UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

Investigation of:	*	
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MINNEHAHA ACADEMY SCHOOL EXPLOSION	*	
MINNEAPOLIS, MINNESOTA	*	Accident No.: DCA17MP007
AUGUST 2, 2017	*	
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Interview of: ALAN EBEL

Fire Station #21
Minneapolis, Minnesota

Monday,
August 7, 2017

APPEARANCES:

ROGER EVANS, Investigator in Charge
National Transportation Safety Board

MICHAEL HOEPF, Chairman, Human Performance Group
National Transportation Safety Board

BRIAN PIERZINA, Senior Investigator
Pipeline and Hazardous Materials Safety Administration (PHMSA)

SYLVIA SCHWARZ, Senior Engineer
Minnesota Office of Pipeline Safety

SHANE JONES, Area Manager
CenterPoint Energy

RYAN LARSEN, Controller
Master Mechanical

DANIEL BOWLES, Executive Director of Finance & Operations
Minnehaha Academy

THOMAS TOBIN
Wilson Elser
(On behalf of Mr. Ebel)

I N D E X

I N T E R V I E W

(9:42 a.m.)

MR. EVANS: Good morning. Today is August 7th. It is now 9:42 a.m. My name is Roger Evans. I'm the investigator in charge with the National Transportation Safety Board out of Washington, D.C. We're at the Minneapolis Fire Department, Precinct No. 21, in Minneapolis, Minnesota. This interview is being conducted as part of the investigation into the Minnehaha Academy school that occurred on August 2nd, 2017. The NTSB case number is DCA17MP007[1].

This interview is being recorded and may be transcribed at a later date. A copy of the transcript will be provided to the interviewee for review prior to being entered into the public docket.

Mr. Ebel, you're permitted to have one other person present during this interview. This is a person of your choice -- a supervisor, friend, family member, or nobody at all. Please state for the record who you have selected to be present during this interview, and also provide to us the spelling of your name and your job title and the company you work for.

MR. EBEL: My name is Alan Ebel. A-L-A-N is the first name. Ebel, E-B-E-L. My job position is meter installer foreperson. I work for CenterPoint Energy. Shane Jones is company representative.

[1] Corrected accident number

MR. EVANS: Strike that, strike that, transcriber, please. The representative is your attorney.

MR. EBEL: Oh. Okay. Oh, Tobin -- Tobin Thomas is my company representative.

MR. EVANS: Okay. And --

MR. TOBIN: My name is Tom Tobin, T-O-B-I-N, with the Wilson Elser law firm.

MR. EBEL: Oh, the other way around.

MR. TOBIN: W-I-L-S-O-N.

MR. EBEL: Sorry.

MR. TOBIN: E-L-S-E-R.

MR. EVANS: Thank you. I'd like to go around the room and make some introductions -- stating your name, spelling of your name and your affiliation. Starting from my right.

MR. HOEPF: Hi, my name is Mike Hoepf, H-O-E-P-F. NTSB, human performance.

MR. PIERZINA: I'm Brian Pierzina. B-R-I-A-N, P-I-E-R-Z-I-N-A. I'm a senior investigator with the PHMSA accident investigation division.

MS. SCHWARZ: I'm Sylvia Schwarz. S-Y-L-V-I-A, S-C-H-W-A-R-Z. I'm a senior engineer with Minnesota Office of Pipeline Safety.

MR. BOWLES: I'm Dan Bowles, B-O-W-L-E-S. I'm the Executive Director of Finance & Operations at Minnehaha Academy.

MR. JONES: Shane, S-H-A-N-E, Jones. I'm an area manager at

CenterPoint Energy.

MR. LARSEN: Ryan Larsen, L-A-R-S-E-N. I'm with Master Mechanical.

MR. EVANS: Well, thank you, Alan. I -- should I call you Al or Alan or --

MR. EBEL: Whatever you -- Al is fine.

MR. EVANS: Al is fine? Okay. Well, thank you for appearing to speak with us today. We appreciate that.

MR. EBEL: Sure.

INTERVIEW OF ALAN EBEL

BY MR. EVANS:

Q. Before we begin the interview, we'd like to get some background information about yourself: how long you've been with the company, who reports to you, kind of your roles and responsibilities, and the positions you've held, and how long you've held them within the CenterPoint corporation.

A. I've been with the company 24 years. I started out as a HSP technician.

Q. And acronyms -- please expand on the --

A. Oh, Home Service Plus, it's called.

Q. Okay.

A. I was there 10 years. Fixing appliances, basically. It was HVAC stuff. So -- then I went to Dakota Station for 3 years. They convert natural gas into a liquid, they store it. Then in the wintertime, when the main pressures get low, they convert it

back to a vapor form. Then I became a meter installer. While I was at -- it's called Dakota Station -- for 3 years, then I became meter installer.

Q. And the year that you became a meter installer was? Roughly.

A. About 9 years ago.

Q. Okay.

A. So, yeah, I was at Home Service Plus for 10 years, at Dakota Station for 3 years, then I became a meter installer.

Q. Okay. Education background?

A. I got an associate's degree at Minneapolis Technical College. Then I got Commercial I and II at Dunwoody. And I also got an electronics degree in -- it's called Northwestern Electronics Institute, a 2-year associate degree.

Q. Do you also -- are you union?

A. Yes.

Q. Okay. And what is the union affiliation?

A. My -- Local 340.

Q. And the name of that union is?

A. Gas Workers.

Q. Gas Workers Union. Okay.

A. Yeah. Something like that.

Q. And the Gas Workers Union, are you -- the title that you have with the Gas Workers Union, what is that?

A. Just -- well, it's -- my title now is meter installer foreperson.

Q. Okay. But is that an official union -- it's not like a Journeyman XYZ? It's actually called a meter installer?
A. Yeah.
Q. Okay.
A. Yes. Well, that's our department, so --
Q. Okay. Do you also weld? Do you know how to weld, and do you know how to fit?
A. No.
Q. Nothing like that?
A. No.
Q. So, yeah, nothing to do with the pipefitting, the threading, welding -- nothing like that?
A. Not the welding part. No.
Q. Okay. How about the assembly part, where you would thread unions and thread elbows?
A. Thread unions, no.
Q. So you don't do any of that kind of work?
A. No. We buy all our pipe threaded and stuff, so --
Q. Okay. But what I'm getting at is this photograph here shows a lot of -- this is a photograph of the meter stations on the school that were installed that we just happened to have a photograph of, that was taken right after it was installed. This is the --
A. Correct. One of my meter installers --
Q. Yeah.

A. -- took the picture.
Q. Okay. So when you installed this -- I know you have angle iron brackets, where you have to red head them into the wall and all that kind of stuff, right?
A. Right.
Q. But you don't do any of the fitting of putting all this together?
A. Me personally?
Q. Right.
A. No.
Q. Okay.
A. I mean, unless they need help doing it. Sure, I can go out and do that.
Q. But typically your -- the work that your guys do is just mount the system to the wall; is that correct?
A. Well, in this instance, yes.
Q. Okay. Okay. That's good.
A. Because that's our piping, so --
Q. Okay.
UNIDENTIFIED SPEAKER: Can we go off the record for a second?
(Off the record.)
(On the record.)
MR. EVANS: Back on the record with Alan Ebel.
BY MR. EVANS:
Q. We were just talking about the meter installation. Can you

clarify the question about the scope of work that you folks would do with the meter installation?

A. The way the process works is engineering creates an order, the work orders. That's what this is. I get a work order to go do the work. Our fab shop, if they need to, they make up the welded fit. Okay. Then there's a date that comes available, that says it's fabbed, ready to go. That's when I go take a look at it, make sure every -- all the parts are going to be there for us to install it. So then, I go out and schedule a date to have it installed, and my meter installers go out and install it.

Q. Okay. Thank you for that clarification.

So let's go back to the first time you ever heard of the phrase Minnehaha Academy school and the word meter in the same sentence. From the first time you heard of that, we'd like to just have you explain anything you know about it. If you went to the school and looked at anything before it was installed, if you did so, who did you talk to, what was the date that you went, what was said, what documents were exchanged? If you can go through that entire --

A. I was just made aware that there's a -- was a dimensional at the school. As far as dates and times, I do not have none of that. As far as going out, I -- we figure out what we're going to do with it. And that was -- that's the early stages. So then, at some point in time we decide that this meter needs to be changed. All right. So if we're going to spend the money to change out the

meter, to upgrade it because it's old and get it out of the system, that's when we decide where we're going to put the meter.
Q. Okay. So let's go back. Was the meeting to have a discussion about replacing this meter, did it happen this year?
A. I would assume it was -- we've been out there a few times, so --
Q. But was that -- was the first time you went out there, was it in 2017?
A. I think it was even earlier than that. But then, engineering, not me, decides when they are going to do -- whenever they're going to replace the work.
Q. So how about your trips out there? Was your initial trip out to that scene this year?
A. I think I even went probably last year. I mean, because I think I changed the oil, and it's a while back. So -- but that was before I was a foreman.
Q. Okay. So when you went to the school last year or so, whenever that was, that was a service call?
A. I don't remember.
Q. Don't recall. So --
A. I mean, because somebody said that the pictures were taken in 2016. So, I mean, I think they had pictures before that. But I also took pictures too. So -- so, when we decide that we're going to spend the money to change out the meter, that's when we start deciding are we going to leave it inside or are we going to put it

outside. So then, they -- engineering calls me up and says, all right, Al, go out to the site and see if we can -- what we can do there. Can we put them -- can we move them outside?
Q. Was the communication you had from engineering to you, was that via email or was that via voice or was that in person?
A. They usually just call me up by phone.
Q. Okay. And that was -- you don't -- if you don't recall the date, you don't recall the date. But 2016 --
A. No, what happens is that they got on the scope what projects that they're going to do. Sometimes they don't even create a work order yet for me to even go do it. So they just tell me go out there and start staging it, is what the word is.
Q. We understand that you have photographs of this?
A. Yes.
Q. Do these photographs have date stamps on them?
A. That I'm not sure. I mean, it's -- was on my phone. You can take a look if you want, and --
Q. Okay.
MR. TOBIN: This is Tom Tobin. We supplied you with the JPEGs, and the JPEGs have dates associated with them in the metadata.
MR. EVANS: Okay. So the problem we have -- this is Roger Evans. The problem we have is that we didn't know those photos were from Al Ebel. That's --
MR. EBEL: Well, I think they even had some before me taking

pictures. I'm not fully certain about that, but --

MR. EVANS: Okay.

