residence, I heard a television news report stating that people just didn't know if their houses would be next to explode, since no-

body knew why the first seventy homes were on fire. One of those homes is 1/4 mile from ours, and was completely lost because there were no more crews to fight new fires at the early point when it broke out.

Approaching Lawrence on Route 495 it looked like a war zone, with smoke billowing from several house fires across the horizon of Lawrence, Andover, and North Andover. The confusion, lack of communication, and lack of disaster planning were on the horizon as well, though we were unaware of its effects at that point. The automatic response from other cities and towns was amazing. I saw emergency vehicles that were like no others I had ever seen before, and as the days ticked by thereafter, they were joined by fire apparatus, police, and gas company workers from far-reaching cities and towns like Boston, Brookline, Holbrook, Randolph, and Atkinson, NH.

Once home, it took me nearly an hour to gather the cats, place some low-sodium foods in a bag to eat wherever we were to land, and load all this with a few bags of clothing and personal items (including my new medications) into my car. As I made one more pass around our home to assure that I had not forgotten anything essential, a neighbor pounded on the front door, asking to be let into the area where our gas meter was located. He had an off-duty fireman with him, who was voluntarily shutting off the gas in any homes he could. After the gas was shut off, I sat to gather my thoughts and catch my breath on the bench outside our garage. Lora arrived shortly from work in Boston, reporting that traffic was already at a standstill on roads leading out of Lawrence. As we began to process what we knew of the situation, which was only the beginning of the uncertainty that became "the new normal" of the next few months, some neighbors joined us, one of whom had a scanner. We all sat in our yard, hearing that it was taking hours for traffic to leave the area, that there was already one break-in at a house on a street nearby, and discussing that our only options for the night were to go hours away where we would have no hope of monitoring the situation directly. We, and our other two closest neighbors, decided to stay put, as we were unwilling to leave our cats, nor to be stuck in traffic for hours to go . . . where. . . ? Nothing seemed like a better alternative, since our gas had been shut off already.

At approximately 8pm, electricity was shut off to the area. For the next three days until it was restored, we quickly opened the refrigerator to get what we could, heated things on the gas grill (including making packaged ramen noodles on the grill), and used rechargeable light bars to see at night (that I had thankfully kept charged for emergencies). We periodically sat in our vehicles, engines running, for hours to recharge devices so that we could get any news at all. Devices seem to charge faster if the vehicle is moving, but we didn't dare drive farther than around the immediate block, because people were not being allowed into the area during the rumored evacuation. The rest of the world knew more about what had happened than we did, it seemed, since we had no access to television.

The first night had been eerie, at best, with helicopters flying about all night, no light, and a plan we had devised in case someone came to the door in the darkness. At 2:30 a.m. we were awakened by pounding on our front door; a Boston Police Officer, and a gas company employee from Fall River came to check that our gas was, indeed, shut off. He determined that it was, and they moved on. At 2:00 p.m. the following day, another crew came to check the same thing. It's great that three different people/crews came to assure that the gas was off, but as the months marched on, it would have been better if crews knew what other crews had already done. We were visited by no less than four different crews to do the same thing at most every step of the restoration process. We liken it to always expecting company, never sure when they will arrive, and never arriving when they have said they would, so we could never leave or stop looking out the windows. The interactive maps and 72-hour lists were never accurate; more on that to follow.

Three days after the electricity was shut off to the area it was restored, and that made things easier, but there was still a lot of uncertainty and lack of information. We had no idea when or how gas service could be restored, so the wait began. We made sure there would always be someone home, as we knew nothing about when someone might stop by to do something toward that goal. After a week or two, we stopped waiting, as the information just was not coming (and what little that came was inaccurate), so we went about our business, returning to work and keeping appointments. Sure enough, when Lora was at work in Boston and I was at a medical appointment in Brookline, a neighbor called her to say that someone was there to begin some phase of work at our house. She rushed home in the middle of her work day, determining that she'd get there quicker than I would, and met them within an hour. The neighbor had detained them for us, otherwise, who knows how long it would have been before anyone came back (we received zero notes on the door to say that someone had missed us, no calls in advance of workers coming until the

very last stage of the work/relight, and people coming by unannounced in almost every case).

Columbia Gas made the effort to publish information that they felt was accurate, but it never was. For some reason, our street was never on the lists stating what streets were to be worked on over certain days, so we were unsure if we were in the queue at all. The interactive map was a great idea, but was never accurate, changing our expected work dates four times over, sometimes stating that work was done that was not done (so we would not be on their radar to come do it), and taking four days to be updated. Every call we made or contact in person was with people who were referring to the same information, so they were telling us that phases of the work were completed at our house that were not. Adjustor #3 refused to approve an alternate heating source because their data stated that our gas would be restored within four days of that conversation, which was not close to what actually occurred. We attended forums, sought resources, and had to fight for everything we've been reimbursed for so far. It has taken three hours per day to do this job, including monitoring websites for information, speaking with workers in the streets and neighbors/reading local message boards for real time information, standing in lines, deciphering published information that isn't necessarily accurate, learning new terminology, and fighting for what we were promised. We are on our fourth adjustor; I never even dealt with #3, #4 has changed the rules for things I was told by #2 regarding reimbursement of lost wages, and #2 tried to refuse our claim for a replacement five-burner stove with convection oven by trying to talk me into whatever they would provide (no convection oven, four burners, ordinary stove). Is Columbia Gas prepared to reimburse us somehow for that time? **\*(UPDATE: I JUST missed a call while writing this from Adjustor #4 checking to see if I received his e-mail (I haven't), leaving me a telephone number to call back that states that the voice mail box is not set up, so I can't reach him to tell him any of this.)\*\***

We are fortunate that we were able to afford to install a temporary electric water heater for \$1,900, and purchase a suitable stove, awaiting reimbursement for both. Not everyone is well enough to withstand indoor temperatures below fifty degrees, as worries began about the need to drain pipes and evacuate our home. We are fortunate to have had gas restoration completed immediately prior to the fifteen degree night before Thanksgiving. We are fortunate that we are able to self-advocate and persist to get our needs met. Others are not, and their stories are heartbreaking. I hope that our story helps in some way to tirelessly continue the fight to get the needs met for every last person affected by this incident. This is not over yet, even for those of us whose service has been restored. Pipeline work should have taken place 24 hours a day, 7 days a week, not taking whole days off for rain, Sundays off, and many not working on Saturdays. The remaining work should not have run into freezing weather, with people displaced from their homes, now indefinitely, while four crews come to do the same work. We were fortunate that Lora could work from home for this time period, but there were days when she had meetings that she could not miss, so I had to lose a day's pay to also be home for work to be done. I anticipate another fight to recover lost wages due to that uncertainty. Our furnace is installed and operational, but not adjusted properly, so we need to spend more time pursuing adjustments once triage is completed for people who have no heat.

Thank you for pursuing resolution of these issues, for speaking for those who can't or can't as effectively, and for caring about what we've been through as well as what is still to come.

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*Lynne Rudnicki from North Andover:* I have a couple of questions. 1. Our street lines and meter equipment have been converted to allow high pressure gas. Is the pressure on street lines now or in the near future being increased to high pressure. 2. Will residents receive prior notice of increasing the pressure of the gas on the street lines? Note: many residents have experienced gas leaks after installation of new service lines and equipment change. Prior notice should be required so we can know to be aware. 3. Only the lines which experienced over pressurization in our three communities have been replaced. How many miles of gas lines and meters are needed to bring the rest to current standards. 4. Since the impacted areas have very irregular boundaries, will there be prioritization to finish replacing aged leaky pipes and updating the gas meter equipment in our communities. Residents of the impacted areas will certainly be concerned for a long time about nearby lines which have not been repaired.

*Thomas Schaefer from North Andover:* Here is a quick summary of our two month nightmare . . .

- When Columbia Gas relocated our gas meter from indoor to outdoor, they installed the pipe to connect the gas main to our existing gas line within the home. When our plumbers did a pressure test on this line, they noticed there was a leak
- We witnessed endless amounts of misinformation. A Columbia Gas rep I called on the phone rudely informed me that if I were to have my stove and dryer installed by someone other than Columbia Gas that I would be liable for all damages.
- We stayed in our house the entire time (some days the temperature was 47 degrees inside) and Columbia Gas was only willing to reimburse me \$7 of my \$160 electric bill for October.
- The three hour window for a Columbia Gas rep to come and install the gas meter and relight our home turned into 7 hours of waiting

My wife and I began our journey through the Merrimack Valley Explosions by returning home from vacation exactly 24 hours after the initial event occurred. We had no direct experience with the way emergency services handled the evacuation but were told by our neighbors of the chaos and diligent efforts by both the police and firefighters in immediate response to a growing catastrophe.

From the beginning of the experience we were not informed of the scale of damages done throughout our neighboring towns. We were reliant on the news for information almost immediately. As the first week progressed we didn't receive a call until, at earliest, September 21st, 8 days after the event.

I was forced to gain any real information from social media accounts held by Columbia Gas and neighbors. Columbia Gas did nothing to communicate the extensive amount of damage that occurred during the emergency.

We attempted our first claim at a claims center set up by Columbia Gas located at First and Main in North Andover. After speaking with a representative who did not work directly for Columbia Gas he informed us that they would be offering us \$100 gift card to help with initial expenses, we didn't end up accepting it as the representative claimed that if we accepted it sometimes Homeowners insurance could be denied as we accepted benefits from a separate entity.

Approximately one week after our first interaction we were informed that we would be receiving a call from Columbia Gas to set up and delivered space heaters. We never received that call. We were forced to find alternative ways to heat our home and deliver hot water. I made a purchase of a propane burner that would allow us to heat up large quantities of water for bathing and washing up.

Desperate for information we continuously called the Merrimack Valley affected customer line provided by Columbia gas for answers to our mounting questions. No information was provided other than requests for our patience as they continued their work. After continually reaching out for information and not receiving it we began to get frustrated. Columbia gas then announced that they wouldn't be making their deadline and if you wanted to have the problems solved it would be quicker to self-mediate their issues. I would rather have gone this route because I didn't not trust Columbia Gas to attempt to repair my appliances. We contacted a company to quote us for the work they said was required for us to receive gas again. By then we had a claims adjuster that worked for Columbia Gas to work on our claim. After a lot of back and forth I received a commitment to pay for the work. I paid \$6,000.00 out of pocket to reserve a time for the work to be completed on November 19th and waited for Columbia Gas to pay for the new equipment. And still, there was little to no information being shared with people in the affected area.

After purchasing a new dryer and stove we contacted a separate company to install our new equipment I called Columbia Gas to make sure that it was OK to do so. The woman on the phone rudely informed me that if I were to have my stove and dryer installed by someone other than Columbia Gas that I would be liable for all damages. I asked her how she figured that as we had in no way affected the safety of our home to which she replied if anything happens we are liable. This was the final straw for me in contacting Columbia Gas as I knew that the people they put in charge of communications were severely unqualified and frankly disrespectful.

