UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:

MERRIMACK VALLEY RESIDENTIAL GAS * Accident No.: PLD18MR003 FIRES AND EXPLOSIONS

SEPTEMBER 13, 2018

Interview of: JAMES ROBERTS

Columbia Gas of Ohio Gahanna, Ohio

Friday, March 6, 2019

APPEARANCES:

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ANNE GARCIA, Human Performance Investigator National Transportation Safety Board

ROGER EVANS, Investigator in Charge National Transportation Safety Board

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1 INTERVIEW My name is Mike Hoepf. Today is March 6th, 2019, 2 DR. HOEPF: 3 and we are at 1600 Eastgate Parkway, Gahanna, Ohio, 4 interviewing -- so you go by Jim, right? Jim Roberts? 5 MR. ROBERTS: I go by Jim. Yes. 6 DR. HOEPF: Okay, okay. I have James written here -- okay, 7 Jim Roberts, in connection with an accident that occurred in Merrimack Valley on September 13th, 2018. The NTSB accident 8 9 number is PLD18MR003. 10 The purpose of the investigation is to increase safety, not 11 to assign fault, blame, or liability. NTSB cannot offer any 12 quarantee of confidentiality or immunity for a legal -- from legal 13 or certificate actions. A transcript or a summary of the 14 interview will go in the public docket. The interviewee can have 15 one representative of the interviewee's choice. 16 Jim, do you understand the interview is being recorded? 17 MR. ROBERTS: Yes. 18 DR. HOEPF: Okay. Excellent. And if you could please state 19 your name and spell it. And I would like everyone in the room to 2.0 also do the same. 21 MR. ROBERTS: Okay. My name is James Roberts, J-a-m-e-s, R-22 o-b-e-r-t-s. 23 DR. HOEPF: Okay. And I'm Mike Hoepf, that's H-o-e-p-f, with 24 the NTSB.

Anne Garcia, G-a-r-c-i-a, investigator with the

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MS. GARCIA:

NTSB.

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- DR. JENNER: Stephen Jenner, S-t-e-p-h-e-n, J-e-n-n-e-r,
- 3 | investigator with the NTSB.
- 4 MR. TOBIN: My name is Tom Tobin, T-o-b-i-n, partner with the
- 5 Wilson Elser law firm.
- 6 DR. HOEPF: Roger, you're up.
- 7 MR. EVANS: Roger Evan on the phone, R-o-g-e-r, E-v-a-n-s,
- 8 NTSB.

9 INTERVIEW OF JAMES ROBERTS

- 10 BY DR. HOEPF:
- 11 Q. Okay. And, Jim, if you could just tell us a little bit about
- 12 yourself and your background?
- 13 A. Sure. My current position is director of pipeline safety for
- 14 NiSource Corporate Services. I've been with Columbia -- in the
- 15 | Columbia companies or NiSource Corporate Services for almost 30
- 16 years. I did have a break in between 2007 and 2012 where I left
- 17 and then came back in 2012, so.
- 18 I have number of different opportunities to work here in
- 19 different positions. I started in marketing in Ohio in the '80s,
- 20 entered into operations as a field operations manager, or an area
- 21 manager, in Maryland, also in Pennsylvania. And then had a number
- 22 of different more shared-services-type duties: leading training,
- 23 leading compliance, leading engineering, leading fleet, land
- 24 services, those types of things over my career. And I've been in
- 25 my current position since 2015.

- 1 Q. Okay. All right. Thanks. And who reports to you?
- 2 A. So I have -- currently, in my organization, I'm a manager of
- 3 | our Distribution Integrity Management Program. I have the manager
- 4 of safety management systems. I have a public awareness manager
- 5 in our Indiana company that reports to me. I also have a -- not a
- 6 compliance specialist but a specialist that supports the public
- 7 awareness programs in all of our states.
- 8 Who am I missing? I have a manager in Massachusetts who is
- 9 dedicated to, what I call, our supplemental gas assets, so he is
- 10 more of an internal subject matter expert around our LNG, propane,
- 11 | air underground storage facilities across NiSource.
- 12 Q. Okay. And who do you report to?
- 13 A. I report to Chuck Shafer, who is the senior vice president
- 14 over engineering and pipeline safety.
- 15 Q. Okay. And what safety training do you have?
- 16 A. From a standpoint of pipeline safety or employee safety? I'm
- 17 | not --
- 18 Q. Everything.
- 19 A. Everything? You know, been through all the employee safety
- 20 training around all the types of training that we've got, whether
- 21 | it's LMS-based or classroom-based. I guess that would be the
- 22 focus of my training.
- 23 Q. Okay. And then -- and so, as far as, you know -- so
- 24 | sometimes we kind of break apart. There's sort of, you know, PPE
- 25 safety training and then there's more system safety sort of

- 1 training. So maybe more so in the bucket of system safety
- 2 | training, are you -- do you go to conferences, do you --
- 3 A. Oh, yeah.
- 4 Q. -- do classes, that kind of stuff? Can you talk about some
- 5 of that?
- 6 A. Yeah. Primarily, it's my interaction with the industry in
- 7 American Gas Association and also the Northeast Gas Association.
- 8 I've been involved in that in the past. I'm currently active with
- 9 the American Gas Association's (indiscernible) Committee, which
- 10 is -- you know, I'm a participant in that committee and have been
- 11 for a number of years.
- 12 I'm very, very active in the American Gas Association's peer
- 13 review program where you interact with other gas utilities to
- 14 review certain aspects of their utilities or receive a review. So
- 15 | I have acted as a reviewer and a loaned employee to that program.
- 16 Q. Okay. And what are your safety responsibilities?
- 17 A. Well, primarily in pipeline safety, really to assure and
- 18 drive that we have an adequate Distribution Integrity Management
- 19 Program. But I'm mostly excited about the safety management
- 20 system that we've been actively pursuing for quite some time now.
- 21 And I had an initial responsibility for bringing that to the
- 22 | company to reviewing it to seeing how it's implemented in other
- 23 industries and then making recommendations to NiSource on what we
- 24 | should do with safety management systems. So those are my two
- 25 primary safety responsibilities around pipeline safety.

- 1 Q. Great. Okay. So you said -- you actually used the word, you
- 2 | were bring SMS to the company. That's a --
- 3 A. Yeah.
- 4 Q. That's a pretty, you know, big --
- 5 A. Yeah.
- 6 Q. Can you elaborate on -- yeah. I mean --
- 7 A. Yeah. You know, I was asked by the company to take a look at
- 8 safety management systems in my role and -- you know, so this was
- 9 back even early 2015, prior to our PL73 being published. Have
- 10 looked at the Kalamazoo, Michigan, and the NTSB report on the
- 11 liquids. I guess it was -- not Kalamazoo. That was the Kalamazoo
- 12 River, right? But the liquid spill there and the recommendation
- 13 that came out of that around our industry needing a safety
- 14 management system.
- 15 I had spent some time outside of the corporation in
- 16 | healthcare and had seen patient safety management systems in
- 17 | hospitals, so I was able to kind of take that perspective and
- 18 start really looking at what would safety management systems mean
- 19 to NiSource. That's what I was asked to do.
- 20 So early in 2015, was visiting outside our industry to
- 21 airlines. We visited with Delta Airlines, you know, took a look
- 22 at what a safety management system really meant because we hadn't
- 23 had one. And so, when I say, bringing it to the company, it's
- 24 | because I was doing the early research on, what would this mean
- 25 for NiSource? And it's very exciting.