MR. TOBIN: I'll -- this is Tom Tobin again. I think you'll find that the metadata on the JPEGs is February 23, 2016, for the 2016 pictures that we supplied. Then we also supplied a set of 2017 pictures. So there are two sets of pictures that we supplied. I don't know about --

MR. EVANS: Okay.

MR. TOBIN: -- any others.

MR. EVANS: I'm going to write down February 2 -- 23?

MR. TOBIN: February 23, 2016.

MR. EVANS: 2016.

MR. TOBIN: Yes.

MR. EVANS: That's photographs that were taken by Alan Ebel.

MR. TOBIN: And then there's another set, coincidentally February 24, 2017, that were taken by Stacy -- yesterday. Both of which you have. And if you don't have them, we have them here for you.

MR. EVANS: Okay. That's Stacy from yesterday. Thank you for that.

BY MR. EVANS:

Q. Al, with the knowledge that on February 23rd, 2016, that we have evidence to support that you were there on that date --

A. It's possible it was me. It could have been an engineer too, so I can't say for sure I was there. I used to have an Nikon

camera that I used to take pictures. It broke. Now they told me start taking pictures with my iPhone.

Q. So the pictures -- just for the record, for the pictures that were taken on February 23rd, we cannot ascertain that they were done by Alan?

MR. TOBIN: This is Tom Tobin. The only set of 2016 pictures that we know of is that date. We understand they were taken by Al, but we don't -- I don't think we have anything more to confirm that. And they may well have been.

MR. EBEL: Right.

MR. EVANS: Okay. Okay. That's fine.

MR. TOBIN: The metadata would also tell us what camera took them.

MR. EVANS: Right.

MR. TOBIN: And if we ever wanted to, we could drill down and find out for sure.

MR. EVANS: Yeah.

BY MR. EVANS:

Q. Okay. So let's just say had that -- had these pictures been yours and you had gone to the school, when you do this type of work and you take photos, what is the nature of -- you know, explain to us why you would take photos, what you do with those photos, and where those photos would go once you've completed them -- once you have taken them.

A. They send me out there at that point in time that there is --

we're going to change out to the meter because it's old, right.
Q. Uh-huh.
A. So that's -- I go out there and I take pictures to decide -- or send it to engineering, too, if we can move it to the outside. And the reason why that we move it to the outside, because we don't want 10 pounds of pressure going into the building anymore. So it's safer to put the meters outside. And if we're going to spend the money, that's what we're -- that's what we do.
Q. Okay. Thank you for that. So --
A. So, yeah, I go out and decide where we can -- if and where we can put them outside. I help engineering with that.
Q. Okay. So we know that that -- from a previous interview, we know that that school is a controlled space to get into that area. When you went to that school, do you recall who you met with to get into the building in the first place?
A. No. I just remember the first time I went there I went with just the -- not the head dude, or whatever, just the -- one of the maintenance dudes. And he got me in, down to the boiler room. I more than likely took pictures on the outside and, you know --
Q. Do you recall any conversation you had with that person?
A. No. I wouldn't even know who that person was. I know it wasn't the head person. It was just a custodian, or somebody that knew how to get down in the boiler room.
Q. Okay. So sometime a while back pictures were taken. What was the next time in your recall when this topic came up again?

This topic of doing the change-out.
A. I just -- that's when engineering decides if they're going to spend the money to move the meters and whatever. That's all I can tell you on that.
Q. But did you have conversations at other visits to the school to speak with anybody about, you know, what Master Mechanical was going to be doing and --
A. No. At that point in time, no.
MR. EVANS: Can we go off the record?
(Off the record.)
(On the record.)
MR. EVANS: We're back on the record with the Alan Ebel interview.
BY MR. EVANS:
Q. Let's go back to -- you know, we know that -- it looks as though there were photographs that you took. We just saw some photographs that you shared with us that you took with a Nikon camera, I believe, back in -- whenever, in '16 or if it was 2017. It doesn't really matter that much at this point. So we know that you've been to the scene before. We know that you scoped out the meter replacement. You took some photographs for engineering, and all that. And you said, you know, to get the 10-pound pressure stuff out of the building. You know, we understand that.
So whenever the time -- post-engineering production of, you know, what they said they were going to do, that -- when they came

up and said, well, we're going to replace the meter at Minnehaha Academy school. Okay. And then once the plan was in place, that, you know, they had selected a typical out of your engineering standards, once that is done, can you tell us customarily what you would do when you know that a commercial site is going to have a meter change-out, and how you would coordinate that effort with a contractor.

A. Okay. So engineering gives me the order. I figure out if we can move it outside. Then I talk to engineering and say this is the location that we can put it or whatever.

Q. Uh-huh.

A. So, I was trying to think back that I was there before, if we have the pictures there. If I could see them?

MR. EVANS: Sure. I'm going to need to call that packet -- I mean, you said we can have this?

MR. EBEL: Yeah.

MR. EVANS: I'm going to call that Exhibit 1 of the Al Ebel interview. I'm marking them.

MR. EBEL: So, originally, we thought that we could probably put the meters right here. But that's --

BY MR. EVANS:

Q. Okay. The witness is pointing to an outside entrance door. To the left of the entrance door is a possible location for where the meters might go.

A. All right. That was option 1, that we first started with,

that we just put them right here. Because the meters are right below it. So the shortest distance to pipe to the inside would be down.

Q. Okay.

A. Well, at the time when I met with the -- one of the maintenance people, I didn't realize that this comes out like 4 feet past. That's the basement, or whatever.

Q. It's a bunker.

A. A -- if that's what you want to call it, sure.

Q. They call it on the drawings a bunker.

A. Okay. So then that means that we can't bring the riser up through the bunker.

Q. Right.

A. Because we don't want, there again, 10-pound gas going into the building.

Q. Right.

A. All right. So, then plan two is put the riser over here. But then you got a downspout for ice and stuff, and we weren't going to put it there. So then we decided that we'd put it around the corner.

Q. Okay. So where the witness is pointing now is the location in the photograph they supplied of the post-installation --

A. Correct.

Q. -- of the meter?

A. Right.

Q. That was taken shortly after this was mounted to the wall at the school. This location here is the location --
A. Right here.
Q. -- around the corner, on --
A. Correct.
Q. -- Exhibit 1. Can I write on this?
A. Uh-huh. Yeah, you can have that.
MR. EVANS: I'm going to call this page 1, Exhibit 1.
MR. TOBIN: Do you want to reference that exhibit the meter set?
MR. EVANS: Yeah. And I'm going to say Al Ebel interview. And I'll call this Exhibit 2. Okay. And this is the as-installed -- Exhibit 2 is the as-installed meter set hung on the wall.
BY MR. EVANS:
Q. Okay. So what Exhibit 2 indicates is this area that I'm marking out right here -- correct?
A. Yeah.
Q. This is where the meter set was actually mounted --
A. Correct.
Q. -- prior to the accident.
A. Right. So then, I let engineering know that the bigger meter, we want it to the left side because that's a -- the bigger pipe we wanted pointed towards where the meter is going inside.
Q. Okay.
A. Because this pipe here is this 2-inch threaded.

Q. Right.
A. And they can easily elbow in and down, or whatever.
Q. Right. Okay.
A. So -- all right. So, let me -- so, continuing on, okay, so we're going to -- now we're going to mount the meters over there. Right?
Q. And you -- the witness is pointing to the box I have shown on Exhibit 1, as to where the as-installed location of the meters are.
A. So, now that I know where the meter is, that's when I call a contractor. All right. It can be Master. It can be NAC. It can be Eagan, whatever. Normally for smaller jobs we pick Master.
Q. And when you say you call a company to do the work, do you --
A. That means engineering tells me to call a contractor --
Q. Right.
A. -- to do that, and I called Pat. I'm not sure what his last name.
Q. Yeah, Pat Boland.
A. P-A-T. So then I -- we set up a meeting to go out there. And then what he does -- I show him the location. We go inside, see where the location is. He figures out how much pipe and how much work is needed to get to the -- connect up to the customer piping. The reason why we hired Master Mechanical is because it's welded pipe on the inside.
Q. Right.