At this point we noticed our deadline for restorations had been updated on Columbia Gas's restoration map. The dates on the map changed each week and never really provided us any valid information. We were now on the 72 hour list for restoration with a relight date the day after the work I had requested from our plumber would be completed.

We were on the 72 hour list for 10 days without a single call or visit. I took time of work to make sure we wouldn't miss our opportunity to have gas restored. They never showed. The last week however I received several calls. Sometimes 4 times a day to make sure I had been contacted. I repeated the same information several times to not bother me as I was self-mitigating the damages and had received money from claims to pay for the work. Three times we had Columbia Gas representatives showing up at my home asking to do the same inspection of my home. I informed them each time that they had already done this work. They told me that the organization of Columbia gas was abysmal and unorganized. On Sunday, November 18th Columbia Gas relocated our gas meter from indoor to outdoor, they installed the pipe to connect the gas main to our existing gas line within the home. When our plumbers did a pressure test on this line, they noticed there was a leak

On November 21st the work in my home had been completed and I needed to call the relight team to turn on my gas. Everything had been inspected and approved. I was told the earliest the Columbia Gas employee could make it was three hours. I needed the meter installed and gas to be turned on by an official employee. The three-hour window I was given ran up and I called again. I was told an employee had me scheduled. After another hour I called again asking when I could expect the employee. I was told 9 pm, seven hours after I was initially told three hours. I sent the plumbers (who has been waiting in my basement for the past five hours) home as I can expect them to put in 14 hours in a day. When 9pm rolled around I called for the last time saying that I didn't believe they were coming. And employee showed up at 9:45pm and the first thing he said to me was "please don't tell me you have steam heat" of course we do! They called in a plumber who got my boiler lit and ready for heat. On November 22nd at 1:45am I had my appliances restored to previous condition and our nightmare was over. I have never seen a company more unorganized . . . you would think after two months of this they would have had established a better system instead of the complete chaos we witnessed.

One of the worst parts for me, was how cheap Columbia Gas was being with the claims reimbursements. They refused to pay our October electric bill. We had to send them July–November 2017 electric bills and compared it July–October 2018 and the currently bill. They only willing to reimburse us \$7. Not sure why they would compare it to summer months when we run our ACs non-stop. That was comparing apples to oranges. The whole time we stayed at home, while only being able to run one space heater at a time. We obviously used more electricity than we normally would have.

With each passing week it got harder and harder to live the way we were living. Some days our house averaged 49 degrees.

After all the stress and anxiety we went through these past two months I don't feel comfortable having Columbia Gas as our gas company in Massachusetts. We saw how they reacted in a disaster. I feel disgusted thinking back on how this whole process unfolded and the lack of Columbia Gas's response. They made us feel like we were the burden when we had to alter our lives for the past 65 days.

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*Maureen Elliot from Andover:* We have owned our house in Andover for over 30-years with virtually no water our basement flooded and Columbia Gas refused to pay for a French drain and other repairs. What people have gone through, is beyond disgusting.

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*Carolyn Bonier from Lawrence:* I was one of the lucky ones. I had my gas back on in 4 days. However, the night the disaster happened was the most upsetting night I have ever experienced. I am 79 years old and live alone with my dog. I was watching TV when the explosions started happening. In a few minutes I lost power. When I went out on my deck, I could smell smoke, hear sirens and three helicopters were circling over head. I later learned that the closest explosion was about 10 houses away from mine. A neighbor came by with a wrench and turned off my gas. I decided to go to visit my husband who is in a nursing home, thinking he would be worried about me. When I got to the nursing home I learned that everyone in the disaster area had been told to evacuate and that there would be police barricades blocking off entry to South Lawrence. I began to get very upset because I had left my dog at home. I knew I had to get her but I was afraid I wouldn't be allowed into the neighborhood. I decided to wait until about 9:30 to go to get her thinking there might be less police presence. I had decided I would walk in if I was blocked from driving in. Also I had nowhere to spend the night because my friends with cats would not allow me to come with my dog. I got to the barricade on the edge of my neighborhood around 10 PM and, after sitting in a line of cars for about 20 minutes,

I was told by the officer that I could get my dog but to “hurry back”. I went to my house and fed the dog and went to bed. I felt that I couldn’t use a flashlight or even my cell phone because the light might alert the police and they might think I was an intruder. I had real difficulty getting any sleep. I felt strange hiding from the police. They drove by with their blue lights on frequently. The next morning, a friend with a dog offered me a place to stay and my nightmare was over. However for the next few weeks, I cried whenever I thought about that night. I jumped whenever I heard a siren and felt depressed in general. If I reacted so strongly from one night of trauma, I can only imagine how bad it must be for the thousands who have suffered for months because of this disaster.

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*Alice Fulton from Lawrence:* Still writing, please check back tonight, when I will submit. Need to go do parent care now, but will get it in tonight. Thank you!

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*Dr. Angela and John Barnes from Andover:* We have been displaced from our home, due to the Columbia Gas explosions since September 13th 2018. We were able to stay in our affected home until then solely because the weather cooperated and was above 55 degrees.

As of today, November 25th 2018 we STILL do not have heat or hot water in our home and we are ALSO without electricity. Yes, there are NO working utilities in our home.

We reside as tenants in our historic Shawsheen home which did not pass the electrical capacity test in order to run even temporary heating solutions in the current voltage setting. The homeowners (residence is in trust) are making decisions from other locations and are removed from the situation. You can understand the trickle effect this is having on us all.

I am sure our story is similar to that of other families displaced and impacted. We are working professionals and also owners of businesses, missed time at work is not “simply” forgiven by “missed wages” paid by Columbia Gas. We have careers and cannot “just” miss work. There are other implications longstanding due to missed days due to this Columbia Gas disaster.

Contractors, who don’t show up on time or show up out of the blue due to poorly coordinated efforts are upsetting, when we have changed our work schedule according to the online information link per Columbia Gas and this ridiculous contradictory information on the Columbia Gas website regarding relight dates. The IT efforts at the back end change our home address relight dates DAILY. We have learned that we cannot rely on any information listed. Why is this public information listed incorrectly and updated incorrectly daily? Who needs this incorrect information? It’s not provided for the residents. Is it to satisfy safety or government guidelines?

We have also had the unfortunate circumstance of daily communication with adjusters who won’t work with us on approval for everyday and necessary expenses, even though, keep in mind, Columbia Gas is the one who created this mess.

We don’t have all day to run back and forth to a laundry room at a hotel or laundry mat?? We have a system in our home to make laundry, food and work all happen, which we can no longer use. Our basic rights disrupted and at the mercy of adjusters to decide.

In the immediacy after the disaster we scrambled from a hotel in Danvers to maintain our careers and commute while driving back and forth to take children safely to school in Andover, waking children up at 5am to feed them breakfast and paying additional childcare costs to drop them off early at school so we could have enough time to drive around in newly created traffic.

When we were able to safely return to our home we had 25 days of residence WITHOUT the use of hot water where we microwave water to fill our bathtub and or take sponge baths. Do you know how long it takes to fill a bathtub of water on the second floor of a home to properly clean 3 children (never mind we parents)? I can tell you. It took 2.5 hours of continuously going up and down the stairs. Cooking on a hot plate and microwaving food for children and all the while trying to keep our own health. How can one spend that many hours a day bathing and cooking while trying to keep up with professional work obligations and also keep some semblance of a healthy home for children??? Pretending like all is well to mitigate any further stress on the children?

We relocated permanently to a hotel on October 8th 2018, only with the assistance of Jim Lyons as on my own I was unable to find a Columbia Gas, Worley or Adjuster who would APPROVE a direct bill on our hotel room.

We were told countless times by Columbia Gas, Worley and Adjusters that they only would only approve one queen bedroom with a shower for five people before for 4 weeks of time, despite the fact that I had a private reservation for a two bdrm hotel in Tewksbury at a corporate rate!

Since the move to our hotel room, we are grateful to have a roof over our heads however one needs to understand it doesn't all end there. It's no vacation, no fun, no break from it all. Now we must rise at 4:30am daily, pay for additional school drop/childcare to drop for 7am so we are able to continue our careers and operate our businesses just to make it on time. These are additional expenses above and beyond what is reimbursed by Columbia Gas, Worley or adjusters. I was told these expenses would be denied.

Maybe this experience seems trivial to the executives and management of Columbia Gas. Multiply these types of situations—increased traffic, missed work, etc due this situation becomes stressful beyond comprehension, from an event that really should not have happened at all.

Our story tends to diverge from others because we have 3 children under age 8 yrs, one of whom has special needs. Try speaking to children about this situation. When our children ask when will we be back in our home, our answer is, truthfully, “we don't know”. Who knows, truthfully, if we will be back to our home by Christmas. Columbia Gas is such a joke. Try answering questions about, “how Santa will find us mommy and daddy?”

How are parents supposed to put on Christmas from a hotel room??? From the looks of our nonoperational home, we will be spending Christmas like Thanksgiving. Thanksgiving was not one we'd like to relive as we were not only not able to host our family, we were not able to experience our traditions, we weren't able to teach our children about our family traditions or serve OUR abundant bountiful traditional meal—from our family.

Sure, the dinner provided by Columbia Gas was a nice half-measure. Really, that is all it was. We waited in a car line for an hour to wait for food, thinking “this should have never happened to us”. I would rather have spent that precious hour of time with my family.

This is what Columbia Gas needs to hear. Our lives have BEEN TURNED UPSIDE DOWN, whether it is waiting in line, waiting on the phone to speak to someone, waiting for a contractor has been extremely disrupted by the negligence of Columbia Gas. Compound these situations by months and months of NO answers, no wonder why our community is unsettled and uneasy.

John and Angela Barnes

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*Denise Velez from Lawrence:* This nightmare began for us Sept 13th at around 4:30. We were lucky to not have started cooking our dinners yet. My parents own the home I live in. Its technically a 2 family but it is 1. I live upstairs with my 2 girls and my elderly parents live downstairs.

On the day this started their was nothing on the news on TV or radio, phones nothing. We evacuated across our street lawn and garden store in front of our homes. Only through word of mouth, facebook, and neighbors listening to scanners were we even slightly aware of what was happening. We sat at a loading dock surrounded by burning and exploding homes. Smoke in every direction. Watched smoke surround my home and worried that my home was not hit with fire. I was one of the “lucky” ones on my street. Out of 8 others the blasting furnaces stopped only 2 doors down. The three homes before that had charred, melted furnaces, and burnt basements. Luckily a neighbor was a firefighters son. His knowledge helped us. That night we slept with our eyes open, listening to the news on the radio. My kids anxiety was greater then I've ever seen before and they've been through some awful trauma. They begged and pleaded for us to leave but we had nowhere to go till the morning. The only person saying there was any threat to our safety was Mayor Rivera. Columbia gas was a ghost!!! They did not communicate to first responders nor residents.