- 1 Q. Yeah.
- 2 A. Yeah.
- 3 Q. It is. That is to be -- that's a pretty unique opportunity
- 4 to be, you know, on the ground floor of something like that. Can
- 5 you walk us through? You know, so that was early 2015, which is,
- 6 you know, years ago at this point.
- 7 A. Right.
- 8 Q. You know, can you give us some dates in terms of when actual
- 9 implementation started to get way and then kind of walk us through
- 10 | a timeline of where we're at now?
- 11 A. Yeah. So a timeline, early 2015, we were really researching
- 12 | it, even put in place in some proposed org charts a safety
- 13 management system manager position, which had never had. Brand
- 14 new position. And that was placed under me. I hired our safety
- 15 management system manager into it, so it was a department of two,
- 16 really, around safety management systems as we started in 2015.
- 17 Rule was published mid-2015. By the end of 2015, we were
- 18 actively in conversation with the Virginia Commission in Massoud
- 19 Tahamtani, if you're familiar with Massoud, about what we could do
- 20 | with this. He was part of writing the -- he was on the team
- 21 | that -- on the API writing the standard -- or, the recommended
- 22 practice. So we were in active discussions and by the end of 2015
- 23 we were actually beta testing a nonpunitive reporting system in
- 24 Virginia.
- 25 So we decided to move forward in our process on moving

forward with SMS was to pilot in our Virginia company. We really wanted to understand how to do this before we we went across all of our seven companies. So we started with a gap analysis, hired a third party to do gap analysis against the 220 should-shall statements that are in the RP 1173, see where we align to the recommended practice, and then move forward with how we were going to approach that. Get gaps closed, if we could, against that. And then, you know, move forward on: what does structure look like; what do processes look like that we need to put in place? So we spent 2017 piloting in Virginia, trying to figure out what's going to work, what isn't, what governance models should we put in place, how's this going to work in our -- and we've got a culture in NiSource and, specifically, in Virginia that is very much around continuous improvement. It's a real fabric of our culture, so this was a really good place to start for us in Virginia because we felt like the safety culture was very strong

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already there.

So, by the end of 2017, we were looking at a -- kind of a step-over-time deployment to each of our companies. I had the opportunity to sit in front of the board of directors for NiSource in January of 2018 and talk to them about how we wanted to deploy across NiSource. And the original proposal was to go company-by-company very sequentially. The board of directors was excited about it and wanted us to move faster, so we moved our deployment on a faster schedule where we might do it over about 3-year period

rather than a 5-year period.

And of course, you know, Merrimack Valley happened in September, so in October I had another opportunity to sit in front of the board and talk about the SMS. And at that point in time, you know, we were very much encouraged to move even faster. So our deployment schedule has moved up quite a bit and we're anxious to -- and moving toward, you know, putting it in place in all of our companies. So that brings us to about today.

9 Q. Yeah.

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- 10 A. Where we are.
- 11 Q. Yeah. That's -- yeah. That's, that -- well, you've really
- 12 kind of laid it out in a very clear manner, which I appreciate.
- 13 So there was already -- it was development and then there was, you
- 14 know, support for -- from leadership to speed that up. And then,
- 15 of course, there was an unfortunate incident. And then, you know,
- 16 even a faster deployment, so --
- 17 A. Yeah. You know, we engaged --
- 18 | O. You know, what --
- A. I would just like to add, from a timeline standpoint since
 that was the original question. We engaged on the AGA pilot group
 of companies early in 2016 to try to understand more about how
- 22 other gas companies were approaching SMS as well, so we've been
- 23 part of that since early 2016. In understanding how they're
- 24 approaching the different aspects, the different elements of SMS
- 25 as well. And then we've done some ensuing base practice visits

outside the industry where we met with United Airlines in Chicago to understand what they were doing.

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We've engaged with the nuclear side of the business and, specifically, with Westinghouse, you know, to understand their approaches. And they're much more mature in those approaches. So while we were doing the pilot in Virginia, we were also trying to understand how do we get better and what are some areas that we can really learn from industries that are a little more mature in this space.

- Q. Yeah. So, as far as, you know, the deployment schedule or limitation schedule of this, I mean, what does -- okay. So you want to move faster, but obviously these things take time, you know? So is that -- what does that look like? Do you -- have you gotten more resources from the board to, you know, speed this -- do you have more -- were you able to hire more people to work for you? What does that look like?

 A. Yeah. So they put together a program management office
- around SMS that's really, you know, focused on, how do we get certain elements or workstreams put together to make it go faster and to make it be every effective across all the companies. You know, we had lessons learned from the Virginia deployment because that's exactly why we did it was it was a pilot. And we wanted to understand how we could improve for that.

You know, it's the basis and fundamental of SMS: It's plan, do, check, act. So the PMO office has identified workstreams. A

- 1 lot of resources have been put on those workstreams to help us
- 2 | accelerate this and do it the right way. So that -- there was
- 3 additional resources put on that in order to accelerate.
- But to your -- I think what I heard in your question, this is
- 5 going to be a maturation. This is how we're going to measure
- 6 this. It's not, we're done, at a certain point. It's a model for
- 7 us to follow. So we want to get certain elements in place, but we
- 8 have to continually improve it and continually mature it. So
- 9 there isn't an endpoint.
- 10 Q. Right, right. So, you know, given that, obviously, it's an
- 11 ongoing process, you know, how would you characterize where you're
- 12 currently at now? I mean, is it -- I guess you'd have a maturity
- 13 | scale, right? So how mature is --
- 14 A. Yeah. I don't -- we don't have that nailed down --
- 15 Q. Okay.
- 16 A. -- on how we're going to measure the maturity. We've got
- 17 some models that are out there that we've seen, so we're taking a
- 18 look at that. I think that's part of the whole PMO process is,
- 19 how are we going to do that? We know we're early into this.
- 20 What's the best way --
- 21 Q. I hate to cut you off. One of the things that Rogers
- 22 remembers last time: acronyms and names. If you could --
- 23 A. Yeah.
- 24 Q. -- spell them and -- you said P --
- 25 A. PMO, which is the program management office --

- 1 Q. Thank you. Sorry to interrupt you.
- 2 A. -- that I referred earlier. I apologize for that, yes.
- 3 Q. No problem.
- 4 A. Yeah. They're looking at different aspects of, how are we
- 5 going to do this? So the maturity measures, I don't think, have
- 6 been defined at this point, you know, but there's certainly a lot
- 7 of discussion around, what are those going to look like? So I
- 8 missed -- what was the other part of your question?
- 9 Q. Well, we're just -- you know, we're just kind of talking
- 10 through where you're at with the process.
- 11 A. Yeah.
- 12 Q. And, you know --
- 13 A. It's exciting because we're actually -- we're adding more
- 14 things than just the recommended practice to what we're thinking
- 15 about in SMS. We're also looking at our leadership and doing
- 16 | leadership assessment. Looking at, you know, our assets and
- 17 | really taking another hard look at assets and saying, where it
- 18 | that we're not thinking about high-consequence, low-probability
- 19 things with those, you know, different divisions of assets.
- 20 And the RP doesn't speak to that, you know? It speaks to
- 21 | certain elements, but -- so we've tried to add some things that
- 22 | we're doing that we -- we're looking at as part of an SMS. So
- 23 we're expanding that kind of definition a little bit of what an
- 24 SMS is because we feel it's important for our particular
- 25 corporation to do that. So it's -- that's where we are and

- 1 | it's -- I've been pushing this since 2015, kind of the first guy
- 2 in the door. So it's exciting to me --
- 3 Q. Yeah.
- 4 A. -- to see the corporation, the board and our top executives
- 5 have said, this is the right and the smart thing to do and we're
- 6 going to put resources behind it, so --
- 7 Q. Yeah.
- 8 A. -- that's why I keep using the word, exciting. But that --
- 9 0. Yeah.
- 10 A. -- for me, is something where you see it from a concept,
- 11 getting moved to a just -- it meets one of our most stakeholder
- 12 | commitments, which is, you know, safety.
- 13 Q. Yeah. Well, you've already answered, you know, one of my
- 14 other questions. One of my later questions is going to be, you
- 15 know, do you have support from leadership?
- 16 A. Yeah, absolutely.
- 17 Q. Because if you don't have support from leadership, then it
- 18 doesn't matter. So, you know, I'm glad to hear that, you know, it
- 19 seems to be chugging along for you. You talked about -- to
- 20 revisit back, you had talked about a pilot program for Virginia.
- 21 And the initial plan was there was going to be different, sort of,
- 22 pieces for different areas. Is that -- so is that still currently
- 23 the plan or you said it's going to be more of -- it's going to be
- 24 all of NiSource and then it's going to go down from there?
- 25 How -- can you walk me through that?