A. So we don't have the capability of doing that, so we hire a contractor to do that work.
Q. Okay. So can we go back, and regardless of the date of when this conversation occurred with Pat -- forget about the date for a moment --
A. Uh-huh.
Q. -- can you tell us, when you had that discussion with Pat, who was in place at the time? Who was there?
A. It would have been -- I think the head maintenance dude. Me and Pat, for sure. Then I'm not sure if there was another person there or not.
Q. Uh-huh. And how long did that discussion last?
A. It usually lasts about an hour. I mean, on a typical whatever.
Q. Yeah. Okay.
A. So the discussion was that how do we get to the pipes to the inside. So the reason why I took all these other pictures -- let's get back to -- all right. So this room here, this is the outside wall where the meter is.
MR. EVANS: Let me mark this exhibit, so I can -- we can relate it to the transcript.
I called this Exhibit 3. And this is a photograph of the basement.
MR. EBEL: That's in the other room.
MR. EVANS: Okay. In the adjacent room to the meter room.

MR. EBEL: Yeah. The reason why I took that picture -- and there's another picture, kind of a broader one. This is the wall right here. That's where the meters are going to be outside.

BY MR. EVANS:

Q. Okay.

A. It's just another routing of the pipe to get to the inside.

Q. Okay.

A. So that was just another option, to do that. But then it's more money.

Q. Right.

A. I'm going underneath this -- whatever you want to call it.

Q. Okay.

A. You know, so -- so then it was decided that we were going to mount the meters here. Pat was going to go through, then go down. Okay?

Q. Right.

A. But then, I got word from Minnehaha Academy -- I'm not sure who -- that he wanted to go down, then in. He didn't want the pipes going through on the top side.

Q. Oh, he wanted them to be below grade from --

A. He wanted to be below grade.

Q. Okay. So, with Exhibit 2, the connection shown on the meter connect point, it was discussed that the piping would not go through the concrete to make its way to the room. It would actually go underneath grade.

A. Right.
Q. And then go through the bunker --
A. Yeah. It's just more work for us.
Q. -- a side entry into the bunker.
A. Right. Right.
Q. Okay. That's shown on Exhibit 2.
A. So that means that now we -- our guys usually dig the hole for him, and then Master can do --
Q. Cord weld.
A. -- their welding and get to the inside.
Q. Okay. So let's go back and talk some generalities about -- and forget about this day for a moment.
A. Sure.
Q. Okay. So when you -- you had just said in a statement you made that "we call Master when we have to have welding, because we can't do that kind of work."
A. Normally --
Q. You won't do that kind of work?
A. For liability -- it's customer piping. Anything after the meter is customer piping.
Q. Right.
A. All right. That's -- typically we don't want to touch that.
Q. Right. Okay. So my question is this, though. The way you stated that makes me believe that you've done customer piping in the past?

A. It all depends on what size meter it is. I mean --
Q. Let's talk --
A. -- okay, let's --
Q. Let's talk commercial.
A. If it's welded piping, no. We don't touch it.
Q. But if it's not welded piping, would you touch customer piping on downside of the meter?
A. This job was initiated because CenterPoint needed to change the meters. They didn't come to us and say, hey, we want to move the meters outside. It was initiated by CenterPoint.
Q. Okay.
A. All right. So there's a difference there.
Q. Right.
A. So, if the -- if he would have came to us, then we would have told him, okay, we'll move the meters outside, but now you got to pay to have your own piping connected up.
Q. Okay. Okay. That's all right. I understand that. Thank you for that.
So let's talk about the -- these are some general questions that we need answers to.
A. Sure.
Q. Okay. When the piping is placed -- connected to here, customer piping, and it makes its way under grade, it gets penetrated to the bunker wall and it gets hooked up.
A. Uh-huh.

Q. Do you provide any painting specification? Any hanger specification? Any vent and drain specification?
A. No.
Q. Any material specification?
A. No.
Q. Nothing whatsoever?
A. Not on a customer side, no. I mean, no, far as the painting goes, normally we don't paint pipe on the inside.
Q. Okay. So if an installer asks you about what spec of pipe I need, would you supply that to them, for the customer piping? If a contractor were to ask you that?
A. It's -- they supply their own piping.
Q. But as far as the specification for that piping.
A. Oh, far as -- well, no, they're certified and whatever to --
Q. Okay. Okay, once the customer piping is installed, let's say, and -- do you offer any sort of inspection of that before you actually connect the gas?
A. No. They pull city permits and all that. Customer piping, no, we don't inspect their work.
Q. Okay. So --
A. Unless there's something totally wrong, or whatever. But, no, normally we don't.
Q. Okay. So what is the assurance that you have when a customer piping arrangement has been installed, okay, that when you put the juice to the pipe, that it --

A. They got to pressure test that.
Q. Oh, so they got to pressure test it. But I wonder --
A. Right.
Q. -- but what I want to know is, is there some sort of state certification that -- where they actually inspect that piping inside and you have to see that specification before you can turn the meter on and you can let the gas flow?
A. No. Not -- no.
Q. So, as long as this piping on this Exhibit 2 is -- once this piping comes out of here and you make this final connection and you bolt that up, you folks are happy to -- you're good to go.
A. They -- let's clarify that. They connect up to the -- this is their connection point.
Q. Okay. So --
A. So Master connects up to that. We don't connect up to that.
Q. Okay. So you connect on the other side of this piece of the gas coming in, from the main?
A. Because, say --
Q. From the main.
A. Well, our C&M guys --
Q. The service line. The service line.
A. Our C&M guys cut off the gas going into the building and reroute the pipe to here, to the outside.
Q. Okay.
A. Not the meter shop. That's a whole different department that

does that.
Q. Okay. So when the contract is let for Master Mechanical to do this work, that's a contract that you folks have with Master Mechanical to install the piping. Correct?
A. What they -- what -- I bring Pat out there. He makes a list of what it does. He writes down -- he sends it in to engineering, the cost. All right. So then engineering decides, okay, do we go with Master Mechanical or don't we. All right.
Q. But as far as the layout, the design, the specification of material, you have no call in that whatsoever?
A. No. Engineering, far as our piping, they design and --
Q. Okay.
A. -- all that. I'm the field worker --
Q. Right. Okay.
A. -- that goes out and does that. I set it up.
Q. Okay.
A. So, as far as specifications and all that, that's over my head.
Q. Okay. That's fine. I just want to get that for the record.
A. Sure.
Q. Okay. So the next item about this is -- so, whenever the work is being executed -- because it is your contract, correct? You all have written a contract to Master Mechanical to do this work. Can you describe in all of your history of doing this kind of work, the oversight you have provided to ensure that your

contractor is doing what he is being paid to do?
A. For the last 4 years -- I'm not sure exactly what the question was, again.
Q. So let's use a comparison. If I'm going to have a room added to my house, right --
A. Okay.
Q. -- and I'm going to pay a contractor X thousands of dollars to add this room to my house, every day that contractor is there I'm going to watch what that contractor does because I am paying him. I don't want him to put a window in the wrong spot. That's -- something like that. Right?
A. Right.
Q. So, using that same logic, when we have a contract that we see that you've let to Master Mechanical, do you just let the contract and say we'll see you when we hook it up? Or do you have people go by --
A. No. He's got an idea that he's going down and in. And --
Q. Yes.
A. -- he knows he has to elbow around the corner and connect up the customer piping.
Q. But the question is, do you actually have project oversight, because it's an X thousand dollar job, that you would oversee what is being done and inspect what's being done somewhere along the way? Is that done in any of these connections that leave the meter and go to customer piping?

A. Just the day that Pat calls me up and says that it's connected up or whatever. So my meter installers go down there and then see that it's welded, connected up, you know, the old one is disconnected. You -- for this project here, when they cut off the old service and run to this one, that's the day that all that happens.

Q. Do you have a checklist that you go by that says --

A. No.

Q. It's just your meter guys going in, taking a look at things and making sure that there are no open fittings or --

A. No.

Q. -- there's no --

A. They -- like I says, that they pull permits and they do air tests and make sure, and he tells me that they passed their tests.

Q. I mean, is the phrase "pinging a nut," is that familiar to you in your business?

A. No, I don't -- no.

Q. Where you take a wrench and tape on a nut to make sure it's been tightened?

A. No.

Q. Is that -- you've never heard of that? How about to ensure that the pipe is supported properly? Is that something they would look at?

A. Yeah. That's -- yeah.

Q. They would look at that?

A. Well, I mean, my meter installers, if they see a problem, yeah, that's --

Q. Okay. Well, that's all the questions I have for right now.

MR. HOEPF: Let's go to the left, around. Questions?

MR. LARSEN: Brian Larsen. I have no questions.

MR. HOEPF: Shane?

MR. JONES: Shane Jones.

BY MR. JONES:

Q. Al, can you describe, when you go out and actually do one of these jobs -- not necessarily this one, but when you do an in to out, and let's say you've got a contractor, you've got C&M, you've got your group -- meter installation -- involved in a project, just generally steps on what they do? Assume that the service has to be replaced. Assume that there's a new meter being put at a different location. And assume that the mechanical contractor is running the pipe.

A. Yeah. They --

Q. Give me a nutshell on a -- not necessarily this one, on a general one.

A. Yeah. They -- like I said, when Master is done, they call. We pick a time when C&M is going to cut off the old service. Sometimes Master Mechanical, they double valve it. That means that they talk to the school, or if it's an apartment building, that they can shut them down pre -- ahead of time, and do the work.

Q. What valves do they use?
A. They shut off whatever valves that they need to, the main shut-offs for the meter.
Q. Before or after the existing meter?
A. If -- that all depends on Master, if they want -- which one ever that they can use. On this particular one, there was no shut-off. After the meter, that becomes customer piping. So the main shut-off is right inside -- or the main one coming from the riser.
Q. The pipe before the meter is whose?
A. It's CenterPoint Energy's, but the shut-off -- as far as I've always been told, anybody can shut that off. It's a shut-off. You know, if they -- if there's a leak right after the meter set on customer piping, that's the only place that they got to shut it off.
Q. So for an emergency, you're referring to, people can shut that off?
A. Right. Or a residential house. You got a riser pipe coming out of the ground. You got a shut-off. You got the meter. People all the time, that's their shut-off to shut off the gas and do customer piping.
Q. But planned work, if you're planning work.
A. Okay.
Q. Is it okay for a contractor to work on the -- be piping upstream of the meter?