Eversource was put into play and things started moving. I had to be placed in a hotel because I am handicapped. Need the hot water. I am in a wheelchair and I use a cpap and nebulizer. They got us back into our homes 4 days after the explosions. Then we realized Columbia had finally stepped up and was trying to cover their tracts. Since CG took over there has been a constant barrage of people in and out of our home doing the same thing the other has done.

No one at CG would give me an answer to a simple problem. I had an old

*William Sahlas from North Andover:* My family's daily routines were altered and disrupted by, and because of, the Columbia Gas disaster. My wife works for the City of Somerville as a teacher in 3rd grade. Someone in her situation would NOT have had the necessary free-time bandwidth nor cooperation from her employer to recover from the disaster without the help of a significant other. I was able to be the primary person in the family to be the contact and liaison to Columbia Gas restoration efforts because of my employers cooperation. If it were not for a very understanding employer, Brightcove Inc. HQ at 290 Congress St. Boston MA, I would not have been able to successfully undergo the steps needed to navigate the recovery efforts.

These steps and efforts are still going on today. There's bookkeeping and accounting to deal with keeping track of the costs for repairs and appliance replacements. There was significant time involved to be with those who were doing the appliance replacements and home repairs. The hours that I put into the recovery efforts were very significant.

I cannot imagine how some others are dealing with this ordeal who have not the same understanding employers or the financial means to fund the repairs needed while waiting to be reimbursed. Not to mention the temporary heating sources that had to be put in place.

Having lived through the ordeal I feel that we are owed more than just an apology from the NiSource/Columbia Gas. The cold showers and cold rooms and disrupted holiday season as a result of the disaster will not be soon forgotten. Thanks for the memories Columbia Gas.

Regards,  
William G. Sahlas  
43 Woodbridge Rd  
North Andover MA 01845

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*Rachel McEnroe from Andover:* This fall, we have been part of the affected area of the Merrimack gas explosion. We were evacuated for 2–3 days, went two months without hot water, just got a portion of our heat back last week (November 20th) and still have not had our stove and oven inspected and turned on. While dealing with this for a short period was OK, over the fall it had a significant impact on our daily routine (who wants to exercise when it requires you to heat up water on a hot plate in your bathroom in order to shower) and has taken a lot of energy and time to 'self-mitigate' by arranging for new equipment, plumbers, and inspectors to come by—and we are very lucky that we could handle the upfront costs ahead of reimbursement. While we have hot plates to cook at home and have been OK, the local restaurants have all been closed for two months and we typically rely on take-out or dining out 1–2x/week because of busy schedules and that too has been both an added drain on us and a tough thing for our local economy. I cannot imagine what this would have been like had we not had some heat or had a gas dryer or had to relocate because of those things. There needs to be better safety procedures put in place for this kind of work and better state or Federal oversight.

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*Carolyn Popescu-Pretor from Andover:* THIS IS A CRITICAL INFRASTRUCTURE PROBLEM! USA missed the wake-up call many years ago.

On September 13th we had gas fumes in our condominium. Our family needed to leave immediately. We also had dirty water. Our water was so dirty, it clogged the furnace valves. While we have numerous workers troubleshooting the situation, we currently have no hot water. On a record cold Thanksgiving Day, we had no heat. I'm genuinely concerned there was error in determining the correct replacement gas-fired boiler for our unit.

The initial install date for our boiler was October 8th. Today is Sunday, November 25th, I have heat—but no hot water. We have not had consistent heat and hot water since the initial incident. Naturally, the current potential for cyber incidents affecting pipeline business systems is a national concern. Leaving this tremendous responsibility of public safety to private industry is reckless. The blame game, please lets not be naive.

<https://energypost.eu/vulnerability-electric-utility-system-cyber-attacks/>  
<https://www.bloomberg.com/news/articles/2018-04-04/cyberattack-bleeds-into-utility-space-as-duke-sees-billing-delay>  
<https://www.forbes.com/sites/jamesconca/2018/03/28/how-on-earth-did-russia-hack-our-energy-systems/#73d7a21a6104>  
<https://www.reuters.com/article/us-usa-cyber-russia/russian-hackers-penetrated-networks-of-u-s-electric-utilities-wsj-idUSKBN1KE03F>

<https://www.independent.co.uk/life-style/gadgets-and-tech/news/russian-hacking-attacks-us-power-grid-sewage-explosions-a8462691.html>

<https://www.wired.com/story/hackers-gain-switch-flipping-access-to-us-power-systems/>

Carolyne Popescu-Pretor

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*Jorma McSwiggan Hong from Lawrence:* Dear Senator Markey,

First, I'd like to thank you and the other representatives for coming to our community today, it is encouraging to find that many of my own concerns were those voiced by you and your colleagues. I left a handwritten testimony today, not realizing that there was an online platform available, and didn't include any of my personal information. For ease of documentation, I thought it might be a good idea to submit my testimony electronically as well. My household was affected as well, but I focus here on the effects of the community as I witnessed while working in Lawrence.

I'm currently a graduate student studying public health, but until very recently and including the months following the disaster, I was working as a nutrition educator in the Lawrence Women, Infants, and Children (WIC) program. The office serves low income pregnant and breastfeeding mothers and their children. This is a community that cooks daily, typically from scratch. It took one mother three hours to cook the afternoon meal for her family on a hotplate. Another mother, pregnant, experienced increased nausea and vomiting while relying on convenience take-out foods that she would not typically have chosen to eat. Pregnancy and infancy are short windows in which to begin healthy development, and to an extent this was disrupted by the explosions and subsequent displacement of our communities. Mothers who had frozen breastmilk in anticipation of returning to work lost their supply as it thawed during the power outage in the days immediately following the explosions. Some mothers were unable to continue breastfeeding their infants, so great was the disruption of the evacuation and multiple relocations. This interruption potentially has life-long health risks to the infants affected. Breastfeeding in the first 6 months of life, per WHO recommendations, is attributed to helping establish the immune system, reducing allergies, and protecting against type II diabetes and certain types of cancer. In the event of a disaster such as this, it is important to recognize that in addition to the immediate damages endured, the health of a future generation has been affected as well.

Thank you again, Senator, for your time and representation of the Merrimack Valley community.

Sincerely,

Jorma McSwiggan-Hong

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*Elizabeth Cunningham from Andover:* Lack of clear plan and protocols to restore power. Teams of 8–10 would arrive together at homes numerous times, often dirty and disruptive. I am a 73 year old retiree who ended up flagging down a Columbia Gas VA truck driving down my street. He was kind enough to give me his phone number, which I called often to receive step-by-step directions. He sent the right person my way each step of the way. Without his assistance and my financial resources, I still would not have heat. I had numerous visits after I had heat, as CG was clueless as to the status of individual homes.

It was clear that Columbia needed to assign a project leader to each street, and provide residents with their phone number. Recovery required leaders, as you can't just throw people onto a disaster without a clear plan.

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*Maureen Omara from Andover:* On September 13th I went home to find an in tact house and there hadn't been a fire, thankfully, but not being able to get into my house and not knowing whether it was safe to even be standing in my front yard was a very unsettling feeling, one that took a few days to resolve. Trying to get to where I was staying and then back to work the next day, wearing the same clothes as the day before, and then trying to figure out how to get the logistics for my week-end guest and myself to get someplace else was a task in it's own right. Knowing the gas was turned off when I was able to go back home was better, however I still had to deal with the unknown. The days that followed were spent trying to figure out where to shower if I didn't want to take an ice cold one in my home and/or what and where to eat—that was a bigger battle as I have an autoimmune disease and try to eat a specialized diet. People who were not affected were great in reaching out offering up a place to shower, do laundry and have a home cooked meal. The

YMCA was great in providing a space to shower but it was just one more thing to try to find time to do in an already tight schedule. There were mornings I just sucked it up and took a freezing cold shower—not a great way to start your day.

Then there was coordinating when I had to be home for someone to come to assess my home—could we get a space heater? I live in a very old home so I knew that wouldn't happen. I had to take off time from work to do so during one of the busiest times for me. The next day Columbia Gas announced there wouldn't be any more appointments as they were going to use the approach that everyone would need new systems and appliances; that was incredibly aggravating. After that it was like radio silence—when would someone come back? Would I have to be home? How much notice would I really get so I could be sure I could miss work. Every day in limbo.

When the opportunity arose to relocate to a hotel as I live in the affected area, I took the steps to do so; that was a process in its own right and was just one more thing that you didn't know when you were going to be contacted. When I finally was a message was left saying there was a reservation for me at the Embassy Suites at Logan Airport however there was no information left as to when the reservation would start, what might I have to pay for, etc. It took five different phone calls to get the information and it turned out the reservation had started the day before. Yet one more thing to be aggravated about. I appreciated having a place to go but the fact that I work in Wilmington meant for an even longer day every day. I was at the hotel for almost five weeks.

Trying to keep up with the tasks associated with this mess became and continues to be exhausting and almost as if I have an additional part-time job. Not knowing what to expect—more importantly what information to trust has truly been the greatest source of my frustrations around this event. When will someone be at my house to inspect it? Will someone actually show up when they are supposed to be on my street? What if someone comes and I am not home—will then come back and when? What could you get reimbursed for as far as expenses? Is the map posted online the actual work plan or will that change? What could you actually get reimbursed for? I heard different things from different claims adjusters, neighbors and others affected. That kept changing and continues to this day to change. Information about what you can still be reimbursed for changes too depending on what you read and hear from others. Having to keep pestering my claims adjuster about the weekly per diem and getting continued clarification about what was and wasn't reimbursable—that became a regular task; he was just as frustrated at times as the information kept changing. Different people calling—about claims, the status of the work being done at my home, etc.—trying to return phone calls and having to play phone tag—more time sucked up and more frustrations. The daily updates—great that Columbia Gas tried to keep us informed—but most of it was information none of us really needed. We wanted to know if our street was listed as a work site to be gas ready/house ready was that really the case? Having an actual window of time someone needed to be home would have helped so we could try to plan to continue to go to work and take care of things we needed to/wanted to. There are things that are still unknown—when will my stove come off of backorder and then, realistically, how long will it take to get installed (and the old one removed from my house)? I understand this situation is one that hasn't been experienced before and there are many moving parts and many people with a say in what happens or doesn't happen however I still feel things could have been a little more streamlined; even there had been one phone number to call to have your questions answered about everything instead having to reach out to different people and/or physically go places—that would have been an improvement.

I am fortunate that I am a renter with a proactive landlord as if that wasn't the case, I more than likely would still be living at the Embassy Suites at Logan Airport. I am fortunate that I'm not afraid to be proactive, have stayed on top of things and have a responsive claims adjuster who continues to reach out and make sure I have what I need. Each day though I come home to take care of another 'Columbia Gas' task. I'm tired and just want things to go back to normal.

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*Richard Oneil from Andover:* About 10 years ago we had a non ignited explosion in the front of our house in the middle of our street which was caused by a leaky gas main it did not catch fire but we were evacuated none the less there was never a cause or response or any such information given to us and this just solidified our feeling of unsafeness. It's obvious that the infrastructure is failing all over the area, what are they going to do? Perhaps replace all lines?