A. Well, you know, the Virginia pilot, you know, we were taking a look at the standard, we were taking a look at where Virginia set against the standards. We were also looking at corporate services because each of our companies receive certain services from the corporate, like -- you know, call center activities or work planning or fleet management, supply chain, those types of things, all of the operating companies receive that service from corporate services. So we were measuring those services, also, pragmatically against the standard.

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But what we wanted to do, then, was use Virginia to say, okay, what kind of governance do we put in place. How is the nonpunitive reporting system going to work and what kind of experience can we get with that? What can we learn from that before we go to all of our companies? You know, what is the performance improvement process, and can we design that in Virginia, test it in Virginia, and see if it's going to work for us. Or do we do -- need to do any tweaks before we roll it out?

So it was much more of a learning-as-we-go because there wasn't a good cookbook for SMS in our industry. Number of companies AGA has pulled together to try to figure it out, but everybody approached it a little differently. So our approach now is to say, we've learned from that. I mean, for instance, one of the key learnings on the nonpunitive reporting system is, you know, you can put the tools in place for employees to report something that they're concerned about. But if you don't have the

right culture in place, they're not going to report a thing.

And, you know, you have to teach them what this means, and you have to talk to them about why it's a safe place to go to report things. So, you know, we were learning that because we really never had anything other than, you know, encouragement for them to do it. But now they have a tool to do it. So we were working through those imperfections and those learnings before we go to all the other companies.

- 9 Q. Got you, got you.
- 10 A. And that's just one example.
- Virginia piece is just, you know, you're piloting and trying to
 work out the kinks and then you're going to apply that everywhere

Okay. So at the end of the day, you're -- that -- the

- 14 else. Okay, okay.
- 15 A. Yeah.

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- Q. One of the -- yeah. Because one of the things -- you know, one of the things we had talked about earlier with Dave was, you
- 18 know, does NiSource have an SMS and then, say, Columbia of Gas in
- 19 Massachusetts have an SMS, or is it all the same, you know, SMS
- 20 and there's just how you're defining the roles and
- 21 responsibilities. I mean, is that -- how do you think of it?
- 22 A. I think of it as a NiSource SMS with a lot of accountability
- 23 to each of the operating companies to execute on that. Because
- 24 | we'll have on performance managing tool that we're going to put in
- 25 place where concerns and issues can be entered, but we will have a

corporate SMS group, which is currently the one that I'm talking about under me, that would have the ability to see all those things that are entered into the one tool.

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So that if there is concern or an issue that occurs in one of our states, we can look at the from a central organization and say, that's something that all of our companies should learn from. That's an issue that we may have in other companies, you know, depending upon what it is. And historically, without the SMS and the tools in place for just -- you know, for all of NiSource, it might've gotten solved very well in the company and nobody knows about it.

So the lessons learned piece, or the near-miss lessons learned piece is going to be enabled by having a NiSource SMS. But it's definitely going to have to be executed at the operating company level to make sure that we're maximizing and maturing the SMS.

Q. Right, right. Yeah. And kind of along with that, you know, one of the other conversations we were having about -- you know, having earlier was about, you know, what -- you know, how does the oversight, you know, look coming from, you know, NiSource headquarters in terms of what's going on? Is it -- you know, how do you -- how are you going to be verifying that -- you know, the roles and responsivities that you set out with your SMS and, you know, data collection practices and whatever else you're specifying, how are you going to be, you know, auditing that?

- A. Yeah. I think that the auditing process is yet to be defined; however, the governance that we're talking about setting up not only includes, what we're calling, a state table at the State so that there's a review of -- any issue that's reported, it's reviewed by that state table, which is the most senior management in that operating company.
- But there's also a NiSource table and an oversight group that includes third parties, not just NiSource, that they want to pull together on that governance. So there's some checks-and-balances there where we're seeing not only does the State have issues that may come up that are safety-related that they want to deal with.
- But then that's going to roll up to a NiSource state table so that each of the states, or the operating companies, are going to have to talk to the issues that have bubbled up in their state and the risks that are being assessed and the risks that are being addressed and the resources that they need in order to address them. So that governance piece is really good.
- 18 Q. Yeah.

- 19 A. You know, I think that the protocols for auditing are part of what needs to be defined yet.
- Q. Okay, okay. I got you, I got you. So -- yeah. And so,
 we've talked a little bit about the timeline, kind of some general
 stuff here. So just to kind of set the tone a little bit for, you
 know, the core of this interview, a coupe of -- let's kind of put
 a couple of frames on this. So there's an incident, of course,

that we're here -- we're kind of mostly talking a general level.

But, you know, obviously, we are here as a result of an incident

that occurred in September.

So there's sort of before of that and then there's, you know, what are we doing now? And so, we've kind of talked a lot about, okay, general stuff. The other dimension is general versus -- you know, there's general versus specific and then there's pre- and post-accident. So we've kind of been talking general stuff, post-accident. And, you know, it sounds like a lot of good, you know, work has been happening.

11 A. Yeah.

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Q. We've been talking general pre-accident about, kind of, some of the lead-up to that. And, you know, I don't want you to talk about things that you're uncomfortable with, but we would be curious if there -- you know, to the extent, from your perspective, that you're knowledgeable about what happened with this incident and, you know, what you've seen within the company, what you've heard, you know, your interaction with your other organizational leadership in terms of responding to this incident, you know? And how that's impacting your role. We would kind of like to talk about -- you know, hash some of that out.

So, again, that's just -- I'm trying to get a general understanding. Is -- you know, have you been involved with the investigation at all up to this point? Do you -- I mean, what is your current understanding of the incidents --

- 1 A. Yeah. It's very high-level.
- 2 Q. Okay.
- 3 A. My role has not been to be part of that --
- 4 Q. Okay.
- 5 A. -- incident investigation. My role has been to, you know,
- 6 participate in the discussions of where we're going from there.
- 7 Q. Okay. Okay. So I want to ask you about the incident. So
- 8 | would it be fair to say that, you know -- the board of directors
- 9 have determined this is an unfortunate event and, you know, they
- 10 just appreciate the value of SMS, generally speaking. And, you
- 11 know, that's why it's an important system for them to implement
- 12 moving forward.
- I mean, is there something specific that has been defined in
- 14 | the organization, like, a deficiency that they're seeking to
- 15 | improve with the SMS? Or is it just more general?
- 16 A. I'd say that our board of directors is very supportive of
- 17 | safety management systems and has been supportive of safety --
- 18 Q. Okay.
- 19 A. -- well, well before the incident.
- 20 Q. Okay.
- 21 A. You know, as part of our culture and part of our stakeholder
- 22 | commitments, we had safety at the top of the list years before the
- 23 incident. And, you know, our board has folks that have been
- 24 involved in the nuclear and has -- have seen the benefits of
- 25 safety management systems. So when I had the opportunity to talk

to them, it was very, very clear to me that safety is a priority, and that trickles through the whole organization.

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So, you know, it turns my stomach that we had this -- personally, I just -- when we had this incident, I just felt so personally affected because I know what kind of a company we've been. We've been very, very focused on improving. It's part of our, you know -- my whole department has been involved in breathing life into safety procedures and making sure that we're improving.

And going through that plan to check acts, like -- and, you know, just bringing the SMS to NiSource. So there's no question in my mind that the commitment around safety has been there and it's not just turned on a dime because of this incident.