A. I would say yes. I mean, a shut-off is the -- shut it off to -- so they can do work. They're not supposed to touch the regulator anywhere from the outlets of the shut-off to the outlets of the meter. That's all CenterPoint's property.
Q. Okay. So, in a below ground entrance -- so I understand what you're saying, then, above ground, from the -- both ends of the meter, that's the company's.
A. Right. From the outlets --
Q. Yeah, but when --
A. From what I've always been told, that the outlets of the shut-off to the outlets of the meter set, and if we have a bypass, that becomes ours too. But then, anything after that is customer piping.
Q. Okay. So on a below ground entrance, the valve -- first valve you come to, to a valve downstream of the meter, is what you're talking about?
A. Yeah. That's -- well, if you want -- yeah. So there was only one shut-off here. So this would be their main shut-off, is right there. And that's before the meter.
MR. EVANS: What are you pointing to? I can't see it.
MR. EBEL: Right here.
MR. EVANS: That --
MR. JONES: Do you have a picture of the boiler room?
MR. EBEL: No, I do not.
MR. EVANS: Let me call that Exhibit 4. Because I want to

capture that.

BY MR. JONES:

Q. Are you aware of any valves outside?

A. Far as code goes, before the gas valve train at the appliances, it says that they're supposed to have a shut-off there. So once the customer piping makes it to an appliance, you're supposed to have a shut-off within 6 feet of the appliance.

MR. EVANS: I'm going to put on the record, I'm looking at an exhibit we've named Exhibit 4. The witness has pointed to a shut-off valve being a 90-degree turn valve. In this photograph, that valve is shown in the open position. And he's pointing to that valve as being the only shut-off valve that's available to the customer.

MR. EBEL: Right.

MR. EVANS: Correct? Thank you.

MR. EBEL: Just like residential house, they have one shut-off --

MR. EVANS: Okay.

MR. EBEL: -- you know. So are we going to tell the customer, no, you can't shut it off? I mean, I was always told that that's, you know -- if they need to shut it off, it's for them. It's -- you know, so -- maybe I'm wrong.

MR. JONES: Nothing further.

UNIDENTIFIED SPEAKER: No questions at this time.

MS. SCHWARZ: This is Sylvia Schwarz, from MNOPS.

BY MS. SCHWARZ:
Q. I'm going to go back to something else which may have been covered yesterday, but I wasn't here in the afternoon. The staging of this meter replacement because the school had to be in service at the time. So is it -- would there be anything different about connecting one side -- you know, the interruptible first and then coming back at a later date to connect the firm?
A. Not -- no, not that I'm aware of. No.
Q. That's not strange, or there's nothing odd about that? Is that done?
A. That all depends on the circumstances. But on this, no, they were just going to connect up.
Q. They were just going to connect what?
A. Well, they were -- Master Mechanical was going to connect from the outlet to the customer piping, this meter here and this meter here.
Q. At the same time? On the same day?
A. Yeah. Well, they had -- no, Master said that they had lots of work there. So they had at least 3, 4 days' worth of work.
Q. Okay.
A. They weren't going to do it in 1 day. Absolutely not.
Q. Okay. How easy is it to get that handle -- to remove that handle on that valve that is Exhibit --
A. Sometimes there is a locknut on there. I -- sometimes it's -- depending on how old it is, or whatever, it could be stuck on

there, as far as that goes.
Q. I mean, sometimes could it just fall off if it's bumped, or something like that?
A. You would have to bump it pretty hard.
MS. SCHWARZ: Okay. All right. That's all I have.
MR. PIERZINA: This is Brian Pierzina with PHMSA.
BY MR. PIERZINA:
Q. Al, does your time get billed out to various projects or work orders?
A. My --
Q. Right. Do your -- over the course of your day or pay period, does your time get billed to certain projects?
A. No. I just -- when I go out there, I charge time to the work order, and the work order is this right here. That's a work order.
Q. Okay. That's what I was asking. So it would be --
A. Right.
Q. -- would be yes, right?
A. Yeah.
Q. So, like, any visit -- like your visit with Pat and the maintenance guy, you bill time to the work order?
A. It all depends on how long it is. You know, if it's only a short --
Q. All right. So --
A. If it's a phone call or whatever, no, I don't.

Q. But if it's a site visit?
A. Well, yeah, if it's going to be more than an hour or -- you know, hour and a half, that's when I charge time to it.
Q. All right. All right. So it's not every -- you don't have to account for every minute of every day?
A. No. Far as that goes, no.
Q. Okay.
A. Because I get oodles of phone calls all day long. I mean --
Q. Okay. Yeah, that's fair.
A. -- with different things that, you know, need addressing or whatever.
Q. And do you remember, prior to the explosion, the last time that you were at the school?
A. The last time I was at the school was with Master -- Pat, going over getting -- so he can get his bid in to -- for the work.
Q. All right.
A. When exactly that happened, I'm not -- it was probably sometime in June.
Q. I think you're right, I think they did the bid sometime in June. Were -- so did you do a walk-through like last week at all?
A. No.
Q. No? Okay. So the last time you were at the school was when you did the walk-through with Master Mechanical to --
A. Yeah, to go get -- tell him what he needed to do, so he could bring a -- put a bid in.

Q. Right. And so did you provide Master Mechanical any written scope of work?
A. No.
Q. You just -- you arrive on site.
A. Right.
Q. Say -- and the meter is not there yet.
A. Right.
Q. But you have an idea of where the meter is going to be.
A. Right. You got to realize that they been doing work for -- before me, you know. And I've been the foreperson for about 4 years.
Q. Okay.
A. So this was nothing new.
Q. So, in your mind, you're just giving pretty much a general overview, you know, from A to B --
A. Correct. Yep.
Q. -- and just --
A. What I do is I tell them what size pipe it is. So the work order is -- I must have had this, or they just call engineering to find out. They need to know what size piping that they're connecting to. So then what Master does -- and another reason why we hire a contractor to do this, they figure out what the total length of the pipe is. Then they figure out what size pipe that they need to supply the gas that's needed.
Q. Okay.

A. Because no we're making the pipe longer. So now you got pressure drops. So that's for them to decide what size pipe that they need to sufficiently handle the load.
Q. Sure. Elbows and all the other stuff.
A. Correct. Yes.
Q. So is there ever an occasion after you do a walk-through to get the bid, for you to return to a site -- not this site, but --
A. If there's something that comes up that needs addressing, sure. I could. But not in this instance, no.
Q. Okay. Do you assign the meter installer or does somebody else?
A. No. My dispatcher, we look at -- we try to rotate our meter installers. On the south side, I think I got eight or nine. And we try to -- so everybody gets a turn with bigger jobs, smaller jobs, whatever.
Q. Okay.
A. When we talk bigger jobs, that means these big rotaries.
Q. Sure.
A. Hanging them, versus going to a residential house, putting a small 250 meter up.
Q. All right. And, I'm sorry, and who decides who goes out?
A. That's -- it's kind of on a rotation. So we just pick -- make sure that we have two A's that usually go out. And we have a guy that's a B -- that's like an apprentice, if you want to call it that -- that we send him out too, so he learns how to do this

work.
Q. Okay. So, and that's -- I'm unfamiliar. You said two A's? They're like your --
A. Yeah, that's -- that means that they can go out by themselves and do work.
Q. They're your topnotch installers?
A. Yeah. Yes, they've been -- they've passed the test to -- CenterPoint tests them.
Q. Okay. So on a bigger set like this, you want two A's?
A. Well, the bigger set is because it's heavy pipe. So we need people to hold it while we drill, hang meters, bolt it together, you know.
Q. Okay. And so, I think what I heard you say is that you normally wouldn't need to go back out to the site unless they encountered a problem?
A. Unless there was a problem I needed to -- to bring it to engineering or, you know, bring it to the school, or whatever the problem is.
Q. Okay. So -- all right. So the walkthrough then -- prior to the walkthrough, what is your -- is there another occasion that you would typically visit the site?
A. No.
Q. All right. So --
A. I mean, I just don't show up to go visit it.
Q. All right. So --

A. I mean, I'm not sure what you're leading to. But --
Q. Well, no, I'm not leading to anything. I'm just trying to understand. So -- and I think Roger started talking about, you know, the project from the initiation. It sounds like it comes from engineering.
A. Correct.
Q. And I was kind of going backwards, you know, from the installation. So, it sounds like what I'm hearing you say is if a project -- if the project comes up, you're informed. You do a site -- but you do a site visit to see what's necessary.
A. Yeah. I go outside --
Q. But then you do another site --
A. -- and see -- figure out what our options are.
Q. All right. So there should actually be two then, right? There would be one where you see kind of what, what's going to be necessary.
A. Sometimes engineering already has pictures because the customer took pictures and sent it to them.
Q. Okay.
A. So they already know that they're going to -- okay, we're putting the meters there, outside on a wall somewhere. Then I just -- they tell me by, you know, usually by phone, give Pat a call and meet with him and, you know --
Q. Okay. So it would be common for you to be able to do that in one visit. If engineering has a good handle on what's needed, you

could just make the one visit with the contractor and say this is what we need you to do, give us --
A. This job here was more straightforward, put it that way.
Q. Okay. All right.
A. I mean, because, yeah, I got a job coming up that it's 22 feet -- or, you know, 19 feet going down. So that's a little bit more complicated. That means the riser pipe goes through the wall, has to go down 19 feet to the floor of the basement to hook up the meter. So --
Q. Okay.
A. So this one here was just go through the side wall. He was going to go across, you know, with one pipe. And his outlet wherever -- on the picture here, that's where he connects up to the other one.
Q. Okay. In your mind, was the -- where they wanted that hole core drilled through the wall, was the meter or any existing piping in the way?
A. As far as whatever pipes are down there. So Pat had an idea where he wanted to go through, you know, so --
Q. Okay. And I was just -- all right. So you're not sure whether or not there was anything that needed to be moved out of the way in order to drill that hole?
A. As far as that goes, no, there was room to get that through there.
Q. To drill the hole.