*Howard Garshman from Auburn:* Senator Markey—I applaud your efforts re: Columbia Gas, unfortunately you are not seeing the larger picture. The DAILY dangers and risks the gas companies are exposing an unknowing public too, make what happened in Merrimack look like a firecracker.

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*Frank Dushame from North Andover:* Good Morning Mr. Markey:

It was a very chaotic day and time for all affected, and the day and stories and memorable for many. Mine was not as tragic as some but very clear in my mind like many. I was home that late afternoon and could smell gas in my house. I had new appliances but an old gas line system. I first checked the stove and could smell the strong order from there so I proceeded to shut the gas valve off behind the stove and was going to address it later. I was headed out to dinner that night so I proceed to leave my house. While driving to the top of my street I remember seeing a lot of first responder activity and was wondering what was going on. As i headed up RT125 towards Haverhill I saw many fire engines headed toward North Andover from other communities. I called my cousin to see what the hell was going on because one is a firefighter and another a police officer. He told me the news and after picking up my girlfriend I told her we were returning to my house to get my dogs out of there. It took us over 55 minutes to get back and upon arrival I opened the door and a tremendous gas smell came from my house. The dogs came running out and jumped into my car and we left right away. It has been a long and sometimes difficult 2 months and I know for me and many that those thoughts, experiences and images will always remain in ones mind. Thank you to all the first responders and people who have been assisting with this difficult time and situation

Frank Dushame

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*Suzanne Vazquez from Andover:* Good Morning,

I have been impacted by the Columbia Gas Explosion. I live with my husband four children and my brother with special needs. One of my children has a medical condition that needs to be closely monitored. In the beginning we could stay in our home and learned to take 5 minute showers. The showers were cold but manageable. As the weeks went by and the temperature dropped, I began the search for housing. The process was tedious with many phone calls and me explaining my situation to numerous people. My family started by hotel jumping, finding what ever hotel was available relatively close. Then, the hotel became fewer and far between. My children's after school activities make it difficult to live further away because I would not get home until 7/7:30 on a good night. The hotels were paid for by me and then reimbursed by my adjuster. My adjuster has been a life saver. He understood my situation and worked tirelessly on finding me permanent housing. After a few weeks, we were placed in the Rec Park trailer site in Andover. I was not originally placed there but my adjuster and the site manager had room for my family and accepted us there. This made my stress and anxiety levels subside for a while. My children and brother had a safe permanent place to call home. There was weak wifi at the site so my cell phone bill has been overcharged for three months due to my older children needing Internet access to do homework. Sometimes they would brave the cold and stay at the house to do homework and come to the trailer around 11pm to sleep. This would make waking up in the morning a challenge for all of us. The site managers are awesome! They are so friendly and accommodating to all our needs. The school where my younger children attend rerouted a bus to pick up my children. I can not say enough good things about the staff at the site.

The second week in November Columbia Gas came to my house to begin the restoration process. The fore told me they would be in and out in two days. The crews were at my house for eight days. I had to continuously call out of work because I could not get a straight answer as to when they were going to be done. When there crews had finished, my new unit did not work. I took a week and countless phone calls to have someone come back to my house. Finally, a CG worker came to my house, I took another day off from work, and he looked at the system and explained that "they" have not been trained on the new systems and he didn't know how to fix the problem. He reset the unit again and told me call the emergency line again to have another crew come back to me house. While I was waiting at the bus stop with my younger children, there was a crew beginning their day down the street. I ran over to them and asked if they could get in touch with someone who could come back to my house. A young man told me that he would be at my house when he finished assessing the house that he was at. An hour later, he came to my house and reset the system again. He gave me his number and told me to text or call if the unit went off again. I text him two more times that day. The following day a

whole new crew was at my house trying to solve the problem. The problem turned out to be the pipping. The pipes were too small for my house. The standard pipes that were installed were too small and now I have 4 1/2 inch pipes. The pipes are on the side of my house leading to the driveway. Now anytime that the weather gets cold, my driveway freezes. I have missed a ten days of work, so far, and may have to miss more when they come back to take my appliances. I am aware that a person 18 years or older needs to be home but I am an instructional assistant and taking this many days off of work has affected my ability to teach my students. I am responsible for their learning and help improve their way of learning. This does not happen if I have missed out on a weeks worth of classroom material. I am currently back in my home with heat and hot water but no appliances. I understand that there is a lot of work to be done, I do wish that the communication was better between CG and residents. It would be a little easier if I could let my administration know when I will be out of work. I have a lot of out of pocket food expenses and cooking for a family of seven, now eight, on a hot plate is quite time consuming and difficult. Not to mention, there is only so much take out one can really have. I have exhausted all the local take out places and fronted a restaurant bill and waiting to be reimbursed is expensive. This is only just the physical toll that this explosion has taken on me and my family.

There is an emotional side effect as well. My children's school work has suffered greatly due to this incident. They have missed assignments and sometimes emotionally fragile during the school day. The unpredictability has taken it's toll on the younger children and they have become sleep deprived and emotional. My older children have become sleep deprived and irritable, more so than teen angst. There is constant tension between my husband and I as to who will take off work. I have more sick time to do so but I am also missing important class time with my students. I too have become emotional at work due to the stress.

I have no time line of when my appliances will be removed or replaced. There have two assessor at my house in regard to the appliances but no action.

The lack of internal communication is infuriating.

Thank You,  
Zana Vazquez

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*Lee Bluemel from North Andover:* As a clergy person in North Andover and a resident impacted by the gas disaster, I see the impact of this disaster from many angles:

1. As a clergy person, my initial response was to ascertain the needs of my congregation members, to coordinate congregational support with food, appliances, living spaces and emotional support. We were incredibly lucky in that none of the members of my congregation had fires or explosions in their homes; other clergy did have members impacted, and I believe six churches were without heat for weeks. Immediate response also included networking with the churches in the state to direct them regarding where they could send special relief collections that Sunday to the ECCF.
2. As a clergy person, next phase response included attending three community meetings in Lawrence to hear from residents who were impacted regarding their experiences and needs. These were coordinated by Merrimack Valley Project and interfaith clergy. We learned from these meetings the need for temporary heat in homes, the need for additional translators on the streets, and the need for greater funding for therapeutic support. We also learned of a desire to reduce gas usage and to switch as possible to electric appliances. These concerns were all shared with the presidents of Columbia Gas and NiSource, and with Gov. Baker in a letter signed by 17 clergy and other supporting organizations. They were then shared with Mr. Steve Bryant, President of Columbia Gas, in a meeting with 23 clergy from the area. He took notes at that meeting about our requests; however, we did not hear back if, when or how these concerns were addressed.
3. Our interfaith team continued then to listen to residents, attend community meetings, contact the State Attorney General's Office, the Office of Energy and others to try to continue to raise concerns, especially regarding an overlooked issue: the lack of energy efficient equipment being brought in by Columbia Gas to people's homes, resulting in more gas usage and higher bills. We also led a community educational session on what to look for in equipment, since Columbia Gas was not offering that education and much of the equipment there were offering was standard efficiency or poorly sized (and thus inefficient) for homes.

4. As a resident, I looked into Air Source Heat Pumps when Columbia Gas initially said these would be covered and received a quote; CG then reversed its earlier stated policy. I then looked into solar hot water heater or heat pump water heater, since I have solar on my roof, and then requested the most energy efficient option for my home from the CG list, but was told again and again by my adjuster that I was only eligible for “like for like” replacement of old equipment. I was also told that I could not get a fireplace insert because I was too close to my re-light date, even though I knew from the meeting with Mr. Bryant that those re-light dates were in question.

The gas disaster has consumed my ministry for the past two months, and it is clear to me that Columbia Gas and NiSource must be required by law to shift to a safety culture and an energy efficient culture. They have not done these things on their own. They should also set aside funds for the non-profits in Lawrence who have been saddled with so much extra work, as well as for solarizing the valley and bringing in energy efficiency programs, which they have not done when they had the opportunity.

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*Leslie Diaz from North Andover:* Good morning,

How do you even start to express the magnitude my life has changed since September 13, 2018 to sum up how emotionally stressed and without a voice I feel every single day is an equality to been rape and robbed. Every day is a new struggle and challenge and I'm going to quote a phrase I was told by one of Columbia Gas employee “I'm just a one man show” while I was trying to explained that my basement has been flooded ever since they worked outside. I was livid so I used his own phrase and told him how would you feel been a one woman show single mother dealing with all of these with no moral or physical support from no one?? He couldn't say anything. Precisely I said. To put in a little box all the frustration, headache, hopeless, helpless I feel throughout all of these it wouldn't fit here and I would have to spend days writing. My only hope is to get back to my home take back my regular life and put all these behind me.

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*Janice Phillips from North Andover:* Comparatively, my family doesn't have a horrific story to share. We are safe and sound and returned to our home 62 days after Columbia Gas's negligent error caused explosions in North Andover, Andover, and Lawrence. Those 62 days were full of worry, chaos, panic, and exhaustion. But, I am grateful. I am grateful we are safe and sound. I am grateful we have had a reasonable and responsive claims adjuster who does want us to feel whole again. The boots on the ground in our home were kind, patient, and respectful as they tried to understand our fear and frustration while working to fix our home. It's simply that no one who isn't part of “the affected” can truly understand the impact.

From a purely logistical level, dealing with this disaster caused by Columbia Gas completely overtook our lives. Early on, it took hours of watching news outlets, digging around on Columbia's website, stalking their twitter feed to looking for any shred of accurate helpful information. The problem? There was none. Personally, it took 2 weeks before I could finally track someone down, who wasn't just placed on a street corner in a truck to hand out a phone number to call, who could actually physically come to my house to tell me whether I had low pressure lines and was in this for the long haul or we'd be back up and running soon because we had high pressure lines. Unfortunately for my family, we had low pressure lines and we realized we were in this for the long haul.

I can't even convey the number of hours of all of our lives this has eaten away at. Hours upon hours trying to get answers on the phone. Hours upon hours waiting and waiting some more because Columbia gas \*should\* show up at my house sometime in the next 3 days. The toll on my entire family, living in two places, never having what we needed in either place is not something I can put into numbers. Our base of operations had to continue to be our home in North Andover as it was early in the school year, peak sports season for my kids, and we were trying to continue with some semblance of normalcy. Each day the temp would drop in my house and eventually, it stopped rebounding. I'd drive in from Danvers, to drop my high schooler off, spend an hour at home with my 5th grader before his drop off where we would snuggle under blankets keeping warm because our home was not approved to use space heaters, then I would begin my “normal day”.

I was working about 10–12 hour days at my actual job, and spending any spare moment I had trying to get answers about what was happening in our home. My kids would head home to wait in a cold house for sports practice and we'd regroup

around 8–9 pm each night to get packed for the next day and trek to Danvers. This didn't seem so bad at first, day 2, day 5, day 7, I mean, there was a warm breakfast after all, a novelty for my kids. Then it sunk in. This wasn't ending anytime soon. This logistical nightmare was actually my new normal. Sitting in my freezing cold house while we tried to live our "normal" life day in and day out, with no end in sight. The logistics were completely overwhelming and depressing.