- Q. Okay. I got you. Yeah. So, you know, just to clarify again, it sounds like, you know, this is SMS, this is something that you've supported, been working on it for a long time. But as far as the specifics of this incident, there's not a specific deficiency that you've been told, hey, Jim. You need to fix this with your SMS because we figured out that this specific thing is a problem point.
- A. Yeah. What I would say is, we haven't looked at it from terms of there's a specific deficiency. We've looked at in terms of what can we learn and improve on because, like I said, continuous improvement has been a focus of ours for many, many years. So, you know, putting together an enhanced safety plan

- around our low-pressure systems is one of the ways that we're moving forward from this and learning from the incident.
- You know, we're focused on, how do we get better at
- 4 probabilistic risk assessment, where we can focus not only on past
- 5 events or learnings from incidents, like Lawrence, but we can get
- 6 really good at and learn from other industries that are
- 7 | doing -- hey, where -- how do we get better at risk
- 8 identification, probabilistic risk assessment. And there are
- 9 tools that we just weren't familiar with that we're just starting
- 10 to learn on how to do that.
- 11 So those are examples of, how do we move forward to get
- 12 better at what we do around risk? And it's -- that's
- 13 | what -- that's part of what's exciting to me about it is we can
- 14 and we're finding ways. And we're going to have to get -- we just
- 15 have to get better at --
- 16 Q. Yeah.
- 17 A. -- risk assessment and risk mitigation techniques.
- 18 Q. Yeah, absolutely. You know, risk -- yeah. Risk management
- 19 | is really a -- obviously, a key part of SMS. So let's -- yeah.
- 20 Let's talk a little bit about, you know, risk management and, you
- 21 know, what that kind of means and, you know, kind of what your
- 22 processes have looked like. Can you talk about, you know, sort
- 23 of -- you know, what that looks like in 2017 versus what that
- 24 looks like today? You know, what's changing? What -- how good
- 25 has, you know, NiSource and its subsidiary organizations been

- 1 about managing risk, identifying risk, having a risk register?
- 2 What did that look like in the past? What does it look like now?
- 3 A. Most of our risk identification assessment have been done
- 4 through our integrity programs --
- 5 Q. Okay.
- 6 A. -- in the past. So, you know, when we talk about 2017, let's
- 7 say, if that's where you want to start, you know, we have a
- 8 distribution integrity management program in every one of our
- 9 companies. That's a code through PHMSA that you have to have it.
- 10 But it doesn't tell you what you have to do, so you have to put
- 11 your own plan together. And our process has been very, very good.
- Our state commissions have told us in many of our states that
- 13 | we have the best distribution integrity management program that
- 14 they've seen in the state. And been through many audits of those.
- 15 The process we've used to -- on the distribution integrity
- 16 management side, is to have an annual steering team. There's a
- 17 | steering team in each state. It's comprised of, you know,
- 18 multidisciplinary people in the state, along with some of the
- 19 corporate support folks that have subject matter expertise.
- 20 And we have an annual meeting, multiple days, where we review
- 21 data from the previous year, primarily around leakage. We do our
- 22 | risk modeling and show them where their risks are. We have
- 23 performance metrics that we trend. And that's where the
- 24 discussions occur about risk and what has been identified as a
- 25 | risk. How has it been modeled? How has it been assessed? What

are your top risks and what are we going to put in place as far as accelerator additional actions to reduce the risk? And then, what's the performance metric for that accelerated action? Is it moving in the right direction? Are you actually reducing risk?

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So we have those discussions every year in all seven of our companies. So that's been our primary process. What SMS is going to do, and it's another reason why we're doing it, is it's going to aggregate the -- where we were doing risk on a distribution integrity management program, we were also doing risk in a transmission integrity management program. We're starting to do that in an underground storage integrity management. We've got a couple of underground storage assets.

It's going to aggregate those into on risk register where we didn't have one risk register anywhere. So we have to -- state operating companies and the management had to look at each one of those risk assessments and risk mitigations and start talking about it that way. SMS is going to allow us to have one risk register, and that part of the pilot that we were talking about and doing in Virginia. It was, how do we take dissimilar risks and put them in one place, and how do you assess them? And that's what were working through as well in the pilot.

Q. Yeah. That's really interesting. And again, something we kind of talked about a little bit this morning. You know, I wasn't on the on-scene part of the -- portion of the investigation, but it seemed like, you know, there was some

- discussion about risk assessments. And that -- it's kind of something that means -- risk management means a little bit different things to different people.
- And I think some of the people, you know -- I think when it
 was asked about, people were talking more about, okay, how would
 you -- you know, how would you manage the risk of a work packet,
 you know, that is incomplete getting into the field, or something.
 Which is different than -- it sounds like there was a relatively
- 10 talking about opt humane and, you know, infrastructure maintenance
- and that sort of thing. But that's a little bit different than,

robust integrity management system that's been in place and

- 12 you know, managing the risk of an over-pressurization event --
- 13 A. Right.

- 14 Q. -- or something like that. So I understand it sounds like,
- 15 | you know -- if I'm understanding you correctly, what you're saying
- 16 is, you're now -- before, you did not have a single one point or
- 17 place you could go to where you got all these risks, but that's
- 18 something you're looking to have implemented now?
- 19 A. Yeah, under an SMS.
- 20 Q. Okay, okay. So -- and how -- I mean, how's that going?
- 21 A. Well, I -- you know, again, that's part of what this PMO
- 22 | group is really working on --
- 23 Q. Okay.
- 24 A. -- to make sure that we've -- we're doing it the right way.
- 25 | So I can't -- I don't have a qualitative, you know --

- 1 Q. Okay.
- 2 A. -- assessment of that for you. It's in scope for what we
- 3 want to look at and accomplish.
- 4 Q. Okay. So, I mean -- and again, don't -- I'm not -- you know,
- 5 I'm just trying to get understanding. So, if I were to go back to
- 6 2017, I wouldn't be able to go to some sort of NiSource and say,
- 7 okay, here is -- an over-pressurization event is -- you know, this
- 8 is a risk on a low-pressure system that we're worried about. And
- 9 we've these mitigations, and have it sort of systematically laid
- 10 out like that.
- 11 You -- I would not be able to find something like that 2017.
- 12 But in the future, you hope -- you're hoping -- like, that's what
- 13 you're working on now.
- 14 A. No, no, no. You would be able to find it in the distribution
- 15 | integrity management program --
- 16 Q. Okay.
- 17 A. -- list of risks. You would look at what we've identified as
- 18 | risks in that program, in that state, and you would see how it
- 19 ranks. That's been there. What you wouldn't be able to do is
- 20 say, how does that compare to something that's no the transmission
- 21 | integrity side? Or how does that compare to something on the
- 22 underground storage integrity side? They were all sat separately
- 23 because we've -- that's the way code had set it up was you need a
- 24 | transmission integrity program, you need a distribution integrity
- 25 program, you need an underground storage integrity program, so

- 1 manager risks within those programs.
- 2 And what we didn't have was the aggregate umbrella of, so how
- 3 do all of those things roll up into one list. So you've be able
- 4 to find the risks, but they would sit in one of those programs.
- 5 Q. Okay, okay. So they -- so, it's there, it's just --
- 6 A. Yeah.
- 7 Q. It's just depending on where you're -- okay, okay. All
- 8 right.
- 9 DR. HOEPF: I'm going to take a break and pass it off to
- 10 Anne.
- 11 MS. GARCIA: Thank you.
- 12 BY MS. GARCIA:
- 13 Q. Couple clarifying questions and then, perhaps, a few
- 14 additional ones. So when you mentioned that you report to Chuck
- 15 Shafer.
- 16 A. Shafer?
- 17 Q. How do you spell that?
- 18 A. S-h-a-f-e-r.
- 19 Q. Okay. Okay. Thank you. And what is his title again?
- 20 Roughly.
- 21 A. Senior vice president of gas engineering and pipeline safety.
- 22 And there may be some other things in that title. I'm not sure.
- 23 Q. Okay. And do you know who he reports to?
- 24 A. He reports to Pablo Vegas, who's the executive vice
- 25 president.

- 1 Q. Okay. Thank you. And you mentioned that you hired the
- 2 NiSource SMS manager. Who is that?
- 3 A. John Curtis, C-u-r-t-i-s.
- 4 Q. And does he report to you?
- 5 A. Yes.
- 6 Q. Okay. And that's his title?
- 7 A. Yes.
- 8 Q. SMS manager? Okay. Thank you. We had a name, Tim Tokish,
- 9 how does he fit in with this?
- 10 A. Right. With the creation of that project management office,
- 11 PMO, to really ramp up the deployment -- the building and
- 12 deployment of safety management systems at NiSource, Tim was named
- 13 as the senior vice president over that project management office.
- 14 So he has primary executive responsibility now over the building
- 15 of the SMS.
- 16 Q. Okay. So he's senior vice president of? Roughly.
- 17 A. Safety management system strategy, I think is the title. I'm
- 18 reaching into my memory here.
- 19 Q. Okay. And do you know who he'd report to?
- 20 A. He reports directly to Pablo Vegas.
- 21 Q. Thank you.
- 22 A. You're welcome.
- 23 Q. Okay. So was John Curtis already on board at the time of the
- 24 incident?
- 25 A. Yes.