A. So this pipe -- all these pipes here are not against the wall.
Q. Okay.
A. Just so you guys know that, you know, there was room there. So --
Q. All right. Earlier, you had talked about changing oil.
A. Yeah, the -- we do have to do maintenance.
Q. And so, can you expand on that? Change oil in what, and how you do that?
A. On this dimensional, I -- pretty sure I changed the oil a while back. So --
Q. And, but that would be in a role that was different than your current role?
A. Yeah. Yes.
Q. So what role would you have had with the company then?
A. Well, I would have just been a meter installer.
Q. Okay.
A. I wouldn't have been the foreperson that went out and did that.
Q. So on a meter like that, how often is oil changed?
A. Engineering says about once every 5 years.
Q. Okay.
A. But this is a dimensional, and now we don't even -- because if it breaks, then we're -- you know, it's dead in the water.
Q. Okay.

A. So these things are dinosaurs, those dimensional.
Q. Okay. And do you -- are you involved in calibrating or testing the meter to see if it's --
A. No.
Q. -- accurate?
A. No.
Q. Who does that?
A. The only time, when we pull it out of service, we bring it to -- we call the 501 building. And we have a department that we drop it off, and they -- NCAL is what the word is.
Q. NCAL. Okay. How about on a new meter? Do you -- does the meter installer person make sure that it's accurate, or has that already been --
A. Accuracy, no.
Q. That's already been done?
A. No. What they usually do is, on a new meter, they just blow on the fins. We're talking rotary meters now. All right.
Q. Okay.
A. And that just makes sure that it spins in there, that it's going to read.
Q. Okay.
A. You know, we assume from the manufacturer that they inspected and tested it, you know, it's good.
Q. All right. Can you, if you would, think back to other projects, meter move-outs, you know, in to outs like this one,

that you've been involved with, with Master Mechanical?
A. Oh, lots.
Q. Can you, if you were just working backwards, give me the last two or three?
A. I would have to look at my book. I --
Q. All right. Well, there -- and so, there would be work orders associated with those?
A. Yeah. I think we were up to like 15 on the south side, just with Master alone. And I think a few other contractors, not just Master.
Q. All right. This year?
A. Yeah.
Q. Okay. So plenty of -- every year you're hopping? Hopping every --
A. Oh, yeah.
Q. Okay.
A. Especially this year, with -- we have a lot of schools. There again, the school that -- you know, 7000 Cornelia, Master was not involved with that, but that was -- the contractor was on site changing out the boilers. So, they were going to connect their own piping.
Q. Okay. And so, you said -- I'm just trying to think of the process of the mechanical contractor connecting the customer piping up to the school. At some point they need to tie into the customer, existing customer piping.

A. Right. Well, let's just say, for instance, 7000 Cornelia. It's an Edina elementary school.
Q. Okay.
A. They -- during the summertime, they were adding an addition on. They had their own contractors there. They were pulling out the old boilers and, you know, going with high efficiency. So all we had to do was pull out the meters on the inside and hang a new meter outside. They were going from interruptible to a firm. So we just hung one meter out there. So that means at the outlet of that pipe, they connected up. I don't even see that. So they're supposed to pull permits and whatever. So --
Q. Okay. So, you --
A. So far as inspecting any customer piping, I wouldn't even know what they did.
Q. All right. So the meter shop goes in and pulls out the existing piping?
A. Yeah. Well, in this case, they -- I think it was NAC that pulled out the meter. They're not supposed to touch it, by law, far as what I was told.
Q. But they pulled --
A. Yeah, they pulled it out.
Q. -- they pulled the meter? So --
A. And the guy that did it said, oops, I'm sorry, we did it. Because we NCAL the meters, and they threw the meter in the trash at this school.

Q. Oh. I meant to ask you that. So the -- so this meter, normally that would go back to this 501?
A. Yeah. Yes.
Q. And --
A. And they decide if they want to NCAL it, if they can, or whatever, you know.
Q. Okay.
A. That's beyond me. So --
MR. PIERZINA: Okay. That's all I have for now.
MR. HOEPF: All right. Thanks.
BY MR. HOEPF:
Q. Hey, Al, this is Mike.
A. Hi.
Q. Doing all right? Do you need a break or anything?
A. No, I'm fine.
Q. Okay. All right. I've got a hodgepodge of questions. But one of Brian's questions just kind of -- maybe you could follow up on that a little bit. Were you talking about somebody throwing the meters away? Were you talking about Master Mechanical threw the --
A. No. It was NAC that was --
Q. Oh, NAC. Oh, okay.
A. This -- oh, I was talking about Edina elementary.
Q. I got you.
A. Had nothing to do with Master Mechanical.

Q. Oh. Thank you. Thanks for clarifying that. Okay.
A. I just gave you an example, like we -- all we did --
Q. Thank you. I --
A. -- is we moved the meters outside. I had my meter --
Q. I got you.
A. -- installers install it. Michaels was going to run the new service because they had directional bore.
Q. Got you. I got it.
A. And that's when we hire them to run the new service. But then the agreement, if you want to put it that way, between engineering and the contractor on site is that they connect up their own pipe to the inside.
Q. Okay. Okay. I got you. I got you. Thanks for the clarification.
A. So far as hangers and -- if they did it right, I wouldn't -- like I said, I wouldn't have no idea.
Q. Okay. Okay. Now I'm hoping you can kind of help me just to understand a little bit more -- you kind of talked about this process, but you said engineering gives you a phone call on your cell phone and gives you a work order for --
A. Yeah.
Q. -- something, and then --
A. So then I print it out and see what they want, and -- because when it's fabbed up, we have to know what direction sometimes the regulator needs to be.

Q. Uh-huh.
A. So like on this bigger one, if you got this picture here, I -- we needed the tail piece to point towards the school. So this regulator has a directional on it. So we have to make sure when it's fabbed that it's going that way. So --
Q. Okay. And you said engineering told you that you were going to need a contractor. Or did I hear that right?
A. Yeah, I -- yes.
Q. Okay. Or, I'm just wondering, I'm just --
A. Well, it's -- like I said, we've been doing this for a long time now. So it's -- yeah, it was decided that we can move it outside. So then -- it's customer piping, it's welded, that's when we need a contractor.
Q. Okay. So, again, just to be clear, engineering told you that you needed to hire a contractor, or you made the --
A. Well, they tell me to go out and get a bid, is what they do.
Q. They told you to go get a bid, then?
A. Yeah. And we know from experience that this is probably going to be under $10,000. Because anything over $10,000, then we get three bids from three different contractors.
Q. Okay. Can you help me to understand a little bit better about that bidding process? So you've worked with Master Mechanical in the past, a lot.
A. Oh, absolutely. Yeah.
Q. And if it was -- the bid was under $10,000, and -- so was

there --
A. So, like, Pat goes out there, figure out how many foot he needs, how many elbows and stuff. He writes down -- he sends it, I believe, to his boss or something like that. They type it all up, what's included, what's not included. They send it off, and it's usually within -- under $10,000. And we're going to proceed with the project, then they get -- they're awarded to do the work.
Q. Okay.
A. If you want to put it that way.
Q. So I'm just trying to think of how I should think about your relationship between -- CenterPoint's relationship with Master Mechanical. I know that you've worked with them before.
A. Uh-huh.
Q. I understand they have -- there's a bidding -- you -- there's some technical work, and things. Who -- does anybody at CenterPoint evaluate the qualifications of Master Mechanical?
A. I -- that's, that's beyond me. I'm the field worker.
Q. Okay. Okay. So you personally are not involved in --
A. Yeah. Usually a contractor like that is licensured and bonded, whatever, and they've -- well-qualified to do the work.
Q. Okay.
A. I mean, the -- yeah, that's -- we wouldn't hire CenterPoint unless that was, you know -- I mean, we wouldn't hire Master Mechanical or NAC or Egan or any other, you know, mechanical contractors to do our work.