The emotional toll is also not to be forgotten. The terror each and every time you hear sirens, to this day. The true mental suffering of each and every member of my family as our lives were completely torn upside down. The tears of exhaustion from myself and my kids as we trekked back and forth to a warm bed. The missed parties and social events because you can't just "pop over" from Danvers.

Most significant is the loss of trust and security in our own home. The loss of ability to feel safe in the one place that should never be taken away. Our fearful tears, because we are afraid that this will happen again, sad tears because we know that many of our community members had their lives far more uprooted than we did, these are the things that each of you who caused this disaster CANNOT understand.

I DO consider my family fortunate but this is way more than an "inconvenience". This is a life changing, man made disaster that could have been prevented. At the upper levels, this project has been woefully mismanaged only increasing the levels of stress on the affected residents. Don't worry though, we have come together and formed an unstoppable bond only understood by "the affected". We will fight for each other and support each other until each and every home is back up and running. However, the toll on our mental health will take much longer to heal.

What's done is done, we are forever changed. We NEED Columbia Gas to step up to the plate. You can't take your mistake back, but you need to make it as right as it can be made. Again, we are not an extraordinary story. Just a story of a working class family, fighting hard each day to get through having our world turned upside down.

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*Mark Ross from Peabody:* I'd like to suggest that every home in the area has a high pressure gas sensor installed that senses over pressure and prevents what recently happened in the Merrimack Valley. There no other way to make people feel safe regarding gas coming into their home. Personally I'm willing to pay privately for the installation but feel that gas companies should be more likely to pickup the expense.

Mark Ross from Peabody

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*Clara Ruiz Vargas from Lawrence:* My family and I are one to be grateful on being blessed as one of the luck ones. My heart goes out to each everyone one individual that was affected by this senseless, selfish, irresponsible disaster that not only greed was a great factor but lack of humanity from CG.

In this whole process I've endured sickness, depression, humiliation, fear and so much anger!

Not only did CG is fully responsible for what we are going thru they have made me feel like if I'm the one responsible for their negligence with their lack of communication and heartless ways in handling this disaster.

To be where I am in this horror movie I had to beg every single day for over five weeks!

No call/e-mails from my adjuster when I requested a budget for more heating source, for housing, for my stove, for my HW & Furnace, reimb. for heaters, until I threaten her with all of our politicians in charge including TRUMP! Now tell me was that necessary! My family and I bundled up in one BR to keep each other warm when temperature dripped just because they were trying to save every penny for CG. and not realizing CG was the cause of all this!

Once again we are very lucky to be here today and have a place to call home but it doesn't change the fact that we are all victims of CG's negligence!

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*James Allick from Andover:* Dear Senator Markey,  
Under normal situations I would not take the time to comment, but in this case I feel the need to say something.

I have been a long time resident of Andover but this mistake by Colombia Gas really proves they are among the worst business group I have ever seen.

As of last week I finally got gas back at my house, this is after of miscommunicated facts by Colombia Gas And to note I had been living in my car

as it had been hovering around 40 Degrees in my home, I have a pet which precluded me from any hotels, and Colombia Gas did NOTHING to help me. I was told to find housing on my own, I did the charge for the month of November was \$1400.00 I turned in a receipt as instructed by Colombia Gas. they are not doing ANYTHING to cover that expense. Now upon replacement of the stove they by accident unplugged my refrigerator and causing ALL the food in the fridge and freezer to SPOIL AGAIN. their reply was did I take pictures????????? No another \$300.00 out the window.

In closing I would not wish this on anyone, And Colombia Gas has done NOTHING TO HELP ME much less the people of Lawrence, Andover and North Andover but they did offer a Thanksgiving dinner. . . . Thanks ALOT!!!!!!!

Jim Allick  
Andover, Ma 01810

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*Linda Battalagine from North Andover:* On the day of the disaster my daughter was home. My landlord had come home and smelled gas, he called Columbia Gas and a tech came to the house and said we were fine. He told my landlord that the levels of gas in the house were in acceptable range. My landlord MADE him shut off the main. By the time they got out side my neighbors house was on fire then the house across the street, there were six fires within a block radius of my house. After they assessed the damage to our house, not only were the appliances condemned but also the gas lines in the house were damaged do to the high pressure and we had several leaks that had to be repaired. So much for being "safe".

Also my daughter was traumatized she called me hysterical looking for the pets and trying to evacuate everyone by herself in what I can only describe what looked like a war zone.

In the days, weeks and months following—dealing with the claims reps was frustrating and difficult to get reimbursed. First when I asked about housing (moving cost or hotel) I was told "we offered a replacement water heater, don't pay your rent". Which I refused to do as my landlord was a victim. Three weeks in I caught pneumonia from the stress, and taking cold showers and sitting in a cold house. At least six men where in my kitchen tearing out the appliances that were built into the cabinets. I put in a claim for take out that week and it was denied. They stated "we gave you a hot plate". . . . I was so upset they it was expected of me to work around all these men doing stuff in the house while in bed with pneumonia to whip up a healthy dinner for my family on a two burner hot plate! I should have been in a hotel!!!! That saved them thousands of dollars.

The only reason I got into housing was because of the local officials that required CG to do so. It took them four or five days to put me in housing after that. When they did they put me in Manchester NH!!!! I was commuting to my job in Boston and commuting took 5-6 hours a day!!! They put me in a hotel room with one bed and a pull out couch! I had to share a bed with my teenage son. I ended up calling around myself and I found a local hotel that CG reserved that was empty!!!! And the trailers were empty as well, I suspect they put us in Manchester so we would refuse the housing and they would not have to pay that bill. I did get into the local hotel after about 9 days.

They promised to give me a food syphon after that and never did. I am out 14K of which I have only been reimbursed for about 8K. I did finally hire my own attorney who will work with CG to get me reimbursed for all my expenses.

I think the worst part is the attitude that we should somehow be "grateful" for everything CG has done. They hired a company that deals with natural disasters to handle the claims process. The difference is that this was not a "natural disaster" it was negligence and my experience with CG through this process has been for them to blame everyone else and NOT take responsibility. From making my landlord responsible for housing, to thinking that a hotplate and space heater should be sufficient in dealing with the aftermath.

The worst part is in the end all of our bills will probably be increased to cover the expense of what their oversight and greed has caused.

Their executives make millions annually in a salary while I am on single mom who gets by living pay check to pay check. I have everything back now . . . but this disaster will have long term implications for me. . . . I am still out 8K and we will not have many gifts this Xmas as a result. My car had to go into the shop as during this I had put over 3000 miles add'l onto my car. My kitchen is still damaged as the appliances where custom fitted and the new ones don't fit so we will need a carpenter to fix. Workers broke things in my house while they were tromping in and out without knocking (one time my daughter was alone and changing in her room).

I lost time out of work, and when I was at work I couldn't concentrate as I had to deal with the lack of communication and fighting to get reimbursed for certain items.

CG did not care about what their negligence caused . . . they cared about the perception of the public. They rushed through to complete the pipeline and gloated to the press about how they completed what was said couldn't be done. They forgot that 8000 people were still without heat or hot water the day of that press release, they did not care if people were getting ill, or making a crazy commute. They neglected the human element of the disaster they do not deserve to be in business and it is my hope that they are forbidden to work in Massachusetts after this. I would rather see that than get my 8K back.

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*Lawrence Teachers' Union Local 1019: December 4, 2018*

Dear Members of the Senate Committee on Commerce, Science, and Transportation,

The Lawrence Teacher's Union, Local 1019, AFT MA, AFL-CIO, would like to offer some brief written testimony regarding the Lawrence Gas Explosion of September 13, 2018 and its aftermath. We are attaching some news clippings, press releases, and internal memos to support our concern for our students, families, community, and our members. We are attaching a survey taken by members who lived in the affected area.

The explosions directly affected the homes of approximately 270 unionized AFT MA members and their families. Most of the 140 teachers, 90 paraprofessionals, and 20 clerks were without heat, hot water, and stoves for over two months. They were relocated to hotels and trailers and suffered the inconveniences of not being able to cook, take a shower, or sleep in a warm bed in their own homes.

The gas crisis also exposed the weakened gas infrastructure in all school buildings throughout the city. Differed maintenance of school boilers and HVAC systems reached a crisis in the weeks following the explosions, as the school department struggled to turn on the heat in the schools before the cold temperatures could set in.

Students and teachers were inconvenienced by multiple evacuations, fire drills, and delays. Young children were exposed to cold and rain as they were moved to other schools.

The Parthum School, although deemed safely situated in another part of the city, was constantly being evacuated for nearly two weeks due to gas fumes of an unspecified origin. The quick thinking of a school custodian found a leaking roof top unit at the school. The gas fumes were circulated back into the building through the exhaust system. The problem was rectified but the parents and public were on edge. Mayor Rivera stationed off duty firemen in all the city schools to insure safety and peace of mind.

The crisis also brought out the best in the Lawrence Public Schools. Union members and administrators worked with the Red Cross by assisting in the shelters and comforting families. Staff read and played with children as their parents made arrangements for alternate housing and assistance. I am proud of their efforts, particularly the staff of the Bruce and Rollins Schools who suffered from school fires in 2016 and 2017. We are lucky to have such dedicated and caring unionists.

On November 1, AFT President Randi Weingarten came to Lawrence and toured the neighborhoods and the schools before visiting one of the trailer parks. At the Breen School she distributed hats and gloves to the 4 and 5 year olds to help ward off the winter's chill. These littlest victims of the natural gas fires and explosions took to President Weingarten as she read and talked with them. President Weingarten knows the Breen staff has a big job ahead of them but knows well that they are up to the challenge.

We thank Mayor Daniel Rivera for his exceptional leadership, transparency, and courage during this crisis. He is doing an exceptional job.

We are deeply grateful to the Lawrence Fire and Police Departments as well as all state and regional public safety and public works departments. They keep us safe.

We are grateful to the American Federation of Teachers and the AFL-CIO for their support. As a gesture of good will at Thanksgiving, the union distributed \$300 worth of Market Basket gift certificates to every affected member. This was a modest gesture of support to our brothers and sisters who were affected by the explosions and struggled through the recovery effort.

We hope for a safe and swift resolution of this prolonged crisis. May we all stay Lawrence strong!