- 1 Q. Okay. So he was the one that really kicked off the Virginia
- 2 pilot?
- 3 A. Yes.
- 4 Q. Okay. And following the Virginia pilot, how were you
- 5 deploying the system, SMS, out in NiSource?
- 6 A. Following the --
- 7 Q. Before the board said to speed it up.
- 8 A. Right. So our initial thought process was to go state-by-
- 9 state or operating company-by-operating company. And
- 10 understanding at the time that it was going to be the
- 11 | responsibility of John and whatever team we had in place at that
- 12 point to help the -- to have that roll out into each state. So it
- 13 was going to be a state-by-state or operating company-by-operating
- 14 company rolling model. That was prior to the January 2018 board
- 15 of directors meeting.
- 16 Q. Okay. And what happened there? How has it changed?
- 17 A. Well, the see -- you know, the discussion with the board at
- 18 | that time in January was, here's what we want to do. We're
- 19 excited about SMS. We think it's going to provide us that next
- 20 | level of focus on pipeline safety and improvement of pipeline
- 21 safety. And they said, we agree, but we want you to go faster.
- 22 And so, can you change your deployment schedule so that it's on a
- 23 faster pace than company-by-company.
- 24 Q. But when they changed it, did they -- was it still linear,
- 25 state-by-state compressed, or was it multiple states all at one

- 1 | time?
- 2 A. Yeah. They -- well, they didn't define it for us.
- 3 Q. Oh, okay.
- 4 A. They said, just --
- 5 Q. They said, do it.
- 6 A. Let's put together a plan that goes faster, right? So --
- 7 Q. Okay. so, what'd you come up with?
- 8 A. So we were going to propose a plan that would be a 3-year
- 9 | rollout and we'd be able to tackle, you know, multiple states at
- 10 different years.
- 11 Q. Okay. And how did that 3-year rollout change following the
- 12 Merrimack incident?
- 13 A. Yeah. Following the Merrimack incident, we, you know, been
- 14 talking with the board. They approached that if we can get the
- 15 primary elements of, you know, RP 1173 in place in every state by
- 16 the end of 2019, they would prefer that.
- 17 Q. And what do you mean by, primary elements?
- 18 A. So there's 10 primary elements in an SMS and the RP 1173 and
- 19 | wanted to focus on those. And I explained earlier that we're
- 20 | actually expanding our definition of SMS beyond those 10 elements
- 21 | to get a, you know, leadership assessment done, get some asset
- 22 assessment done, to do our low-pressure enhanced safety plan, all
- 23 those things that are beyond RP 1173. You know, we're expanding
- 24 that definition through the project management office effort.
- 25 Their focus of, you know, at least, let's get -- make sure that

- 1 | we're getting all the primary elements of RP 1173 in place by the
- 2 end of 2019.
- 3 Q. Okay. Thank you. What is your education background?
- 4 A. So I have a Bachelor of Arts in Business Administration, and
- 5 | a Bachelor (sic) of Science in Organizational
- 6 Management -- Organizational Leadership.
- 7 Q. From where?
- 8 A. The Bachelor of Arts was from Grove City College and the
- 9 Bachelor -- or, the Masters of Science is from Geneva College.
- 10 Q. I'm sorry. Bachelor of Science in -- Master of Science in
- 11 Organizational Leadership?
- 12 A. Yes.
- 13 Q. Okay. Thank you. Okay. You and Mike were talking about
- 14 risk assessment and is your group the only one within NiSource
- 15 | that has the responsibility for the risk assessment?
- 16 A. No. There's a group under the transmission integrity program
- 17 | that does risk assessment on our transmission class lines. And
- 18 then they also provide risk assessment under the underground
- 19 storage integrity program.
- 20 Q. So were you trying to split back up and now the SMS is going
- 21 to aggregate it back together?
- 22 A. Yeah. And that's we have to do. In order to stay compliant
- 23 | with the integrity management rules that PHMSA has in code, we'll
- 24 still have to do risk assessment in those programs.
- 25 Q. Okay.

- 1 A. What we'll want to be able to do is translate those to a
- 2 | common risk register. So, you know, that's what the SMS is going
- 3 to allow us to do is translate risks that were assessed in those
- 4 programs to a common register, so we have apples-to-apples
- 5 comparisons.
- 6 Q. Okay. So do folks that work for you actually do the risk
- 7 assessment?
- 8 A. Yes.
- 9 Q. For which part against?
- 10 A. Distribution integrity management.
- 11 Q. Okay. You do the distribution?
- 12 A. Yes.
- 13 Q. Thank you. Thank you for clarifying that.
- 14 A. Yes.
- 15 \mathbb{Q} . I appreciate it. And then just one other question right now.
- 16 We've talked, I quess, a little earlier today in the other
- 17 | interviews about management of change. How does that fit in with
- 18 | vour risk assessments?
- 19 A. Management of change is a part of our focus through safety
- 20 management systems. The risk assessment piece on management
- 21 | change is not a part of a distribution integrity risk assessment.
- 22 The risk assessments that are done through distribution integrity
- 23 are kind of two-part. One is system-level, so threats on assets.
- 24 And then what may bubble up is a higher risk through those
- 25 | assessments get, what we call, segment-level assessment.

So you referred Optimain earlier, so obviously you're aware -- if we feel like a system-level assessment bubbles up a high risk on, let's say, bare steel corrosion. So the threat would be corrosion, the assets would be our steel. Then we'll do an additional risk assessment to understand what's the worst-case scenarios on those pipes. So Optimain does a segment-level risk assessment. We have similar segment-level risk assessments that are done in damage prevention, on cross bores. There's other places where we're building segment-level risk assessment on threats on assets, so.

11 Q. Okay.

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- 12 A. Management change isn't one of those because it's a threat on
- an asset that we're looking at in the integrity programs.
- 14 Q. Okay. We have the briefing that your folks came NTSB
- 15 headquarters on Monday and went over in terms of your response to
- 16 the urgent safety recs. But could you explain right now what you
- mean by assets -- threats on assets?
- 18 A. Yes. So there's different categories of threats that we've
- 19 identified and subcategories of threats that we identify on
- 20 different components of our systems. So, for instance, corrosion
- 21 is a threat on a -- on certain types of assets.
- 22 Damage -- excavation damage is a threat on out assets. Outside
- 23 forces, forces of nature is a threat on our assets. There's a
- 24 number of categories of threats. And then we assess them against
- 25 the different types of assets we have.

- 1 0. Such as?
- 2 A. Such as mains -- gas mains, gas services, plastic or steel,
- 3 regulators, valves. There's a whole matrix that we've created in
- 4 | our risk model of assets and the different categories of assets,
- 5 and then the different types of threats that may occur on those
- 6 assets.
- 7 Q. Okay. Thank you.
- 8 A. You're welcome.
- 9 Q. So what I'm looking for and not hearing is change in
- 10 processes as being perceived as a potential threat to your assets.
- 11 For example, the new pipeline being laid down and service being
- 12 reconnected.
- 13 A. Yeah. That may -- it may not be called out as management of
- 14 change, although we're recognizing management of change through
- 15 | our SMS, but we want to improve that. There is one category of
- 16 threats called, incorrect operations. And that's part of our risk
- 17 | matrix, you know, where we do -- if there's incorrect operations
- 18 | that may occur, and we've got some subcategories on that that
- 19 apply to the different assets. Then we focus there to see, how
- 20 does that assess against all the other threats on assets that we
- 21 have. So it may be embedded in there, if that's what you're
- 22 looking for, is incorrect operations as a threat category.
- 23 Q. Okay.
- 24 A. The management of change process is what's in focus for us on
- 25 | the SMS. We want to understand how we can get better at

- 1 management of change processes.
- 2 Q. Well, I'm looking at the link between the risk assessments
- 3 and safety management system that you're implementing in terms of
- 4 management of change. So if you have the procedure, for example,
- 5 this project at Merrimack, that there were so many work packets
- 6 being done and the timeline got compressed or got stopped, started
- 7 | up again. Everything that happens that you look in terms of
- 8 management of change, when that happens, do you -- does someone
- 9 there on the ground or someone in project planning or anyone else
- 10 who is part -- responsible for the work, do they stop and do a
- 11 | risk assessment for management of change?
- 12 A. At this point, I'm not familiar with a risk assessment that's
- done at the point of management of change.
- 14 Q. So when something changes in the work that's to be done,
- 15 | there's -- is there a safety assessment, a new safety assessment
- 16 | that's done?
- 17 A. It wouldn't be part of my group, so I'm not sure I can speak
- 18 to that. I don't know.
- 19 Q. Okay. Thank you.
- 20 A. You're welcome.
- MS. GARCIA: Steve?
- DR. JENNER: This is Steve Jenner.
- BY DR. JENNER:
- 24 Q. Just a couple high -- well, let's just call them fundamental
- 25 questions. You're very excited about the SMS.