Q. Okay.
A. We've had other contractors, not just Master Mechanical.
Q. Right. I'm just trying to get an understanding of who at CenterPoint does ensure that your contractors are qualified. And I think -- if I'm hearing you correctly, you're saying that's not you?
A. That's engineering, or who -- I don't know.
Q. Okay. You don't know who that is?
A. Yeah.
Q. Okay.
A. That's --
Q. Okay. And so does the engineering, when they call you, do they give you a list of preferred contractors? Or is there some sort of general service agreement between contractors, or --
A. No. Usually Master Mechanical -- we test them yearly, the contractors. So usually if -- whatever contractor is usually the, let's say, the cheapest and most reliable, put it that way, that's who usually we hire.
Q. Okay. And do you do that annual --
A. No. No. Engineering tells me who to call, what to call. You know, if they want to, you know, test Master to see if there's another contractor that will underbid them. Or if, you know, it's within ballpark.
Q. Okay. So somebody above your pay grade in the engineering department --

A. Right.
Q. -- does annual evaluations --
A. Right.
Q. -- of your contractors?
A. See, I talk to those contractors. They all say that they got the same software and they all punch it in. But it -- now, it all depends on how much, how -- if they want the work or not. You know. So if they all got the same software to do the work, and whatever the rate and what, you know --
Q. Okay. During those annual evaluations that are contractor qualifications, what metrics do they look at?
A. You're asking the wrong guy.
Q. Okay. Okay. And, I'm sorry, I'm just trying to be thorough --
A. No. Yeah, that's -- yeah.
Q. -- that you're not the person to --
A. No.
Q. -- to ask about that. Okay.
Let's get a little bit more back to your scope of the work here. The work that was being performed on August 2nd in Minnehaha Academy, were you aware of the specific nature of the work being performed on that day?
A. As far as -- that's a broad question. We were moving the meters out, Master was connecting to the customer piping. They had 3, 4 days' worth of work. All I know is that C&M was supposed

to dig that hole -- or, they were supposed to meet that morning. Pat with Master Mechanical was supposed to tell them where to dig, how much dirt that he needed removed to get his pipes to the inside.

Q. So --

A. So I was aware that they were supposed to meet that morning.

Q. Okay. Were you responsible for overseeing that work?

A. No.

Q. Okay. Who was responsible for overseeing that work?

A. Well, they just call up C&M, which is -- Charlie, he's the foreperson. He sends a crew out, and Pat meets with the crew and tells them, hey, I need this dug out, you know.

Q. Okay.

A. It's not complicated, you know, as far as that goes.

Q. Okay. I just --

A. They were going to bring in a vac truck, far as what I understood, to suck it out because there was oil tanks nearby.

Q. Yeah. And I don't want you to speculate on anything you're not comfortable with.

A. Right.

Q. I'm just trying to get a scope of where your -- what's your responsibility versus --

A. Right. Yeah.

Q. -- you know, versus --

A. My responsibility is pretty much anything with a meter.

Q. Okay. Okay. So I guess I'm just trying to get a better understanding of -- it sounds -- this overall project is the meter is being moved. And you have -- you're responsible for --
A. Well, we're moving it outside, yes. We're replacing it.
Q. Replacing it. And --
A. I want to make sure that's clear. Yeah, we needed to replace that mirror -- meter. Both of them.
Q. And the scope of your involvement with that, you got the initial work order for that?
A. Engineering tells me, like I says, hey, we need to change the meter, it's old. It's like 1965, I think, that dimensional was.
Q. Okay. And --
A. So they get -- they create work orders. Even before that, they tell me to go out to the school, see what we can figure out.
Q. Okay.
A. Do we have to leave the meters inside? Can we move them outside? Talk to school representatives, let them know, you know, that, hey, we need to do something.
Q. Okay.
A. So that means we have to shut off the gas to do our work for a while. That means that they're going to be without gas for a while.
Q. Okay.
A. So we don't want to interrupt. So obviously, during the school season, we ain't going to do the work then.

Q. Right.
A. So it's, you know, middle of summertime.
Q. Right.
A. So --
Q. Okay. So you're the one that gets the initial work order. Is that fair to say?
A. Yeah. I mean, it can go to anybody, far as that goes. That could have gone to our fab department, you know, being fabbed up already.
Q. Okay.
A. So there's different departments that can see it.
Q. Okay. And you hired Master Mechanical for the job?
A. I didn't personally. No, I -- they told me to get Pat to go out there.
Q. You personally --
A. Like I says, he goes out there. I tell him what the plan is, whatever. And --
Q. The engineering department told you to call Pat?
A. Well, yeah. That's -- we hire a contractor. And then usually we know it's going to be under $10,000. Right. So, then, that's -- yeah, we've been working with Pat. They can supply the manpower to do that. Because there's been other contractors that didn't have the manpower to do the work. So we needed to get this done. There was a memo sent out between Paul Albertson, whatever, that there was no work to be done between -- I think it was like

July 15th through the 22nd, because there was a school program going on.
Q. Uh-huh.
A. So then after that, Pat was out of town, I guess. Then the week after, that's when they were going to start.
Q. Okay. I hope I'm not -- I'm not trying to get you twisted up here or anything.
A. No. No.
Q. I'm just trying to understand that you received a work order.
A. Yep.
Q. And the engineering department told you to hire Master Mechanical or they just told you to hire a contractor?
A. They -- yeah, they told me get Pat to go out there. Or meet with Pat. So I call up Pat. Say, Pat, when can you meet? You know, he tells me his schedule or whatever.
Q. Do you know who from the engineering department told you to call Pat?
A. Well, it's either Stacy or Ron McKibbon. Those are the two people that -- Ron McKibbon is kind of the top guy.
Q. Can you spell his name, please?
A. Ron, R-O-N. Well, it's Ronald -- the first name.
Q. Okay.
A. McKibbon is M-C-K-I-B-B-O-N.
Q. Okay.
A. But I think he handed it off to Stacy. So she's not a Level

3 engineer. I think she's a Level 2. I -- don't hold me to that. But like, you know, she's -- I wouldn't say apprentice, but, you know, she's not the top.

Q. Okay. And so do you know if Ronald McKibbon, is he responsible for -- actually, you were already asked that question. You said you don't know. So, I'm not going to go -- I'm not going to ask you that.

Did Minnehaha Academy, were they involved in the hiring of Master Mechanical?

A. No.

Q. Okay. So CenterPoint hires Master Mechanical.

A. We hire a contractor, yes.

Q. Okay. You hire a contractor.

A. Right.

Q. Okay. So who --

A. Yeah, we don't need three contractors on a small job like that.

Q. Right. So who is -- help me to understand how CenterPoint coordinates a safe work plan with their subcontractors.

A. That's -- I -- you know, fire safety goes, they're licensured and bonded. They're mechanical contractors. They're not beginners, put it that way, you know. So they pull permits with the city. They got to pressure test it. They got welded pipe. They're qualified to do it.

Q. So would it be fair to say that because the engineering

department told you to hire Master Mechanical that you determined that they were qualified to function independently?
A. They know what their role is, yes.
Q. Okay. So would it be fair to say that you felt no responsibility for overseeing the work being performed by Master Mechanical?
A. Not typically, no. I mean, as far as the air tests and all that, no. That -- they handle all that.
Q. Okay.
A. I mean, they got to get signed off by the city even before we start hooking up the meter.
Q. So do you look at it as the city's responsibility to ensure that they're following -- your subcontractors are following safe work practices?
A. What do you mean by safe work practices? Define that.
Q. Well --
MR. EVANS: This is Roger Evans. I'd like to --
MR. HOEPF: Go ahead, Roger.
MR. EVANS: Yeah. Because Mike is in the human performance area. Okay?
MR. EBEL: Right.
MR. EVANS: Safe work practices are things like lockout/tagout, how to handle ladders, how to deal with pressurized systems, the PPE that one would wear.
MR. EBEL: Right. We never seen --

MR. EVANS: Making sure that there -- that the environment is safe to weld within.

MR. EBEL: Right.

MR. EVANS: All these items that a lot of people take for granted when work is being done, that company has to have all these safe work practices in place prior to doing this work.

MR. EBEL: Correct.

MR. EVANS: What we're trying to determine is who in your firm is policing the fact that your contractors are practicing their safe work practices, written programs that they would have. They're all going to have written programs. Every contractor out there has a written program to teach their guy you have to have safety glasses on and a hard hat before you go into that space.

MR. EBEL: Correct.

MR. EVANS: That's a safe work practice. We're trying to determine through this conversation what role do you have in ascertaining that this contractor practices and ensures that his people are working to their safe work practices.

MR. EBEL: I --

MR. EVANS: No, I'm going to leave the rest to Mike.

MR. EBEL: Yeah, I don't -- I mean, I pop in every once in a while. I look to see what they do. Master -- you know, if they're welding, they have fire extinguishers out. If it's a big hole, they have ladders that go up to the -- I've never seen Master not be safe. If they wouldn't, they wouldn't be working

for us, period, you know.

BY MR. HOEPF:

Q. Okay.

A. I mean, yeah, they know what they're doing. You know.

Q. And so -- oh, this is Mike again. Thanks. Okay. I'm -- I think I'm just trying to get an idea of how this, you know, how this delineation of responsibility kind of works out.

Previously, you used -- and I just want some clarification on this. You were talking about liability and customer piping. And I think I might have misheard you. It sounded to me like you said you prefer to rely on contractors to work on customer piping because CenterPoint is not liable.

A. Well, no --

Q. But I don't think that's what you were trying to imply. So I just wanted to see if you could comment.

A. No. For the customer, if we needed welded pipe, we're not -- we don't have the manpower to do that, or the equipment. So far as a liability standpoint, then that's why we hire a contractor.

Q. So you just meant liability from a getting the work done --

A. Typically, on bigger welded jobs, if our -- there again, liability. You know, that's their responsibility. Any contractor that we hire, not just Master.