Respectfully,  
Francis J. McLaughlin Jr.  
President  
Lawrence Teachers' Union  
Local 1019

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*Chief Patrick E. Keefe, Chief Roy P. Vasque, Chief Charles P. Gray:* On September 13th, 2018 the City of Lawrence Massachusetts, along with the neighboring communities of Andover and North Andover, experienced a natural gas disaster, which is being described as the largest disaster of its kind in our Nation's history. This incident was the result of the over pressurization of a low pressure gas main, resulting in explosions and structure fires in these three communities. The Dispatch Centers of Lawrence, North Andover, and Andover were immediately inundated with hundreds of frantic 911 calls from terrified residents, as the smell of gas and clouds of smoke filled the air. The City of Lawrence alone received five hundred and fifty-six (556) calls between 4:10 PM and 8:00 PM. The Town of North Andover received roughly 198 911 calls in the initial moments of the incident. The Town of Andover received over 300 calls for service during the initial hours of the event. The men and women of these three police departments immediately responded without hesitation to this unprecedented disaster, doing what was asked of them without concern for their own safety. As Chiefs, we were tasked with coordinating the immediate evacuation of all residents as the fires began and continued to spread with no end in sight. Entire neighborhoods were filled with terrified residents, leaving their homes with just the clothes on their backs, as the magnitude and danger of this disaster remained unknown for a period of time. The three Chiefs immediately called and spoke to each other to determine the scope and magnitude of the event. The Chiefs, after determining the proximate cause was gas related, had officers on the roads and in cruisers begin to use their public address systems to tell people to get out of their houses. Cruisers drove through the affected area warning residents to rally at local evacuation sites. During the initial hour of the event, local fire apparatus was tied up at fire after fire. Police officers were tasked with locating other structure fires and alerting central dispatch. It was at this time that a call was made to Rockingham County New Hampshire for assistance. This is something that has never happened before.

As the situation was unfolding, an incident command location was established immediately adjacent to Interstate 495 and Route 114 at the borders of the three neighboring communities. As Chiefs, we immediately realized that an emergency of this size would require a significant amount of law enforcement personnel, far greater than that which was available in all three communities combined. As a result, we collectively established a safety plan utilizing the Massachusetts State Police and the Northeastern Massachusetts Law Enforcement Council (NEMLEC). The Council is made up of sixty (65) communities and Sheriff's Departments from Northeastern Massachusetts. NEMLEC provided personnel as well as additional communications and command capabilities to aide in the implementation of a constantly evolving safety plan. The Massachusetts State Police provided similar assets as well as providing helicopters to oversee the entire operation.

At the command post, the three Chiefs sat in a meeting with the Governor, Lieutenant Governor, the State Fire Marshall, Fire Chiefs and the two town managers and the Mayor of the City of Lawrence. Also present were members of MEMA, the Columbia Gas. The meeting focused on turning off residential and business gas meters, as well as shutting down the power.

As it was deemed necessary for safety reasons to shut down the power grid, a mass evacuation of the disaster zone was implemented. This required closing all exits from the highways and blocking all secondary entrances to the zone, while still allowing people to safely evacuate the area. Following the evacuation, the next essential task was to provide safety and security in the disaster zone which, with the exception of strategically placed temporary lighting, was in total darkness. Officers also were teamed with firefighters and Columbia Gas personnel to begin the arduous task of shutting down every gas meter in the affected area, approximately 8500 meters in total. This was done in all three communities well into the night and early morning. Massive amounts of police, fire, EMS, and gas company personnel were used to complete this task. As daylight broke, the plan required an avenue for law enforcement to assist residents in temporarily returning home to gather medication and other essential items. This effort was carried out with assistance of buses

provided by the Merrimack Valley Regional Transit Authority and the Massachusetts Bay Transportation Authority.

Throughout the first two nights where power was turned off, cruisers from all over Massachusetts arrived to patrol the affected areas. Cruisers maintained a visible presence to all those still in the area, both residents and potential criminal elements saw a cruiser on every block all through the nights.

These efforts continued for two (2) days until the power was restored on day three (3) of the event. As the evacuation order was lifted, law enforcement personnel assisted residents with the safe return to their homes, and continue to maintain the visible presence giving people a sense of safety and peace of mind.

As each of the affected communities attempted to return to a sense normalcy, it became clear that there would be an unprecedented amount of road construction underway simultaneously in all three communities. Once again, this required another adaption of the safety plan that would allow for the utilization of law enforcement personnel from Massachusetts and southern New Hampshire, as needed on a day-to-day basis. The three Chiefs quickly contacted NiSource and established a work agreement for the use of police officers in the work zones related to this incident. This was required to ensure the safety of motorists and pedestrians as they tried to navigate through neighborhoods in which virtually every street was affected. As alternative housing locations were established throughout the three communities, a law enforcement presence was maintained. Both of these facets of the plan are continuing to this very day.

The overwhelming cooperation, collaboration, and professionalism of all law enforcement personnel involved from the outset of this incident until this very day has been simply amazing. While no amount of training or preparation could have adequately prepared our three communities for this disaster, this is without question one of the finest hours for the Massachusetts law enforcement community. In closing, it is important to note that none of these highlighted law enforcement successes would have obtainable without the support and understanding of the residents who we are sworn to serve.

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*Jennifer Vallone from Lawrence:* Her is my story . . . On that day I got home from work approximately 3:45. I was on the phone with my husband, i heard a loud bang. I figured it was a car accident so I looked outside and saw nothing. I walked back to the kitchen and smelled gas, thought maybe the cat had turned the knob on the stove, looked and saw nothing. Then I heard the smoke alarm going off in the basement, I opened the door and the smoke just started filling up the entire house. I was still on the phone with my husband and said something is really wrong here. I walked down a couple stairs to the basement and all I saw was flames. I screamed into the phone the house is on fire and immediately hung up on him and called the fire department. They told me leave the premises and evacuate the area there's been multiple gas explosions in the area. I grabbed me keys and two dogs and ran out of the house. The smell of gas was so strong and when i saw the flames I knew it was bad. As I pulled away from the house my husband pulled up like a bat out of hell and I saw him run into the house from my rear view mirror. I immediately knew he was going in to save the house. I parked my car and ran back to the house to make sure he was ok, the house was filled with smoke, he was running around looking for a wrench screaming he had to shut the gas off. He yelled at me to get far away as he was running down to the basement after he found a wrench. He shut the gas off and the flames went out. He saved our house from burning down. After he knew we were ok, he grabbed two wrenches, he gave one to our neighbor and they both ran around the neighborhood shutting gas meters off to save other peoples homes. There were no firefighters, police or any help for almost 2 hours. It was like a movie, helicopters flying above, people running around, kids crying. It was horrible.

We ended up being without gas for 57 days. That time was the most stressful time of my life. Carting kids around to hotel rooms to shower. Trying to figure out different ways to cook for our family. The worst thing is the worry. I am worried everyday that something like this will happen again. I lay in bed every night before I fall asleep wondering if the smoke alarms are all working, I have a suitcase packed in case we have an emergency again and we have to leave our home suddenly. My husband has nightmares at night to this day, talking in his sleep. My 9 year old can't even take a shower without calling me to make sure I'm still here or asking me if I'm ok. This incident changed our lives forever.

*Margaret Stone from Londonderry:* I am writing on behalf of my Mom, Rita Kimball. We were in the process of selling her home and signed a purchase & sales agreement on 9/14/18 the day after the disaster. Her house is on 53 Dana St. Lawrence & it was considered to be in the high impact area. At the time my mom was living in a nursing home (age 87) so I was the contact to get any information of what we needed to do regarding the disaster. I repeatedly called the Columbia Gas phone # to get info with no answers, their usual response was since we are in the high impact area we can't tell you any information at this time. I actually gave them my cell phone # and still no call backs. We originally had a closing date of 10/19/18 but due to the disaster & no Gas or appliances we had to extend it to 11/19/18 and now it all set to close on 11/30/18. I'm just puzzled as to why no one called me not one time except on 11/17/18 to ask if we were all set & if our gas was on. We didn't even have a stove at that time, they delivered the wrong furnace which had to be replaced which took an extra week, when someone came in with the water heater & noticed they delivered the wrong furnace. Finally everything fell into place the following week. The total lack of information that was given out during this trying time was exhausting. No one not even the workers could tell you anything when you saw them in the neighborhood. If they did tell you something it was usually the wrong information. It's stressful enough trying to sell your family home but to have this on top of everything else was truly trying. I must say that every worker that we encountered during this process was very polite and caring. My family appreciated all their hard work they have endured. Our situation was not as bad as other people including my sister who was also impacted during this time. She actually purchased all her appliances and she got her gas quicker than expected. Fortunately no one was living in the house at 53 Dana Street or this would be an entirely different response. Just the total lack of communication.

left me speechless. Thank you for listening and thank you for your hard work during this time. I no longer live in Lawrence but work in the area and still have family in this city.

I hope that Columbia Gas realizes the major impact of this terrible disaster.

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*Juliann Porter from Lawrence:* On Sept 13th I received a call from my neighbor, a little before 5p, telling me that houses were exploding and I needed to get home to get my animals. I was at work in the Lexington area and begun the very long ride home, panicking the entire time that I would be too late to save my 2 dogs and 2 cats. By the time I made it into N Andover the emergency was full on and it felt like a war zone as I inched closer to my house. Just about 2 blocks from my house, someone tried to stop me and he made a rude remark when I told him that I had to get my animals. I immediately lost my composure and drove up on the sidewalk to get around him, in a complete panic. I ran in my house and threw all my animals into my car. Right after this, a house, approximately 5 houses down, basement exploded and I jumped in my car. My husband was unable to get into the area and we agreed to meet in a parking lot in Methuen. It then took me another hour and a half to make it those few miles to get to him. We were lucky to have family that were able to take us in for the evacuation, but that weekend was supposed to be filled with joy, as my brother was getting married. We were now in shock and without anything except the clothes on our back and our animals and had to figure out a way to still celebrate. The ensuing months just brought more frustration as the communication between Columbia Gas and those of us affected was horrid, at best. I lost those first 2 weeks of work due to robo calls telling me to be home for the next 48 hrs only to have nobody show up. After that it was just luck of the draw if you were home when they came. They repeatedly, did the exact same inspections with no progress at all. At the end of October, they finally were installing our combi unit, but this took 5 days because nobody was familiar with them. The removal and installation process was a joke as nobody was even aware that our appliances either hadn't been removed yet or that we hadn't even picked out new appliances. The workers on the ground were all very nice and working hard, but appeared to be just as confused as we were, as they were not getting direction from Columbia Gas either. I am grateful to be up and running, but feel as if we will never quite be able to return to our normal, prior to that day of Sept 13th.

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*Doug Porter from Lawrence:* This whole experience was a lesson and a scary one at that about how bad the flow of information was kept and shared. None of the workers knew where to go or what to do. I had workers in and out of my house four times to assess appliances and heating system. They took pictures of them every time they were here. The removal of the condemned appliances was a night-

mare, they skipped around. When it came time to install heat and hot water, only a few workers seemed to know about how to install and wire controls for the systems they installed. It took four to five days at each person's house. I know plumbers that could have everything done in half the time. Then with the stoves and dryers, you'd call and they said one thing but we're doing another. They told people they weren't installing them, yet they were. The miscommunication in all this was horrendous, surely in this day and age of computers, there should of been an app from Google or Microsoft that could of kept all information and shared among the workers as to what each address needed. Many people had to use vacation or sick days to be home for the reconstruction process only for them not to show up. FRUSTRATING! Many people ended up getting sick too. Some with pneumonia or bad colds or flues. I myself got bronchitis because of a cold damp house. This could of gone quicker and easier if they actually had proper communication and worked in an efficient manner.