- 1 A. Yep.
- 2 Q. So we hear that, we see that. But in the few years that
- 3 | you've been involved in it this heavily, how has -- you know, how
- 4 do you see that SMS is improving on the way that NiSource had been
- 5 doing business in terms of assessing risk? Can you think of any
- 6 | specifics?
- 7 A. I can speculate, but it's -- we haven't deployed the SMS yet,
- 8 so that's -- we're on track through this PMO to really get it
- 9 built and put it in place. And so, to realize the benefits of it,
- 10 we haven't been there yet, so.
- 11 Q. Okay. I understand that, but there are certainly perceived
- 12 benefits --
- 13 A. Right.
- 14 Q. -- that you're forecasting.
- 15 A. Right.
- 16 Q. So if you can talk about what areas do you think it would be
- 17 most beneficial.
- 18 A. Yeah. To have -- well, first of all, you know, having one,
- 19 | single risk register in each of our companies that can be looked
- 20 at. The biggest benefit I see is creating an opportunity in the
- 21 culture of the companies to improve the safety culture from where
- 22 | it is and take it to the next level. We don't -- we didn't have
- 23 formal processes in place around nonpunitive reporting, so really
- 24 cultivating frontline input that are closest to the work and
- 25 closest to the assets and, theoretically, to the threats that

- might be out there, to really bubble those up through a grassroots 1 So I'm excited about that. process. 2
- To really have good scorecards in place that are common 4 across all of our companies around, how is this working, and some
- maturation scoring to -- for that to be developed. 5 Those are the
- 6 things that I think are going to be exciting. But we're not
- 7 coming from, you know, ground zero, square zero on this.
- That's -- I want to make sure that that's clear is, we were doing 8
- 9 a lot of really good safety stuff already.
- 10 You know, when we did our gap analysis piece, you know, early
- 11 on with Virginia's pilot, we were already pretty well-aligned with
- 12 a lot of the elements of RP 1173. We found places that we needed
- 13 to improve. But what it told us was, we're already doing some
- 14 things that are really good, so. But we have the opportunity to
- 15 improve.

- 16 And that sort of goes to my question. I mean, before Right.
- 17 the concept of safety management systems came along, there were
- 18 plenty of companies out there doing good, I mean, risk assessment-
- 19 type work without having this name associated with it.
- 2.0 Α. Yeah.
- 21 But, clearly, your company and you see a reason to bring this
- 22 in because you perceive some benefits --
- 23 Α. Right.
- 24 -- to the way you were currently doing business, so that's
- 25 what I was trying to get to. How will you go about assessing its

effectiveness?

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A. Well, again, you know, building scorecards to understand how we're doing on certain performance metrics. Agreeing to what the metrics need is part of this, you know, program management. But understanding how are we doing on these safety performance metrics. But there never was a standard for us.

That's why this RP 1173 is pretty good for us as an industry is, we've never been measured against any particular standard. So having this standard now gives us a measuring stick. So I think we're going to be able to tell -- first of all, against the elements of the RP 1173, that's going to tell us how we're doing, get a baseline, and start measuring how we're improving.

The other big piece to this, and it's the foundational element to any safety management system is the safety culture and measuring that. And that's another one where, you know, we started off with the National Safety Council's barometer survey, which gave us some benchmarking against a lot of other industries. But we're also trying to find out, is there other ways to measure safety culture out there that'll be helpful for us so that we can determine, are we -- you know, are we getting better with our safety culture.

We can have the greatest processes in place and, if nobody cares, it's not going to matter. But we're already starting from a really good spot once we got the National Safety barometer survey. You know, we've got a good safety culture. Now we need

- 1 to mature it and cultivate it more.
- 2 Q. Yeah. And I do have a fair question, but can you just sort
- 3 of summarize what your perception of safety culture is? How do
- 4 | you think of safety culture?
- 5 A. I think of it as the way that we do our business day-to-day.
- 6 Is it front-of-mind? Is the safety of our public, of our
- 7 employees and, you know, our system, is that the primary elements
- 8 that we're thinking of? Are we -- you know? So that's how I
- 9 think of our safety culture. And it's strong right now, so I
- 10 guess maybe it's hard for me to explain because I'm used to living
- 11 | in that culture.
- 12 Q. Right. I understand.
- 13 A. Yeah.
- 14 Q. That's all I have. Thank you.
- 15 MS. GARCIA: Roger?
- DR. HOEPF: Hey, Roger?
- 17 MR. EVANS: This is Roger Evans.
- 18 BY MR. EVANS:
- 19 Q. How are you? Hope you're making it through this okay. Not
- 20 too rough on you.
- 21 A. Yeah. We're okay.
- 22 Q. Just a couple questions. Just a couple questions. Now, I
- 23 understand that the over-pressurization protection is going to be
- 24 put in place. First off, was that put in place at all your
- 25 utilities that NiSource owns?

- 1 A. I'm not familiar with what --
- 2 Q. For all low-pressure --
- MR. TOBIN: Roger, you asking about the slam-shuts?
- 4 BY MR. EVANS:
- 5 Q. Yeah. The slam-shuts. Right.
- 6 A. Yeah. So that -- the low-pressure enhanced safety program
- 7 | that we're talking about is for all of NiSource, on all of our
- 8 low-pressure systems.
- 9 Q. Oh, okay. So when you -- that's good. I was curious about
- 10 that. When you first found out about this accident and you, you
- 11 know, saw what happened an everything, your thoughts about risk
- 12 | assessment and -- what were your thoughts about the overall risk
- 13 assessment part of your business when you first heard about this
- 14 | accident?
- 15 A. Yeah. I -- so our risk assessment has been improving. And
- 16 you know, I think it's been one of those things, Roger, where we
- 17 | have really worked to try to get better at risk; identification
- 18 and risk assessment. The models that we have right now, some
- 19 refer to as deterministic, which means we're looking back at
- 20 | history a lot of times in order to assess our risks; leakage that
- 21 occurred in our system in the past or some other event.
- 22 What we -- and one of the reasons for why I keep saying I'm
- 23 excited about SMS is it's got us focused on, how do we learn as an
- 24 organization the techniques and the tools and the skills to do
- 25 probabilistic risk assessment, which isn't necessarily looking

back at history but really helping us anticipate and be more
predictive in our risk assessment.

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So we've been on a journey over the last number of years.

Distribution integrity itself as a program in our industry is pretty young. We're pretty young in an industry at risk assessment, so I've been very happy about how we've progressed in our risk assessment skills in our company over the last few years. I was just -- you know, because this incident happened, it didn't sway may confidence in how we're assessing risk.

Q. Oh, okay. Okay. So at the time when this occurred, I guess, you know, one could say, well, the program risk assessment -- not the risk assessment from maybe at a distribution integrity management 30,000-foot level. But at the project level, that was maybe not as thorough as what one would think. Or maybe it wasn't even considered because this was such a unique problem that it wasn't on a radar.

But the fact that you have this new system in place with these slam-shuts to control this problem in all your locations now -- and I know that takes care of this problem. What about the issue of -- you know, if I'm going back to root cause of this, I have to look at it from the standpoint of saying, okay. Someone decided to put this change in there, in this system. And when they did this change and they operated that valve, you know, we had this accident.