Q. What is -- what do you mean by it's their responsibility?

A. They're responsible from the outlet, the piping that they put in.

Q. Your subcontractors?
A. Yes.
Q. I'm -- just --
A. I don't tell Pat how to do his job. If that's -- you know, plain and simple, they go out and -- whatever. We discuss how it's going to be routed, you know, where he's got to go in underground. And then he just goes out and does his thing, you know.
Q. Okay. So do you know Reggie Metcalf?
A. Yeah, he's -- yeah, he works for CenterPoint.
Q. Okay. So if he was on scene with Master Mechanical, you would have -- would you have any expectation that he would be monitoring what they would be doing?
A. No.
MR. HOEPF: Okay. Okay. That's all I got for now, Roger.
MR. EVANS: Okay. This is Roger Evans.
BY MR. EVANS:
Q. I want to go back to the day that you met with Pat and -- who was in the room with you and Pat that day?
A. I think one of the chief engineers.
Q. At --
A. Yeah, at -- or, at --
Q. The school?
A. At the school.
Q. Okay. So, let's go to -- can I see your packet, please?

A. Yeah.
Q. Okay. I am on Exhibit 4, which is a photograph of the space -- the bunker space, and it shows the isolation valve that was identified earlier as the main shut-off that this school has in case there was a problem. Correct? That's what was in this picture. If they had a problem, they would hit that valve?
A. Yeah. Yes.
Q. Okay. Good. So let's go back to this walk-through that you did whenever we were talking about the fact that you wanted -- you attended the walk-through, and they were talking about what they were going to do, and all this. Did the subject of blind flange come up with reference to this valve?
A. No.
Q. You did not hear them say anything about a blind flange?
A. No.
Q. Did the subject of where the tie-in was to be made to this system, was that discussed?
A. Say that again.
Q. Where the tie-in was going to be made.
A. Time?
Q. The tie-in.
A. Oh, tie-in.
Q. Tie-in. I'm sorry. Crazy accent I've got. Sorry.
A. No, that's -- they connect up to the outlets and the meters.
Q. But, I mean, was there any discussion that -- and again, I'm

pointing to Exhibit 4 again, that shows the picture of the valve. Were there any discussions regarding this valve?
A. No.
Q. That was not discussed that day?
A. No.
Q. Was there any discussions about how they were going to make an attempt to get the piping connected with or without the line pressurized with gas?
A. No. I mean, usually Pat or -- coordinates with the school, or the chief engineer. Are you using the boiler; can we shut it down?
Q. Right.
A. You know, that's -- so he coordinates with the school or the --
Q. Okay. But my point is, when you had this walk-through discussion, did they ever talk about -- did Pat ever mention -- or this engineer, did they ever mention the fact that they may try and do a tie-in while the line was live?
A. No.
Q. That subject never came up?
A. Not -- no.
Q. Had that --
A. Why would you do that?
Q. Well, had that subject come up, what would --
A. No, no. It's -- you don't do nothing -- no.

Q. But had that subject come up, what would you have said to them?
A. How would you even do that? That's not even -- to disconnect and flange that, you'd have blowing gas.
Q. Okay. I just want to make sure that --
A. Yeah, right.
Q. -- go on record that when you had the walk-through that that was not discussed?
A. No. There was -- no.
Q. Okay. Was there any discussions with regard to a Plan B if they ran out of work and they wanted to keep the job going, that they would do any activities to prefab sections and put it in the building and --
A. Pat, over the phone, I think he told me that they were prefabbing welding at the shop, some pipes. I mean, that's their business.
Q. Okay. But there was no talk -- you never heard the word of -- the phrase, let's call it, to tie in to the line while the line was energized?
A. No.
Q. It was not discussed?
A. No.
Q. Okay. Were there discussions as to where the line was going to be -- you know, how you were going to cut the line out -- you know, actually stop the flow of the gas to the building?

A. No.
Q. Was that discussed during your --
A. No.
Q. -- walk-through?
A. No.
Q. Was there any discussions with regard to the fire valve?
A. You talking about the curb valve outside?
Q. The curb valve outside. Was that --
A. No.
Q. That was not discussed?
A. No.
Q. Okay.
A. I mean, for all the years that they do it, they know that eventually we will shut off the gas and --
Q. Right.
A. -- we tie it over, and whatever.
Q. Uh-huh. Was there any discussions regarding if they opened up the piping and there was residual gas in the area, how they would handle that residual gas?
A. No.
Q. Okay. Were there discussions that -- I'll say it this way. When all of the talking that was -- all the talk that was going on during this day, were you privy to all these discussions or did they have sidebar discussions that you were not part of?
A. No.

Q. So all --
A. It was --
Q. The three of you were always in together speaking?
A. Yeah. That's -- it's -- yeah, like I said, let's figure out how we're going to get the pipes connected to each meter.
Q. Okay. So the content of your discussion and the discussion that you -- you know, that the three of you had was more along the lines of routing the pipe, with determining a route for the pipe --
A. Right.
Q. -- not so much if the line is pressured, if it's -- how we could tie in to maybe anywhere on this system; that was not discussed. It was more along the lines of routing the pipe?
A. Well, Master knows that they -- he has to connect up to the customer piping.
Q. Right.
A. So he basically said that somewhere in here he was going to cut it off, put an elbow, bring it across, go through the wall for that meter. And then this one is -- pretty much right there, it's 2-inch pipe, threaded.
Q. Right.
A. So that's pretty simple, I mean, as far as piping goes.
Q. Okay. So different line of questioning. Forget about this particular installation for just a moment.
A. Sure.

Q. In all of your years working with Master Mechanical, have you ever known them to work on a live line?
A. Not far as our equipment, no.
Q. So in all your memory you never hear --
A. No.
Q. Like, you know, we call that in the industry near-misses. If someone did something and they were able to, you know, complete the act, but when they went back and talked about it, they say, well, we probably shouldn't have done that; that was kind of like a near-miss.
A. No. Like I said, when we hire a contractor it's usually for welded piping. And why would you have an open flame when it's blowing gas? And -- that just doesn't make sense.
Q. I'm just trying to --
A. Yeah. No, I --
Q. -- get on the record that this has never been discussed and you know for a fact --
A. No. Far as that goes, no.
Q. -- you never --
A. I don't even know that practice.
Q. Okay. So there's no instance in your recall of any installation you've done with -- how about any mechanical contractor? Where you found out that they were tying into a live line on the other side of a valve?
A. No.

Q. Has not happened in your knowledge?
A. I wouldn't even know how you would do that.
Q. No, I'm just saying --
A. Right. Yeah. No.
Q. -- if you heard about it after the fact.
A. No, no. No.
Q. I'm not saying this happened. I'm just saying --
A. Right. No, that's -- right.
Q. -- were you made -- have you ever been made aware that this practice was done?
A. At no -- no.
MR. EVANS: Okay. That's all, that's all I have.
MR. PIERZINA: This is Brian Pierzina. I just -- if it's all right --
MR. EVANS: Yeah.
MR. PIERZINA: -- I'd just like to clarify your question, because it sounded different than what I think you're asking. You said -- you asked him if he knew if a -- if he knew of a contractor that tied in to a live line on the other side of a valve. So you mean on the other side of a closed valve?
MR. EVANS: Yes.
MR. PIERZINA: All right. So let me reask that question. Do you know of an instance where a contractor would have shut that valve and tied in the customer piping?
MR. EBEL: Shut what valve?

MR. PIERZINA: The shut-off valve. And not live, not blowing gas. Shut that valve, and hooked up their piping.

MR. EBEL: Once you got the gas shut off, yeah. It's --

MR. PIERZINA: So --

MR. EBEL: I mean, when you go to any residential house, it's the same concept.

MR. PIERZINA: Right. So it wouldn't be unusual for you to find out that a contractor shut that shut-off valve in Exhibit 4 and worked on their piping, either connecting, disconnecting?

MR. EBEL: Oh, I -- yeah. If they're going to add another line, branch off or whatever, that's their shut-off to use.

MR. PIERZINA: Got you. Thank you.

Is that what you're asking, Roger?

MR. EVANS: This is Roger Evans. To clarify my previous statement, when I made the statement "live," I meant up to the valve live --

MR. EBEL: Oh.

MR. EVANS: -- where the valve was closed and they were going to do work on the dead side of the valve.

MR. EBEL: Oh, yeah. No, if there's a valve for them to use, sure.

BY MR. EVANS:

Q. Okay. So now that we know that, and we clarified that --

A. Right.

Q. Thank you very much.

A. That means that there is -- we always have a shut-off to each meter, typically.
Q. Okay.
A. Of some kind. You know, the riser pipe comes out of the ground or through the wall -- however you want to say it -- there's a shut-off valve. All right?
Q. Okay. So let's go back now. So on the day of the walk-through --
A. Okay.
Q. -- and the fact that they have this valve here --
A. Uh-huh.
Q. -- did they discuss closing this valve and going ahead and typing into that and routing their line along the way? Was that discussed?
A. You're talking about touching the meter? I don't know what you're --
Q. No, the --
A. -- referring to.
Q. That valve.
A. Well, yeah, they -- well, no. Far as shutting it off, no, we don't go into the specifics of that. No.
Q. So there's no discussions about closing this valve --
A. No.
Q. -- and doing anything along this line after the --
A. No, I just tell them that -- I tell Pat, you know, this is

customer piping. He knows that he needs to connect into there. If that's his only shut-off, that's his shut-off. You know, if there's one down below, if he wants to shut it off there, that's his choice. If there was two shut-offs there, he could shut it off there or there.

Q. Okay. So just -- I'm going to ask this question. If by chance they were having this discussion and they said, I am going to close this valve and make sure that there -- that this here is intact, right --

A. Uh-huh.

Q. -- and I know if I close this valve I'm not going to have a flow on the other side of that valve, I may work on the other side of that valve. Would you have said anything to the contrary as far as if they wanted to do that?