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*Vicente De La Rosa from Lawrence:* Vicente de la Rosa Consejo Terapeutico Familiar. Es imposible entender como ocurrio este desastre que a creado confusion, ansiedad, temor entre los Residentes que vivimos en esta ciudad, ami que como consejero terapeutico familiar y Miembro del Comite intergrado por Sacerdotes, pastores, Capellanes y consejeros, me a tocado escuchar a muchos personas miembros de nuestras congregaciones donde han expresado su agustia y temor haun cuando se escucha el sonido de Emergencia muchas personas estan aun en panico y asta han expresado el deceso de mudarse de esta Ciudad por el temor que esto pueda vover a ocurrir, ami en particular que me toco junto a mi esposa Rosina estar por mas de un mes viniendo en un Trailer a sido muy dificil, su conducciones de salud se empeoran y aun esta en recuperacion, mi nieta Marlin enferma pir mas de dos semanas y aun no se recupera del todo apor que teniamos que pasar por esto? Por la negligencia de Columbia Gass, y no nos sentimos seguro de que vuelva a ocurrir y tengamos que atravesar por situaciones peores en el futuro, aun no se puede estar seguro en toda la la Nacion porque estamos viendo en tiempo donde nadie esta seguro, con sistemas de distribucion muy obsoleto y vulnerable a cualquir persona mal intencionada en sus manos queda impulsar leyes que nos permitan vivir con mas confianza.

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*Kate McHugh from Andover:* November 26, 2018

Initial Shock

On September 13 I returned home from the hospital after having a total hip replacement. A casual friend drove me home. She had been to my home only once before. It was 10 minutes before the evacuation alert was sent.

I truly believed that I had minutes to leave my house. I believed my life was endanger and that I would lose everything. But what could I do? What options did I have? How could I get the cats out? I could barely walk on crutches, I couldn't go down stairs easily, nor could I drive. Neighbors went door to door to turning off gas valves as others huddled in the street in disbelief. My friend ran to CVS to get my crucial blood thinner and pain med prescriptions. When she got there, employees were fleeing. They said they could not help and told her go to any other CVS. By that point, my street was closed and there was gridlock on Elm Street and Rt. 28. I needed those meds as blood clots are the most serious risk of death post hip surgery. My friend, not knowing the area, admitted she wanted to get home. What was I to do?

This 30 minute period brought back another awful trauma . . . 3 years ago my husband died suddenly as we were commuting to Boston. I was as helpless then, as I was on Sept. 13.

I was scared and frightened throughout that long initial 4 day period; every night a different crew came to check the house for gas. But my gas was turned off. What are they looking for? What is the danger? Feeling afraid in your own home is something you never forget.

Turning Challenge into Opportunity

A community of "affected" folks shared info about getting resources and alternative heat. This is how I learned of a safer, more energy efficient way of heating my home. It appeared that the safest and alternative was a ductless system. In fact, it would be more energy efficient as my steam heat has only one zone. A mini split system would allow me to heat only the rooms that I am occupying.

So, I was proactive and asked Worley if I could get approval to research other heat sources, namely a mini-split system. My adjuster replied that that shouldn't

be a problem. After doing copious research, I obtained 3 estimates for mini-split from MassSave approved contractors. The estimate included ~\$1,700 rebates from MassSave. I called them immediately and sent the best estimate to my claim adjuster.

To qualify, an energy audit/assessment must be scheduled, but not necessarily completed, before work is begun. Eager to use these rebates, I called MassSave to schedule an assessment. Initially they said they were booking into January in Andover but when I provided my address I was told they could not book a date because I am in the “affected” area! When I explained that that was precisely why I needed to install an alternative heat source, I was told that Columbia Gas was forbidding the scheduling of energy assessments and then she gave me the phone number of folks who could help me. . . . The Columbia Gas Claims adjuster. My adjuster knows absolutely nothing about energy assessments! The worst part of this? Even if folks in the “affected” had the means to pay for a mini split, they would not qualify for ~\$1,700 in rebates!

That same day, my adjuster responded that his supervisor advised him not able to approve any mini split systems. It was suggested that I have a contractor come to my home to see if a pellet stove is possible to be installed.

I asked if Columbia Gas would offer even a partial reimbursement as the mini-split system is an energy efficient alternative to heating my entire house with gas. He told me he had been forbidden to authorize any payment toward a mini-split because the system is not solely used for heat.

The idea that a pellet stove is a reasonable substitution is absolutely unfounded. The idea that I haul 40 lbs of wood pellets is simply not possible; I am physically unable to maintain a pellet stove.

#### What You See is Not What You Get

I stayed updated via Columbia Gas website and Andover.gov. Again, I was searching for energy efficiency so I was happy to read that CG was offering such as for replacement. When the Gilbane crew (my 4th assessment) took over on my street I spoke to them about this and pointed to the pdfs online. They were totally unaware these options existed . . . because they didn’t in their world.

Communication within Columbia Gas was sorely lacking. Their subcontractors were not kept up-to-date nor did they have access to the models shown on the website! The crew chief said, I have access to 3 boilers today, Kate, that’s it.

How do you measure the fear, anguish, and exhaustion that countless people have and are still going through? Not only did this affect the residents but also the subcontractors. Boots on the ground. They were under a tremendous amount of pressure (meetings every night after they had worked 12 hrs) to check off the houses. And all these folks were away from their homes and family. There was empathy on both sides.

Columbia Gas kept track of houses that were “relit” but those numbers don’t show the truth behind them. My home was relit on October 23, only because my 83-year-old neighbor was elevated to “priority” status. My neighbor told all the workers they needed to put me on the priority list as well due to my recent surgery. However, as of December 9, 2018, I have no stove nor oven nor heat in my bedroom. I got approval to replace my gas fireplace for my bedroom last week. It took 5 weeks to get the approval.

The CEO of NiSource said in the hearing that he couldn’t commit to NOT raising rates for those who lived through this disaster. Essentially, their victims would foot the bill for their complacency and utter neglect. Please tell the residents of the Merrimack Valley that this unconscionable action will not be allowed in the United States of America.

Thank you.  
Kate McHugh  
Andover, MA

Senator WARREN. Mr. Chairman, does that mean people can still submit stories?

Senator MARKEY. For two weeks, yes, for two weeks, that will be included in the record, and we—

Senator WARREN. Small business owners, as well.

Senator MARKEY. Everyone up in this community who was affected, we want to hear your stories and it will be included in the record and we welcome that, urge you to do so.

And, again, I want to thank Andrew Flanagan of Andover and Andrew Maylor of North Andover, the Town Managers of those two communities. Thank you so much for being here. Thank you for your incredible response to this disaster. It's ongoing but I can see—I think we can all see the teamwork that exists amongst your three communities.

And I know that you're a unit because that's why we're here. You're saying how often does it happen that a Senate committee goes to a local community. Not often. This is a special day—

[Applause.]

Senator MARKEY.—and the reason that I wanted to bring the Senate Commerce Committee, which has jurisdiction over the pipeline safety agency and has jurisdiction over the National Transportation Safety Board, so they would be here today, is that they should experience what the impact is of regulations that do not work. They should see the harm which is done.

Again, my father grew up in 88 Phillips Street in South Lawrence. He went to the John Breen School and I would like to take this moment to thank the South Lawrence East Middle School for hosting us here today. We thank you for—

[Applause.]

Senator MARKEY —allowing us to use your beautiful facility. My father came from this community and many members of my family now live in Andover and North Andover. It's one community united.

After hearing today from Columbia Gas and NiSource, Federal and state regulators, safety experts, and our communities on the devastation and hardship they have had to endure, I am not satisfied. We are not satisfied. The company and regulators refuse to take responsibility and I will not rest until there is accountability.

1,300 Merrimack Valley families are still waiting for their homes to be house-ready because Columbia Gas was not even close to being safety-ready. Temperatures in Massachusetts are dropping and so is my faith, our faith that Columbia Gas, NiSource, and Federal regulators can prevent another disaster like this from happening again.

That is unacceptable. That must change and I will fight every day, along with Senator Warren, as I know that Seth Moulton and Lori Trahan will, in partnership with Congresswoman Tsongas, to ensure that things change and that there is justice for our communities.

We are going to take the lessons of this disaster and then turn them into laws so that we can ensure that no community, no family anywhere in Massachusetts or the United States has to experience a tragedy like this ever again.

We thank all of you for being here. We will not forget.

[Applause.]

Senator MARKEY. This hearing is adjourned.

[Whereupon, at 1:08 p.m., the hearing was adjourned.]



## A P P E N D I X

### RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. EDWARD MARKEY TO HON. MATTHEW A. BEATON

*Question 1.* The Columbia Gas pipeline integrity management plan did not contemplate the risk of this sort of event—a very low-probability, high-consequence disaster. This integrity management plan was audited and approved by the Department of Public Utilities.

Did the Department of Public Utilities offer any comments or technical assistance for improving the distribution integrity management plan?

Answer. In accordance with Federal law, 42 CFR 192 Subparts M and O, gas distribution companies are required to develop, and the Department is required to review, integrity management programs. The programs must meet the requirements set forth in the Federal regulations. The purpose of the Department's review of the programs is to ensure compliance with the Federal standards.

The Department reviews these programs for compliance with Federal and state laws and regulations and, beyond ensuring compliance, does not offer comments related to the programs.

*Question 1a.* Does DPU plan to require any modifications of this plan following the September 13 disaster?

Answer. The Department has hired an independent evaluator, Dynamic Risk, who will examine the operation and maintenance policies and practices of the Commonwealth's gas distribution companies and 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 the coming weeks. The purpose of the independent evaluator's report will be to provide concrete recommendations for improving the integrity and safe operation of the Commonwealth's aged natural gas infrastructure.

*Question 2.* The Columbia Gas emergency response plan was approved by the Department of Public Utilities. However, this plan simply does not seem to have contemplated responding to system-wide disaster of the magnitude that we saw on September 13. The most severe level of emergency your response plan contemplated was for an incident that would last "72 hours or longer."

Did the Department of Public Utilities offer any comments or technical assistance for improving the emergency response plan?

Answer. Under the Department's regulations, Emergency Response Plans ("ERP") of the natural gas distribution companies are annually filed with the Department and developed in accordance with the requirements set out in G.L. c. 164, § 85B and 220 C.M.R. 19.00. Each gas company is required to ensure that it is adequately and sufficiently prepared to restore service to its customers in a safe and reasonably prompt manner during an Emergency Event. This includes, at a minimum, preparing and following written procedures consistent with those required by 49 U.S.C. §§ 60101 through 60125; 49 C.F.R. Part 192; G.L. c. 164, §§ 85B and 105A; 220 CMR 69.00 and 220 CMR 100.00 through 113.00. Each gas company shall include these written procedures in their respective manuals for conducting operations and maintenance activities and for emergency response, and, where appropriate, in their manuals of written procedures to minimize hazards resulting from gas pipeline emergencies, as required by 49 C.F.R. Part 192; 220 CMR 69.00 and 220 CMR 100.00 through 113.00.