But one could look at this and say, the risk assessment of

- 1 what they were doing, you know, the what-if analysis of, you know,
- 2 | if when I draw this up and I look at it from the standpoint of
- 3 | basis risk. Not a big-picture, 30,000-foot level risk, but just
- 4 | basic risk of what I'm doing. Have you changed that as well at
- 5 | the project level? Because I know you've obviously
- 6 | changed -- you've kind of, like, canceled out the risk on this
- 7 | over-pressurization with the slam-shuts. And that is
- 8 your (indiscernible) --
- 9 A. Yeah. At the --
- 10 Q. -- slam-shut system should take care of it. But what I'm
- 11 getting back at is the root level of what went on here that there
- 12 wasn't enough oversight or something in a risk assessment or
- 13 review of the project or whatever so that this didn't happen in
- 14 | the first place at the project level. Are you addressing that
- 15 | with your new systems that you're putting in place?
- 16 A. I'm not part of that discussion, so I'm not sure I can answer
- 17 that question. But what I can answer is that, even though
- 18 | we -- you know, you refer to the slam-shuts that we're doing to
- 19 address risk in that way, we're -- we were also addressing other
- 20 | risks with our modernization of the low-pressure system. So
- 21 | that's in anticipation.
- 22 For instance, we didn't just say, what's the over-
- 23 pressurization risk that we need to address through slam-shuts,
- 24 | but we're also assessing each of those regulator stations for
- 25 other risks, such as vehicle damage or, you know, could a

- 1 | tree -- is there -- you know, is there tree limbs that could fall
- 2 on this thing? Or security risks around these things. So we're
- 3 | anticipating more than just an over-pressurization risk as we're
- 4 addressing these.
- 5 Q. Okay.
- 6 A. So --
- 7 Q. But the other question I have and -- oh, go ahead. I'm
- 8 sorry.
- 9 A. No, no, no. I just -- I was just trying to clarify. I'm
- 10 done.
- 11 Q. Okay, okay. So the other part of this that's, I guess,
- 12 | somewhat unique maybe in the business, you know, most utilities
- 13 have -- that have these low-pressure systems have these sensing
- 14 lines located on their alignment sheets or they're on their GIS
- 15 system. And we know that you folks did a bang-up job getting
- 16 these things on the GIS system post-accident and it -- like,
- 17 | I think there's only a handful of these left and they happen to be
- 18 | in the same area where it -- your company has to deal with this
- 19 mayor. He's not permitted you access, I think, is what I heard
- 20 last time.
- 21 But when you first heard of this accident, were you surprised
- 22 | that the -- you know, that these lines were not on your GIS system
- 23 for someone to call them up and recognize those when they were
- 24 doing work in this area so that they'll -- those line would be
- 25 kind of, like, in the forefront of project planning? And the fact

1 that they were across your companies, you had to pick up 2,100, or

- 2 | something, lines. Had this not been on the radar before from
- 3 | a -- you know, from a risk standpoint in all the time you've been
- 4 at your company?
- 5 A. Yeah. For all the time that I've been involved in this
- 6 | industry and at my company, I've never heard of an over-
- 7 pressurization as the result of a single point of failure on
- 8 control lines. And that's -- so it was a surprise to me. We have
- 9 over-pressurization on our risks, but the causal points of those
- 10 were different than control lines. You know, they were debris in
- 11 | the regulators or freeze-offs on heaters or those types of things
- 12 that we'd seen.
- And again, in a deterministic kind of risk modeling, we were
- 14 looking at history very hard and saying, what can we learn from
- 15 | history so that it doesn't repeat itself? But I'd like to think
- 16 | that because we're moving toward probabilistic risk assessment
- 17 | that we might be able to anticipate things we've never seen before
- 18 | if we do it correctly.
- 19 Q. Right. Yeah, because -- I mean, from a general standpoint, I
- 20 | quess, I mean, it's fair to say that control lines from main to
- 21 regulators were kind of like not on the radar from a standpoint of
- 22 project planning, for modifications. Everything I've looked at, I
- 23 don't see any reference to -- they're not, like, a checklist item.
- 24 I haven't seen that anywhere. But, you know, just -- and I'm not
- 25 trying to point fingers at anybody. You know, we're here to try

- 1 and improve the industry because there may be somebody out there
- 2 | that has a similar issue with control lines that reads the report
- 3 and says, hey, I just found out something I didn't know before.
- 4 We have to go look at these --
- 5 A. Right.
- 6 Q. -- things and make sure -- blah, blah, blah. But I mean, it
- 7 appears in this case that the sensing lines were kind of, like,
- 8 not on the radar of the risk assessment, of the design, of
- 9 the -- you know, and there have been so few accidents in the past.
- 10 But perhaps that was --
- 11 A. Right.
- 12 Q. There have been some accidents with sensing lines and I can
- 13 | imagine your risks you're talking about: things like an excavator
- 14 hitting a sensing line, maybe a -- some sort of a land-type event
- 15 | like a landslide or something like that could hit a sensing line.
- 16 But would you have the same opinion that these were not, like,
- 17 | high on the risk list at -- you know, at Columbia when this
- 18 accident occurred?
- 19 A. Yeah. From a low-probability standpoint, it wouldn't
- 20 have -- in our modeling, it wouldn't have bubbled up as a higher
- 21 | risk than other risks that we were addressing at that time.
- 22 Q. Okay. So this wasn't -- I mean, this wasn't considered
- 23 | anything like -- I don't know how you rank your risk, scale of one
- 24 to 10 or something, or A, B, C, D, or whatever, but this was not
- 25 at the high-risk level in any of the documentation that you've

- 1 seen with regard to risk --
- 2 A. Not specific to --
- 3 Q. -- (indiscernible) --
- 4 A. Yeah. Not specific to control lines. Over-pressurization
- 5 was listed as a high risk, but other causal factors that we knew
- 6 about were identified, not control lines.
- 7 Q. Okay. Okay.
- 8 A. Yeah.
- 9 Q. Well, thank you very much. I appreciate it. That's all I
- 10 have. Thank you.
- DR. HOEPF: All right. Thanks, Roger. How are you doing,
- 12 Jim? Do you need a break?
- MR. ROBERTS: Nope, I'm good.
- DR. HOEPF: Okay. I don't image we're -- the second round is
- 15 going to take a long time, so I don't think we -- if you're good
- 16 to go, we can probably just kind of keep plugging along here.
- 17 BY DR. HOEPF:
- 18 Q. You know, I appreciate you kind of talking through this with
- 19 us. I think you've given us a great, you know, overview of, you
- 20 know, the SMS implementation and some really good, I think,
- 21 insights. I think it's really interesting what you -- you know,
- 22 | we've been talking about the risk and, you know, risk management.
- 23 And, you know, I think it's interesting you say, yeah, we know
- 24 over-pressurization was something that has been identified as a
- 25 | risk, but if your models are built on history and you've never had

- some -- an over-pressurization event due to control lines, then,
 you know, I see where that would be something that could be
 difficult to predict. So it's an interesting insight.
 - So I think, naturally, where we're kind of gravitating at this point is, you know, trying to get, I guess, insights in terms of things that, you know, maybe could prevent a reoccurrence along these lines. So if we start to drift into areas that, you know, too in the weeds, that are not at your level, just say, I'm not -- you know, I'm not getting that -- or, that's not your area of expertise. I think we're kind of -- we're interested in the engineering process, the constructability reviews, the risk assessments as their done at a -- like, a project local level.
- And so, if you have some insights on those kind of things,

 qreat. If --
- 15 A. Yeah.