A. If that was brought up, no. That's our customer piping. They know not to touch that.

MR. EVANS: Brian -- excuse me, Brian. Am I asking the question wrong?

BY MR. EVANS:

Q. The question is, if in that discussion they had talked about closing this valve.

A. Sure.

Q. Right?

A. Uh-huh.

Q. Because they wanted to do some fit-up, perhaps, to that point

on that. Or they wanted to put a blind flange on that. Or they wanted to do something on this particular valve, on the dead side of that valve once it was closed. Would you have objected to them doing that?

A. Typically, I have jobs that they did it by themselves. So normally I would have said no. Because they can blind flange it at the outlet here, at that connection there. I mean, to answer your question. But that didn't even happen, so this is kind of --

Q. So -- yeah. But I'm just wondering. Since it -- I know you say it didn't happen, but had it happened is what I'm trying to figure out.

A. Oh.

MR. EVANS: Okay. That's all the questions I have.

MR. LARSEN: Brian Larsen. No questions.

UNIDENTIFIED SPEAKER: No questions.

UNIDENTIFIED SPEAKER: I have no questions.

UNIDENTIFIED SPEAKER: I'm good. Thank you.

MR. HOEPF: This is Mike Hoepf again.

BY MR. HOEPF:

Q. Al, do you have a safety-sensitive role?

A. Safety-sensitive role? Sure. I check my meter installers once in a while to go out and see that they're putting up the meters right and putting shut-off valves where they need to be, and bypasses and -- sure.

Q. Are you responsible for ensuring that a meter installation

project goes through safely?
A. Safely? All meter installers, when they get done, if there's gas there they're supposed to leak check that. So they turn on the gas, pull out their little SENSITs -- that's the type of meter that we use -- and leak check. And then if there is a leak, it's their responsibility to fix it after they install it. Or, even a repair, far as that goes.
Q. So does CenterPoint have a risk mitigation strategy for using subcontractors on meter-related work?
A. That's overtop my head.
Q. Do you ever interact with anybody from your safety department?
A. Say that again.
Q. Do you ever interact with anybody from your safety department?
A. Far as interacts, no.
MR. HOEPF: That's all the questions I have.
MR. EVANS: I just had a couple more questions.
BY MR. EVANS:
Q. You talked earlier about flow calculations, and having the meter be okay based on what pipe they put in there.
A. Uh-huh.
Q. And you explained to us that they would supply how many feet they put in there.
A. Correct.

Q. Okay. So my question is do you rely on the customer to perform that flow calculation, or do you take the pipe lengths and elbows and do your own --
A. No.
Q. -- your engineering department does the calculation?
A. Right. Well, we just -- far as -- this is an engineering question, not for me, now.
Q. Right.
A. But for engineering, they decide what size meter that they need for the load. Then, what size pipe that would sufficiently supply. So, but then the contractor, if they're going a long ways, that they can make a bigger pipe to go -- you know, whatever they need. So --
Q. Okay.
A. That's an engineering question. That's really not for me.
Q. Yeah, we'll ask that Donald McKibbon, I guess, when -- if he's -- Ronald, I mean. The other question I have is -- the first one is, do you audit the permit process to make sure that when your -- let's just say I'm a mechanical -- a Master Mechanical company. And oh, I forgot to pull my permit; I'm going to go out there and install the piping. How do you catch that?
A. We don't. I mean, but it's in their bid. I mean, that's --
Q. But that's not something that anyone on your side of the fence, in your responsibility, that -- do they look at --
A. I don't know if engineering follows up with that. I -- that,

I don't know. I mean, I certainly don't, far as, you know -- I don't go out there and meet with the inspector. As far as I know, there again, that would be for some -- the contractor, if they meet with the city inspector. Because I would assume that he goes out there and signs off on the permit.

Q. And my last question, simple one I hope. Do you -- do your guys prior to the meters being -- the line going live into the building, do you check customer piping for leaks?

A. No.

Q. You do not?

A. No.

Q. How do you control -- I mean, how do you know that that's been done?

A. If it's our initiative and we shut off the gas, we know that they didn't bust into the line or whatever. But when we turn on the gas, we can tell, if that meter is singing, that there is gas going in there. So --

Q. But if there were a pinhole leak on a 3-inch weld, butt weld on -- a butt weld joint on carbon steel pipe, which you could very well have -- which I've been around it all my life; it's a very popular thing to happen. How would you catch that?

A. On customer piping, if it's downstream, we wouldn't catch that.

Q. So there's no quality control of -- to make sure that the entire system is intact before you activate the gas?

A. Far as when they pressure test, I think it's just the new pipe that was installed, you know. If it was under gas pressure before, you know --
Q. So, you rely --
A. Like I said, it was CenterPoint that initiated this. So there was gas on the whole time.
Q. But what I'm getting at is, what if the Master Mechanicals of the world skip the step, pressure test, and you activate your gas to that system and there's a leak. Who catches it? That's all I'm asking.
A. Hopefully the customer, I guess.
Q. There is no oversight in your system to catch the fact that a leak test on the customer piping by a subcontractor has ever been tested?
A. Okay. The amount of pipe that they're putting in, my meter installers would have to remove the old meter. So we would be down in there. So if they would smell gas, they would certainly pull out their SENSITs and leak check, if that's hypothetically happened.
MR. EVANS: Okay. That's all I have.
MR. BOWLES: One quick -- I think I heard you say -- I may have misheard you, that --
MR. EVANS: Your name, please.
MR. BOWLES: Dan Bowles.
BY MR. BOWLES:

Q. That Pat would be on site when the work was done? Is that right, or am I --
A. No. Not necessarily, no.
MR. BOWLES: Okay. Thanks.
MR. PIERZINA: This is Brian Pierzina.
BY MR. PIERZINA:
Q. And I apologize if you mentioned this earlier. Who -- how many people report to you, Al?
A. About 9 or 10.
Q. And their positions?
A. Well, it's just -- they're meter installers. So --
Q. Meter installers. Okay.
A. That's on the south side.
Q. Okay.
A. So, we have a north and a south areas.
Q. All right. So there is a --
A. There is a foreperson for the north side.
Q. -- someone like, someone like you on the north side --
A. There's a different meter foreperson.
Q. All right. And you report to Shane Jones?
A. No. I report to the north side.
Q. Oh. Oh, okay. Who -- so who is your immediate supervisor?
A. Well, my supervisor -- my supervisor is Kyle Meyer.
Q. Kyle Meyer. Okay. And what's his position?
A. He's my supervisor.

Q. All right. And he -- what's his job function at CenterPoint?
A. He supervises us. Whatever --
Q. All right. So is he -- all right. And he --
A. Shane would have a better --
Q. Kyle -- and I've heard the name before, but I don't recall. Is he a meter --
MR. JONES: This is Shane Jones. He's a meter installation supervisor.
MR. PIERZINA: Meter installation supervisor.
BY MR. PIERZINA:
Q. So, and you -- all right. So you, as a meter installer foreperson, report to the meter installer supervisor?
A. Yes.
MR. PIERZINA: All right. Thank you. That's all.
MR. EVANS: More questions?
UNIDENTIFIED SPEAKER: I have one more question.
BY UNIDENTIFIED SPEAKER:
Q. Al, when you go out and do an installation, tell me what you do for a leak check. Let's just say a meter, as an example.
A. They -- usually we just check our meter. Let's -- for instance, there's a shut-off on the outlet there.
Q. Uh-huh.
A. So, normally the guys would shut it off there. Pressurize all our piping, because we just install it. That's assuming, well, if the riser has already been hooked up. So we got jobs

that are brand-new. Some are replacements or whatever. There's all different types of jobs. So, if we -- let's say this was a brand-new school going into service, right. So we would, you know, hang the meters. C&M -- construction and maintenance would bring the riser up to it. We would leak check it and go from there. Then the customer connects up to --

Q. Leak check how? What do you use?

A. They use a SENSIT or soap bubbles.

Q. So you soap --

A. Yeah, they soap it or SENSIT, whatever they prefer.

MR. EVANS: I do have one last question.

BY MR. EVANS:

Q. Knowing that Minnesota can get cold and that you have a lot of work that has to be scheduled for a summer --

A. Uh-huh.

Q. -- are -- is the contractor Master Mechanical currently still being used to do work?

A. As of today?

Q. Yes.

A. No. Not that I'm aware of. No, I -- that's -- I have no idea.

MR. EVANS: Okay. Thank you very much for the information. This concludes the interview.

(Whereupon, the interview was concluded.)

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF:	MINNEHAHA ACADEMY SCHOOL EXPLOSION MINNEAPOLIS, MINNESOTA AUGUST 2, 2017 Interview of Alan Ebel
ACCIDENT NUMBER:	DCA17MP007
PLACE:	Minneapolis, Minnesota
DATE:	August 6, 2017

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.

Jane W. Gilliam
Transcriber

Interviewee Name (please print): Alan Ebel

Organization: Centerpoint Energy

Date of Transcript Review: 10-24-17

I have reviewed my transcript(s) from the above referenced accident and...

☐ I have no comments to make.

☐ My comments are submitted herewith.

☒ My comments are marked on the attached copy.

ERRATA SHEET

Investigation: DCA17MP007 - Minnehaha Academy School Explosion

Interview Date: August 7, 2017

Investigation Of: Alan Ebel

Page	Line	Existing	Correction
50	15	-- We test them yearly, the contractors.	Add: "We check their pricing, not qualifications. The contractors we hire are licensed, insured and bonded, also they can pull and pass city inspections.

[redacted]
Alan Ebel