The Department reviews these plans for compliance with Federal and state laws and regulations.

*Question 2a.* Does DPU plan to require any modifications of this plan following the September 13 disaster?

Answer. The Department has hired an independent evaluator, Dynamic Risk, who will examine the operation and maintenance policies and practices of the Commonwealth's gas distribution companies and will also examine the physical integrity of the Commonwealth's gas distribution system. A preliminary report, which will com-

plement the NTSB's ongoing review, is expected within the coming weeks. We anticipate that the independent evaluator's report will provide concrete recommendations for improving the integrity and safe operation of the Commonwealth's aged natural gas infrastructure.

*Question 3.* After reading the National Transportation Safety Board report about what happened with this disaster, is it your opinion that a state inspector would have been able to catch this error, if one were to have been looking at the September 13 job at Salem St. and South Union St.? If not, is DPU planning additional requirements to ensure that state inspectors have the information or tools necessary to detect these sorts of faulty plans?

Answer. The Department is one of many parties working with the NTSB on its investigation. As such, the Department cannot comment on, nor offer opinions about, the NTSB report. Additionally, the Department is conducting its own investigation into the cause and origin of the events of September 13, 2018 and it would be improper to comment, speculate, or make any conclusions about the possible outcome of that investigation.

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RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. EDWARD MARKEY TO  
PAUL ROBERTI

*Question 1.* Columbia Gas used to have a policy in place that required a trained technician be on site at the pressure-regulating station when work was being done that could affect the pressure of the pipeline system. This policy was abandoned four years ago, but according to the National Transportation Safety Board (NTSB), on-site personnel could have "immediately addressed the issue and mitigated the consequences."

Would a nationwide requirement that technicians are present at key pressure-regulating stations improve safety during construction?

Answer. Pipeline regulations already require that all individuals who perform tasks that affect the operation and maintenance of a pipeline, including tie-in of a new pipeline to a previously existing (operating) pipeline, are qualified. Such qualified personnel are expected to perform or oversee activities that may represent a high risk to the safe operation of the gas system.

Further, it is PHMSA's expectation that the pipeline industry adopt the American Petroleum Institute's (API) Recommended Practice (RP) 1173, which clearly indicates that risk management must be an integral part of the design, construction, operation, and maintenance of a pipeline system. PHMSA participated as part of the RP 1173 standards development committee. This standard defines operational controls that are essential to the safe design and construction of pipelines. For example, Section 5.6: Risk Reduction requires that processes are reviewed to continuously reduce risk in all activities, including construction practices. Section 8.2: System Integrity requires pipeline operators to maintain quality control procedures so that construction is performed in accordance with an approved design. Pursuant to these practices, a pipeline operator should assess risk associated with all aspects of its pipeline system to define operational controls, address those risks, and review progress.

*Question 1a.* If so, is PHMSA working on any regulation or guidance that would require on-site technicians during construction? If not, why not?

Answer. Pipeline regulations already require that all individuals who perform tasks that affect the operation and maintenance of a pipeline, including tie-in of a new pipeline to a previously existing (operating) pipeline, are qualified. Such qualified personnel are expected to perform or oversee activities that may represent a high risk to the safe operation of the gas system. Pipeline regulations also require that companies have adequate written procedures for pipeline design, construction, operation, maintenance, and emergencies; have the capability to shut down systems in a timely manner in the event of an incident; and establish and adhere to written emergency plans to minimize hazards to life and property.

PHMSA awaits the official conclusion of the NTSB's investigation of the incidents in Merrimack Valley Massachusetts and will fully evaluate and consider all of the NTSB's conclusions and recommendations, including whether or not further regulatory clarifications are needed.

*Question 2.* The NTSB found that a single field engineer was allowed to almost unilaterally approve the work order that led to the explosions on September 13, 2018. The NTSB noted there was no oversight from experienced technicians who would have understood the implications for the entire pipeline system. According to

the NTSB, the engineer in question had only “limited knowledge” about the “consequences of losing the capability to sense the main pressure.”

Mr. Roberti, would safety improve if Federal regulations required that the departments responsible for knowing the locations of pressure-control equipment have to sign off on work plans?

Answer. PHMSA takes all NTSB recommendations seriously. PHMSA awaits the official conclusion of the NTSB’s investigation of the incidents in Merrimack Valley Massachusetts and will fully evaluate and consider all of the NTSB’s conclusions and recommendations.

Preliminary NTSB findings indicate that this accident stemmed from a deficiency in the company’s quality control and a breakdown of internal procedures. Pipeline regulations already require that all individuals who perform tasks that affect the operation and maintenance of a pipeline, including tie-in of a new pipeline to a previously existing (operating) pipeline, are qualified. Such qualified personnel are expected to perform or oversee activities that may represent a high risk to the safe operation of the gas system.

Companies must comply with existing safety regulations, including instituting quality control procedures, and should continuously improve and nurture a comprehensive safety culture. Implementing the elements of RP 1173 can help companies achieve a strong safety culture.

*Question 2a.* If so, is PHMSA working on any regulation or guidance that would require the approval of the officials within companies that have a system-wide view of the gas system? If not, why not?

Answer. The Commonwealth of Massachusetts has passed laws to require this for pipelines in Massachusetts. PHMSA’s primary role is to establish minimum safety standards and to provide oversight to these standards. PHMSA also partners with most U.S. states to provide pipeline safety oversight of about 80 percent of the 2.8 million miles of pipelines in the U.S. The states may establish safety standards that go above and beyond the Federal minimum standards. PHMSA expects the pipeline industry to understand and manage the risks of their respective pipeline systems and to ensure the safe operation regardless of compliance with the Federal minimum standards.

*Question 3.* One of the NTSB recommendations was for Columbia Gas to have a professional engineer review and certify any construction plans before starting work, in order to provide another layer of defense against the odds that one engineer could make a decision that would bring down the pipeline system.

Mr. Roberti, would safety improve if gas distribution companies everywhere had a professional engineer review and approve all construction plans for gas distribution companies?

Answer. PHMSA takes all NTSB recommendations seriously. PHMSA awaits the official conclusion of the NTSB’s investigation of the incidents in Merrimack Valley Massachusetts and will fully evaluate and consider all of the NTSB’s conclusions and recommendations.

*Question 3a.* If so, is PHMSA working on any regulation or guidance that would require that professional engineers review and approve all work plans? If not, why not?

Answer. As noted above, PHMSA awaits the official conclusion of the NTSB’s investigation of the incidents in Merrimack Valley Massachusetts and will fully evaluate and consider all of the NTSB’s conclusions and recommendations.

*Question 4.* Right now, Federal regulations do not require pipeline companies to have a Pipeline Safety Management System (SMS) in place, which would require the adoption of a safety culture throughout a company’s operations and decisions.

Do you agree that it would improve safety if Federal regulations required that all pipeline companies adopt a safety culture through a Safety Management System?

Answer. At this time, PHMSA’s focus is on emphasizing the continuous assessment and improvement of pipeline safety by strongly encouraging pipeline operators to implement SMS.

The common thread that runs throughout every aspect of PHMSA’s safety mission is an SMS approach. SMS looks to prevent accidents and incidents from ever occurring. PHMSA is moving beyond the role of being just a regulator—to push operators to identify and target their own risks, and to encourage a company-wide culture that makes safety the number one priority, always. Further, PHMSA understands that there is no one-size-fits-all method for creating an SMS program; implementation varies from operator to operator. To be effective, SMS programs must be developed by operators to address their specific operator needs and risks.

Further, for an SMS culture to permeate through all levels and areas of the pipeline industry, we need ways to share and analyze data, allowing all of us to see

emerging trends to inform best practices. In December 2016, PHMSA established a Voluntary Information-Sharing System Working Group (VIS WG). The VIS WG was charged with studying information-sharing systems for the pipeline industry and providing recommendations to the Secretary of Transportation on the necessity of a sharing system, ways to encourage the exchange of information, and best practices for the protection of proprietary and security-sensitive information. The VIS WG plans to submit its recommendation report to the Secretary in Spring 2019.

*Question 5.* On September 13, the pressure-controlling equipment in Lawrence experienced what is known as a “common mode of failure.” One action, in this case the abandonment of a pipeline running under South Union Street, caused both the main pressure regulator and the backup regulator to fail at the same time and in the same fashion. PHMSA regulations require that equipment meant to protect from over-pressurization are “designed and installed to prevent any single incident [ . . . ] from affecting the operation of both the overpressure protective device and the district regulator.” Shut-off devices or relief valves both provide a separate layer of protection beyond just having two working regulators in series. Previously, PHMSA staff have said that the regulator setup employed by Columbia Gas at issue in the September 13 disaster satisfied Federal requirements and is in common usage throughout distribution systems—conceivably putting other communities at a similar risk.

Would safety improve if Federal regulations required that pressure-control devices could not have a common mode of failure, as we saw in this disaster?

*Answer.* Preliminary NTSB findings indicate that this accident stemmed from a deficiency in the company’s quality control and a breakdown of internal procedures. Several methods and devices could potentially provide additional protection. PHMSA awaits the conclusion of the NTSB’s investigation and will thoroughly consider whether to require additional measures to prevent over-pressurization of low-pressure systems.

*Question 6.* The maximum fine that PHMSA can levy for an incident is only \$2.09 million.

Do you think it would act as a greater deterrent if PHMSA were able to fine companies above \$2 million for disasters like this, yes or no?

*Answer.* Civil penalties for violations of the pipeline safety regulations, statutorily set by Congress under 49 U.S.C. § 60122 and 49 CFR § 190.223, may be assessed up to \$213,268 for each violation for each day the violation continues, with a maximum administrative civil penalty not to exceed \$2,132,679 for any related series of violations. This maximum represents an inflationary increase by DOT final rule effective November 27, 2018.

Civil penalties are just one of the critical tools, such as corrective action orders, that PHMSA uses to hold operators accountable. When appropriate, our agency does not hesitate to issue fines to operators. PHMSA also uses Compliance Orders and Corrective Action Orders to mandate company action, sometimes beyond regulatory standards, in order to assure safety. PHMSA has found the cost of complying with these orders can dwarf the civil penalties that PHMSA can impose, serving as a significant additional deterrent to pipeline failures.

*Question 7.* When setting the recommended level of inspectors per state, does PHMSA take into account how much of a state’s pipeline system is made up of old, leaky cast iron pipes, some of which are well over 100 years old?

*Answer.* Yes, PHMSA’s state inspection formula considers a state’s pipeline system composition, as well as several other performance factors, to determine the minimum inspections required in accordance with state certification. The number of inspections is then used to determine the number of inspectors needed.