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- 16 You know, if that's kind of out of your purview, then, you 17 know, don't go there. You know, I think maybe part of the reason 18 that came up is, you know, into some discussions we've had, you 19 know, a mention of sort of risk assessments were sort of delegated 2.0 to a local level. And, you know, that phrase had come up and, you know, I wasn't sure exactly what, you know, that meant in terms of 21 maybe you can give us a little bit of thoughts -- and you've 22 23 already kind of commented on this, too.
 - But, I mean, who is doing -- who is managing risk, you know? How is that going to look, you know, both from your perspective,

- 1 | and how do you sort of see that working through the engineering
- 2 department as it works from the higher levels of the organizations
- 3 down to those in direct contact with the system?
- 4 A. Yeah. The operating companies own risk. And they're the
- 5 closest to the assets. So, you know, the -- my role in this is
- 6 really to help them understand the risks they have and to model
- 7 the risk for them. The SMS will expand that to help us learn from
- 8 and manage a lot of performance improvement and the plan, do,
- 9 check, act. But I'm nowhere close to the local engineering field
- 10 and I think you're going to want to talk to Kevin Swiger a little
- 11 more about engineering -- gas engineering because I don't have any
- 12 involvement with gas engineering from that standpoint.
- DR. HOEPF: Okay, okay. Well, I think the rest of my
- 14 question are -- yeah. I think we're going to have a lot to talk
- 15 tomorrow, you know, with the engineering folks. But I think that
- 16 wraps up -- well, for me. Yeah. I'll give --
- 17 MS. GARCIA: Yeah. Okay.
- DR. HOEPF: Yeah. Let's go around, and then I'll just have a
- 19 | couple of --
- 20 MR. ROBERTS: Sure.
- 21 DR. HOEPF: -- standard conclusion questions.
- MR. ROBERTS: Okay.
- MS. GARCIA: Okay. Thank you, Mike.
- DR. HOEPF: Oh, yeah.
- 25 BY MS. GARCIA:

- 1 Q. I just had one question for you. It's a general question.
- 2 So in your position, what do you see as the safety goal for
- 3 NiSource?
- 4 A. Zero incidents. That's our goal.
- 5 Q. Okay.
- 6 A. Should always be, and it is.
- 7 Q. Okay. Thank you.
- 8 DR. JENNER: I have no questions. Thank you.
- 9 MR. TOBIN: Roger, do you have any questions?
- 10 MR. EVANS: Yeah. Just one real quick on.
- 11 BY MR. EVANS:
- 12 Q. So just want to get a feel for this. If I'm going to be
- 13 describing this, I'm going to have to know this part of it. So if
- 14 in your business there's an accident report and maybe it's
- 15 | something that's -- I'm just going to it XYZ accident that you
- 16 get. And then maybe 2 weeks later you get another XYZ accident.
- 17 | Maybe you have two of these accidents in a certain period of time.
- 18 Then maybe after a while you get three of these accidents.
- 19 Once you have some sort of an occurrence appearing on your
- 20 | radar with regard to, you know, a loss, are you -- do you have
- 21 people that are basically taking these reports and saying, okay.
- 22 This one needs to be trending and this one does not. We have a
- 23 history of this in the past. We try to do this to make this never
- 24 happens again. Here it's happened again. Can you describe that
- 25 | for us a little bit? How do you go about managing that risk

- when -- with regard to accident reports and frequencies and all that type of stuff?
- 3 A. I'm not sure that I'm following the line of questioning, but
- 4 let me try, okay? You know, one of the -- here's an example
- 5 because this is the best way that I can explain it. We have a
- 6 dig-in on one of our systems in one of our states every day.
- 7 Somebody with a backhoe or a plow or something hits our facility
- 8 every day.
- 9 So, I mean, we see that frequency so we're trending a lot of different metrics around those and putting in place as many
- 11 proactive avoidance measures that we can in each of our states.
- 12 And we've got a whole damage prevention department that focuses on
- 13 that. So that's probably the extreme of the most frequent
- 14 accidents that occur. To trend, you know -- I don't know that
- 15 there's a magical number of, you know, if we have a certain type
- of accident or failure on our system when it gets trended. But we
- 17 have a lot of programs that look at that.
- 18 For instance, we have a facility failure program where, if a
- 19 | valve leaks, we're recording that and we're taking a look at it.
- 20 And if a similar valve leaks, then we're taking a look at that.
- 21 And we're looking at each individual and trying to understand the
- 22 | causal factors around that. We record ever leak that we have,
- 23 regardless of what the cause is, and we trend those things, and we
- 24 trend the cause factors on them.
- 25 So we are very focused on the analytics of where we have

- failures or where we have -- if it's an accident. You know,

 that's just a -- it's another term for a failure that can -- a lot

 of different types of failures can occur. So we're very active

 about doing that. How frequently any one particular accident may
- 5 occur, I don't know that I could speak to that.
- Q. So -- well, I guess -- that's great. You did answer my
 question. But what I'm wondering is if someone in the engineering
 department experiences something like a small over-pressurization
 event, or maybe they have a near miss -- I guess you report near
 misses as well -- that that would make its way into your system
 and somehow another -- if were to do a doc request on any and all
- its way into your office, you would be able to tell us that number over the last 5, 6 years?

over-pressurization events on the low-pressure system that made

- Will that be something that you would -- you think there would be any that we could -- you know, that we could see? Or is this something you've never -- it hasn't been on your radar at all?
- A. No. We would be able to talk to any over-pressurizations that occurred on any of our systems because it's part of our tracking for our integrity programs. Or any other type of --
- 22 Q. Okay.

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A. -- accident, because we put causal factors on those and then
we check that, you know? So, for instance -- and then, in some
cases, we're doing -- we're stopping and we're doing a complete

- 1 | root cause analysis to understand the causal factors because
- 2 they're not clear and evident.
- 3 Q. Okay.
- 4 A. Okay?
- 5 Q. That's what I was wondering if you were doing -- yeah. Okay.
- 6 | Well, I think I'm actually going to prepare that doc request
- 7 because I think that's something that would be interesting to
- 8 have, even if it only shows up a couple of them, the fact that we
- 9 have done that and that we have -- you know, we've asked for that
- 10 and you've responded and, you know, this is what the result was.
- 11 So, yeah. I'll be doing that. So I'll -- it'll come through
- 12 (indiscernible) --
- MR. EVANS: Thank you very much. That's all I had.
- 14 MR. ROBERTS: Okay.
- 15 DR. HOEPF: Okay. Thanks, Roger. Okay. And -- so
- 16 just -- yeah.
- 17 BY. DR. HOEPF:
- 18 Q. So just a couple of concluding questions here. So the NTSB
- 19 has made several recommendations after the incident. So from your
- 20 perspective, has NiSource been successful in implementing these
- 21 changes? And I know we've talked about management of change a
- 22 | little bit. But just to give you a couple of specifics, there's a
- 23 recommendation about the construction documents, reviewing them
- 24 for accuracy, completeness, and correctness. And then there's
- 25 another recommendation about records, documentation, making sure

- 1 | that they're traceable, reliable. Can you comment on those?
- 2 A. I'm not part of, so I guess I can't --
- 3 Q. Okay.
- 4 A. -- comment on those, on the approach that's been taken for
- 5 | the urgent recommendations. I know, you know, Dave Monte, Chuck
- 6 Shafer, my boss, have been very, very involved in that, so.
- 7 Q. Okay. Okay. Fair enough. Is there anybody that we have not
- 8 interviewed and -- you know, that's not on our list already that
- 9 you think would be key for us to talk to?
- 10 A. Can't think of anybody.
- 11 Q. Okay. That's fine. And do you have any suggestions to
- 12 prevent an incident of this nature from occurring against?
- 13 A. Yeah. I -- you know, we're actively pursuing the SMS and I'm
- 14 very, very hopeful that, if we get really good at using a safety
- management system the way it's intended, we'll be able to, you
- 16 know, prevent anything from occurring. The goal is zero
- 17 | incidents. But the low-pressure enhanced safety plan that we're
- 18 putting in place with the slam-shuts and mapping the control lines
- 19 is going to go a long way to help us avoid ever having this done
- 20 in the future.
- 21 DR. HOEPF: Okay. Awesome. Anything else? Nothing? Thank
- 22 you so much. We really appreciate you coming and talking to us
- 23 | today, Jim.
- MR. ROBERTS: Sure.
- 25 (Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: MERRIMACK VALLEY RESIDENTIAL GAS

FIRES AND EXPLOSIONS SEPTEMBER 13, 2018

Interview of James Roberts

ACCIDENT NUMBER: PLD18MR003

PLACE: Gahanna, Ohio

DATE: March 6, 2019

was held according to the record, and that this is the original, complete, true and accurate transcript which has been transcribed to the best of my skill and ability.

Danielle C. Morgan Transcriber